

President's Message

Last month CWops once again had a stand at the RSGB Convention which ran over the weekend of October 14/15. There were plenty of members there and a steady stream of interested visitors dropping by on both days.



(Continued on page 2)



Found in an old box of QSL cards dating back to the 1920s. Note the price!

CWops "CWT" 1 hour 'tests
Every Wednesday at 1300z and 1900z
Every Thursday at 0300z and 0700z
Exchange: name/number (members)
name/SPC (non-members)
Avoid DX Pileups!

CWO Mini-club callsign web site:
<http://cwomc.org>

CWops "neighborhood": Look for CWops on 1.818, 3.528, 7.028, 10.118, 14.028, 18.078, 21.028, 24.908, 28.028, 50.098 "and up"

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It's always good meeting in person and actually talking face to face – a different aspect to someone's on air persona! There is a short write up and some photos later in this edition.

Last year Duncan G3WZD (aka 'Mac') gave a talk on the CW Academy. This year I'd had an invitation to give a presentation on the CW Operators Club as a whole which I gladly accepted. I was pleased with the size of the audience and the fact that, in response to one of several questions at the end, I wasn't simply preaching to the converted – a show of hands showed there were just 5 CWops members present including myself. Over the course of the weekend I heard several unsolicited comments complimenting CWops and what it is doing for promoting CW in the UK.

Preparing this talk got me brushing up on the things we offer the wider CW community as well as our own membership. Some things like the CWTs probably don't need much deep thought but others are always worth re-evaluating occasionally (incidentally Enzo MØKTZ did a fine job with ragchewing/QTX in last month's Solid Copy). I talked for example about the CWops Operating Awards as a way of encouraging member to member activity. With Fabian's (DJ5CW) Awards Tool it's now super easy to take part – simply upload your latest log extract and Fabian's software does the rest. I just export an ADIF file of my last month's log; no need to search out QSOs with members, the algorithms take care of all that. It's a great motivation to get on the air and work other members and watch your position in the league tables move, hopefully up, hi! The variations based on DXCC, WAS etc are fun too; like many others my overall WAS total is maxed out at 50 but I only have a full house on 20m. I need three on 15m for example and the tool tells me which States they are so I know who to chase. I also discovered that with an ADIF upload it will pick up any M/QTX contacts in my log too (which can be with anyone, not limited to members only). The Operating Awards certainly add to the interest and enjoyment of belonging to CWops.

I have just renewed my Logbook of The World certificates for G2CWO along with GW2CWO and GM2CWO. G2CWO is the official call of CWopsUK which is a 'paper exercise' club formed solely for the purpose of obtaining UK CWops club calls – it's the way our regulator Ofcom does business. The regional variants like GW2CWO are simply required when the call is used in Wales, GM2 when in Scotland etc. Separate LoTW certificates are required however and to date only G2, GW2 and GM2CWO have been activated. If you look at the club [website](#) you'll notice we have a number of other club calls; with one exception these are all for different US call areas and have the 'CWO' suffix bearing a couple with 'CWT'. The exception is thanks to Chris Chapman VK3QB, our VK Ambassador, who recently obtained VK1CWO – so now we have club calls in all three IARU regions!

I use GW2CWO in my Giving Back sessions but hearing these club calls on the air is quite rare. It occurred to me that if we had a few more we may be able to have some interesting activities based on members and others working these club call signs. A time limited 'Marathon' style event springs to mind. I've taken part in several Marathons over recent years from both ends of the action; they are very popular and provide the call operators the possibility to experience frequent pile-ups without having to travel to exotic locations. If we had a handful of additional club calls particularly from our more populated European countries we may reach the point where it would be feasible to consider such activities. The CWO suffix is quite distinct and could become

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as easily recognizable as FOC. Anything which will increase activity, add to the fun and raise our profile has to be good.

73, Stew GWØETF, President (CWops #919)

SC

Editor's Notes: CWops Marathon?

This is not an announcement. This is just me getting excited about Stew's thoughts about having a CWops Marathon. While he's interested in hearing the CWops vanity calls in use, I'm thinking of my own experiences in marathons and how much activity and fun they generated. I most recently participated in the 19th Anniversary of the North America QRP CW Club as N3A/9 - a week-long, on-air celebration where each of the US Call Districts was represented by a member using the N3A call sign appended by their call district number. As a QRPer, calling CQ can be a lonely prospect at times, but with a special callsign, its like a magnet drawing in keys from anywhere there is favorable propagation. During that week, the NAQCC also held their monthly two-hour sprint whereby members, including the N3A/# stations, were exchanging names and membership numbers. 80m, 40m and 20m was filled with CW activity celebrating the club that night. Overall, the NAQCC was delighted to hear the amped up activity generating interest in and among the club.

Its not a stretch to see how CWops could assimilate all that commotion, interest, and excitement and morph it into its own cultural activity, style, and identity. True we have the CW Open which offers a totally unique contest experience through multiple sprints. Perhaps we have that same creative thinking develop a more relaxed experience via a Marathon.

I think about Stew's thoughts to build interest in using the CWO and CWT vanity call signs as the instigator of a CWops Marathon. The PR guy in me sees it as additional member engagement. The Marketing Guy™ in me sees a great opportunity to expand our reach and welcome the rest of the CW world into ours.

Appearing later in the pages of this month's newsletter is a compilation of comments about left-handed keying that was gleaned from a pretty active thread on our Groups.io exchange (aka reflector). I'm married to a left-hander, or as she calls it, the fortunate, so it made interesting reading I could relate to. I'd be a liar if I didn't admit to thinking that being a Southpaw CW op might not be a bad thing when I was first learning to send CW. Caution: this article may change your behavior.

73, Dick N9EEE, (CWops #3113)

Editor, Solid Copy (SolidCopy@cwops.org)

News and Notes

[Duncan \(Mac\) Fiskén, G3WZD](#)

We regret to report that the following Members have become Silent Keys

Fred Curtis, G3SVK #1357 on 24th October, 2023

Gus Samuelson, VO1MP* on 30th October, 2023

**Former Member*

The following short obituary of Fred was posted on the RSGB Contest Club reflector, courtesy of Nick, G4FAL:

"Fred was a prolific HF radio operator despite having a relatively modest station. He was a stalwart of the special activities that were organised by the RSGB Contest Club. In the Cricket World Cup activity in 2019, he steadily worked his way through activating all the 21 England callsigns, with 12,106 QSOs to his credit, mostly on CW. Fred also engaged in the Transatlantic Centenary Tests last December, making some thousands of QSOs using G6ZZ. You will be very sadly missed Fred".

(N&N ed -I am delighted to receive another bumper mailbag of news. My usual thanks to all contributors for the varied selection of topics. Please keep the submissions coming, but don't wait until the monthly call for articles or reminder (deadline for the next issue is 2nd December).

Don, W4ZYT #55 Next year's North American CW Weekend is happening June 7-9, 2024. Full details were given in the October issue of *Solid Copy* and you'll see them repeated in future months. Dinners, lunches, breakfasts. It's a great time. Why wait? Make your plans now. Email any questions to [Don](#)

John, K3CT #466 My thanks to Jim N3JT & CWops for sending me this plaque, which will look great on the shack wall. I've been a member of the N1MM Logger+ development team since 2007, and Jim was appreciative that we had added the CQ repeat stop and the feature that filters out all incoming spot callsigns that are not in the call history or log.



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Mike, VE3GFN #1119 My 17M DXCC certificate arrived in the mail this week. Since the earliest DX QSO on 17M shown in LOTW is 2010, I'd say this was the end of a 14-year project, the last five of which were spent coaxing QSLs from stations I had worked a decade ago!



All 17M QSOs were made with my trusty inverted-vee, fed with open line. No Yagis on 17M, sad to say! That inverted-vee has been active since we bought the house in 1975 and has proven to be a killer of an antenna, useful on all bands 80-6M if need be. I now have 2,000 feet of ground radials in my lawns under my antennas, and they certainly help!

... and my much-modified Cushcraft tri-bander, with its traps replaced last summer, continues to work like a trooper, with a vastly improved F/B.

Joe, K9UR #2102 For the younger generation or the young at heart, the CWops channel is also on [discord](#). Come chat: share photos / videos all in real-time with your CWops friends. Activity continues to grow.

Chuck, WS1L #2411 October has brought Fall weather to the Berkshires of Western Massachusetts. I've been working on a low-band receive antenna to try to improve my ability to rag chew into Europe on 80 and perhaps even 160 meters this coming winter. After several frustrating weeks I finally located a bad piece of cable in the shack that had been the cause of very poor performance and the single loop in place now is hearing very well. A preamp from Advanced Receiver Research is at the base of the antenna, helping to overcome 200 feet of RG-6 feedline. A couple of home-brew common mode chokes along the line are in place to reduce any local noise pickup.

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I've got a FAR Circuits kit on the way along with a few other odds and ends to turn the single loop into a pair of crossed K9AY loops, electrically switchable in four directions, with variable terminating resistance and a broadcast band filter.

On transmit I'm handicapped by my choices of a low trap dipole for 80 and 160, or a Butternut HF6V vertical over 40 ground radials for 80, which hopefully will be a bit better. Future plans call for an Inverted-L once I can settle on a decent location for it. I'll be calling and listening in my early evenings for any CW low-band QSO's!

Josep, EA6BF #3072 Here are some pics of the Remote station tests done at home. Here's is "Remote" K3 connected to the box and to the router, and to the power supply. I have one of those intelligent sockets that works through internet so I can switch the power supply and the RemoteRig box on. At home I have another power supply and RemoteRig box that I switch on manually and then switch the K3/0 mini, so the remote K3 also switches on. The station is ready to work.



I can use it as regular operation, or contest through DXlog, which is good! I'm waiting for the coax cable, Aircell 5, to bring it into the house and put the antenna up.

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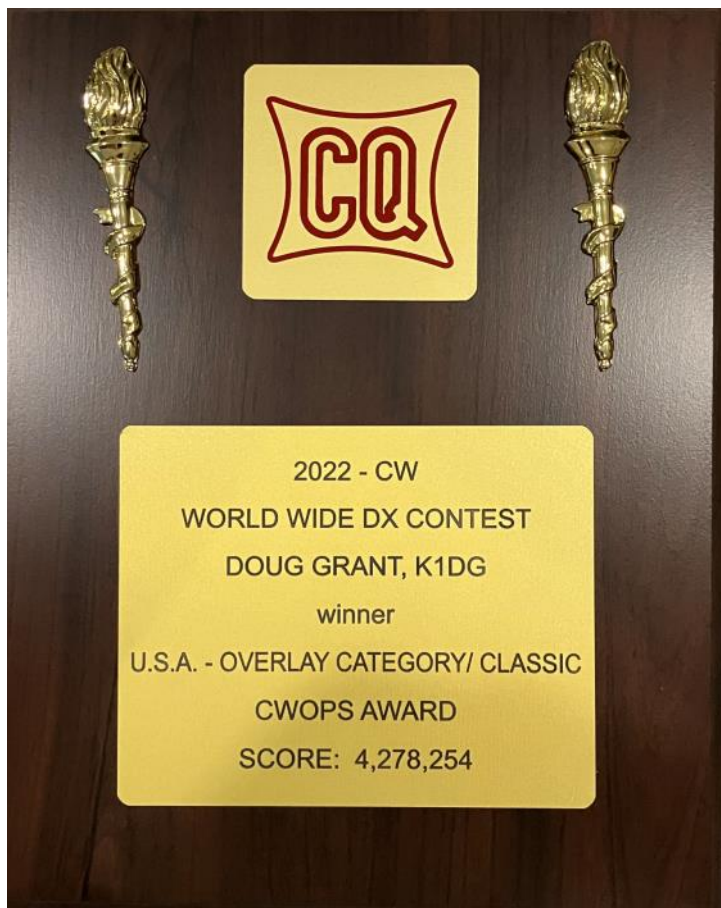
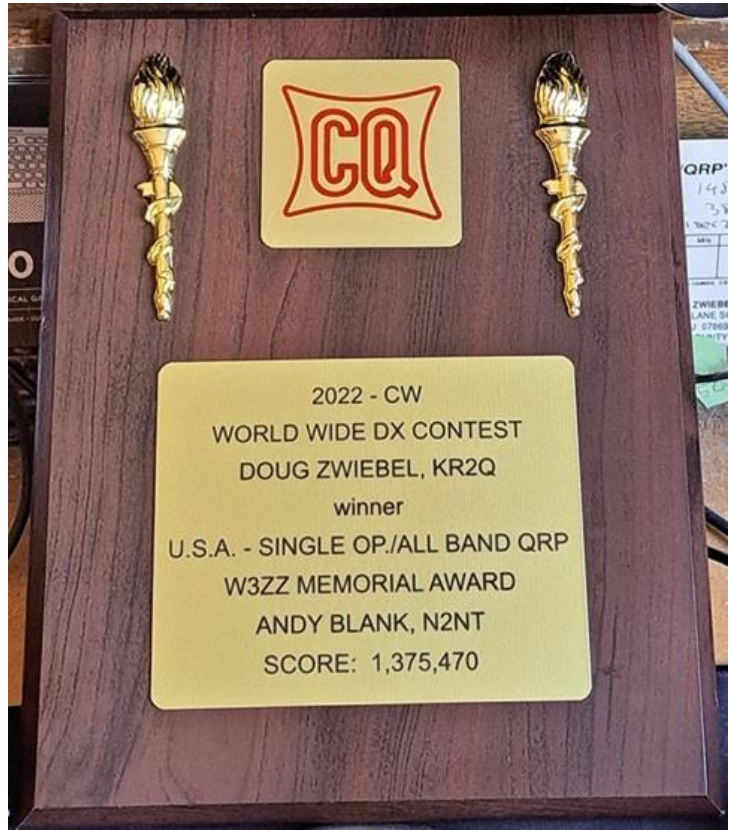
Doug, KR2Q # 438 Today I received a very nice wooden plaque for winning my category in the 2022 CQWW CW contest. The trophy is sponsored by our own Andy, N2NT. And thanks to our own K1AR for administering the trophy program!



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Ed. - A tale of two Dougs...




Doug, K1DG #817 Thanks to CWops for sponsoring the CQ WW Single-op Classic plaque which I received for the 2022 CQWW CW contest.

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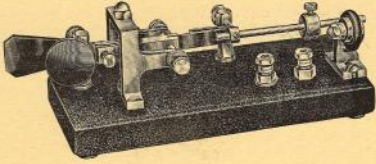
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Dick, N9EEE #3113 The family of a silent key in our local club gave me a box of old QSL cards and I mean O-L-D...from the 1920s and 30s. Some real gems in that box. The cost to mail a postcard was \$0.01. They reported grid and plate current, not power output. Many of the contacts were on 160m. The content on the face of most cards was very informal and jocular. The designs were quite imaginative and creative, too. Definitely worthy of hanging on the wall in a ham shack.

Mixed in with those classics was this tri-fold mailer in perfect condition, like the day it was given to W9MPV, the silent key.

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A Key You Will Be Glad to Show Your Friends!



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<input type="checkbox"/> .50 Cut-in Plug and Cord.	<input type="checkbox"/> \$1.00 Polished Nickel Parts.
<input type="checkbox"/> \$1.00 Polished Nickel Parts.	<input type="checkbox"/> .25 Extra postage to Canada and U. S. Possessions.

Enclosed find Money Order \$..... for same.

It is understood and agreed that if I am not satisfied with the above key or kit I will return same in good condition within ten days and you are to refund the above amount paid at once.

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*Telegraph
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Jim, N3JT #1 To explain – using the pressure washer on the several thousand paving stones (about the size of bricks) means a lot of back spray from dirt between the stones. That invariably hits me! I had to rinse my shirt and shorts 11 times before the water stopped being black!! Next time I'll hire somebody. They have much bigger machines than my borrowed 3000 psi washer. It probably takes then 30 minutes. It took me 4 hours.



Duncan, G3WZD #1979 A nice addition to my shack wall. Many thanks for all the CWT Qs!



73, Duncan, G3WZD (CWops #1979)
(NewsAndNotes@CWops.org)

How We Were

[Ian Capon](#), GWØKRL

Stew Rolfe, GWØETF CWops #919



This solitary early photo of myself doing radio business is of uncertain age. It was taken by a local newspaper at the old Marconi Long Wave Transmitting Station near Caernarfon in North Wales. My local club operates various special events from there each year and I would guess this would have been late 1980s or very early 1990s. I will by then have bought my first paddle, a Kent single lever which I used for many years. The character behind me is the lovely Hywel GW4CNM, a retired surgeon who was known as 'Hywel Cwm Nant y Mynydd'. It's the habit round here (and probably elsewhere?) to augment personal names with imaginative extras based on their callsigns and Hywel's title was particularly apt as he was a native Welsh speaker who lived in a Cwm (valley) by a Nant (stream) and under a Mynydd (mountain). And of course this was in the days when the suffix you ended up with was simply the next in the queue - no choice or vanity calls then. When I was club secretary I became known as 'Excellent Treasurer Fellow' but that's definitely scraping the barrel!

So now it's your turn, do you have a picture to share accompanied by a brief paragraph description, of your early days in radio, experimenting, exploring or just "being a ham". Please send it to [Ian Capon](#).

73, Ian GWØKRL (CWops #2896)

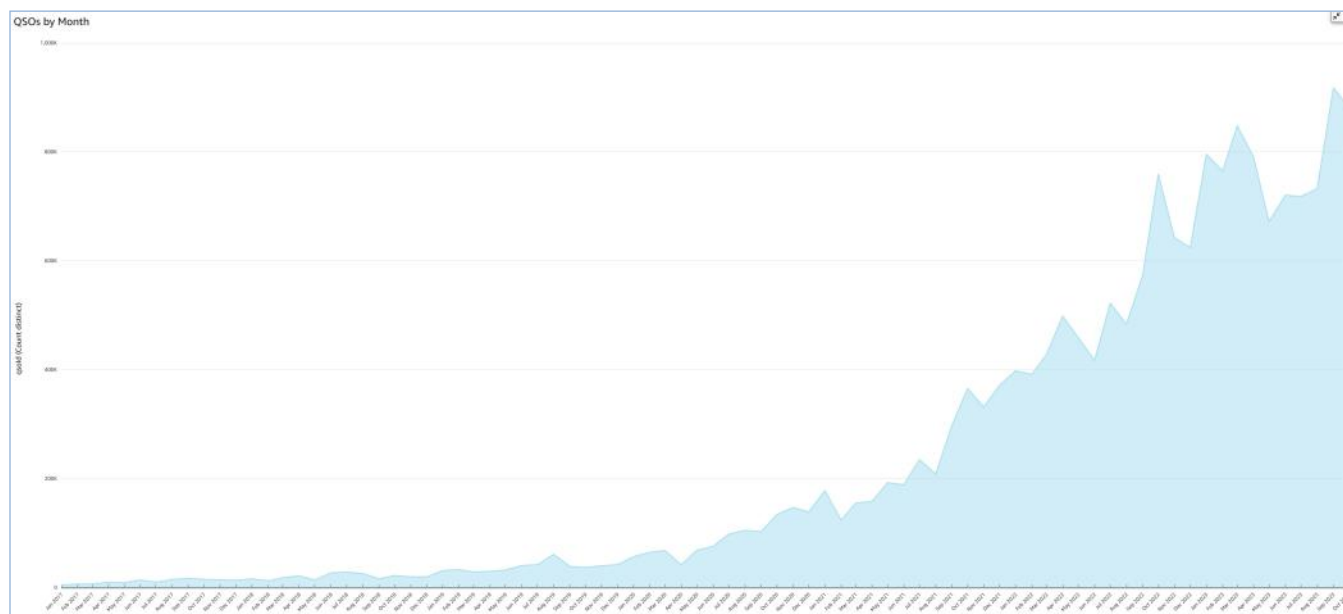
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CWops and POTA

[Andrew Goss](#), AA5JF (CWops #2751)

As anyone who has recently tuned across 20M or 40M knows, Parks on the Air (POTA) has dramatically increased interest in HF operating, especially in North America. During daylight hours, even say on a random Thursday in September, there are at any time numerous portable stations looking for a quick contact. And on a Saturday afternoon, even during a non-contest weekend, it's sometimes so crowded with calls of "CQ POTA" in the General portion of the SSB band, that it can be a challenge to find a clear frequency. If it seems like there has been an uptick in the last year or so in POTA activity, you'd be right. Figure 1 graphs the number of POTA QSOs (per month) since its beginning in early 2017. Breaking out the data from September over the last four years makes the growth since COVID clear:

Month	Number of POTA QSOs (approximate)
September 2020	110,000
September 2021	280,000
September 2022	550,000
September 2023	900,000



Many reading the CWops newsletter will have more than a passing familiarity with POTA, and for those little introduction is required. If you are new to POTA, you might start with the informational part of their [website](#), and read the Getting Started page. Then create a Login, which will give you access to all the features on their [app](#), which acts as the activity part of their website and displays your stats and awards. There is an official Facebook [group](#). And perhaps the best source of official POTA news is from their YouTube [channel](#). Plus there are many, many other resources, including a new book published by the ARRL, plus hundreds or likely thousands of activator videos. For more info about the structure of POTA, see W1DED's [interview](#) last year with POTA found-

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er Jason W3AAX on how it started and where it is going.

What does this have to do with CWops? Most of you will know that POTA CW contacts are usually conducted well below 25 WPM. Of the 5,000+ POTA CW contacts I've made, less than 1% were at speeds above 25WPM on both sides. And most of those were with other CWops members. What stands out is the number of callsigns I work that are not CWops members or testers (given that they are not included in Super Check Partial). Of the 1644 calls I've logged on CW while on a POTA activation (between June 2022 and mid-October 2023), 247 have been with CWops members. Even after factoring in busted calls, changed calls, and club calls, that still leaves almost 1,400 non-CWops members – all but a handful contacted outside of a contest. Most are not likely to become CWops members soon. Nonetheless, as the new members bios are making clear, more and more of our new members are coming to CW through a love of POTA.



My own POTA experience may be instructive for making sense of the growth of CW POTA. I created a POTA account in late 2019, but did very little with it. During COVID I played a lot of radio, much of it on CW, but all from home. I took only a passing interest in hunting POTA activations, and most of it was on SSB. I also fell into 6M grid chasing. In the summer of 2022, I decided that I wanted to activate some rarer grids on 6M. Most 6M activity is on FT8, and I realized I would need

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to get some practice figuring out all the details of portable operating using WSJT-X. I figured doing some POTA activations on HF digital would be a way to start. I did take a spare paddle along, and did some CW on the side. I quickly got hooked on portable operations in the outdoors, and after the 6M E-skip season ended, I wanted to keep going. It was not long until I realized that POTA is way more rewarding on CW than phone or digital. There is no need to hookup your computer, figure out the audio settings, get your clock set right, etc., all required for FT8. And of course you get out better than on SSB. All you need is a key, radio, battery, coax, antenna, headphones and pen & paper for logging (well also some cables). With temporary antennas, lower power outputs, minimal equipment, and RBN porting directly to the POTA spotting page, CW is also just more effective for completing POTA contacts. And with interest in POTA exploding, there are never a shortage of callers when I call CQ.



There is a lot of enthusiasm and interest in the world of CW POTA, but still plenty of room for growing skills and experience, as I learned during the MARAC County Hunter Contest this August. I operated as a CW mobile station from a number of POTA locations, and needed hunters to send their county. Many of the stations who were hunting me via POTA were not able to understand my query asking them to send this information. What struck me then, after the frustration passed, was that POTA is encouraging many who are either new to HF, or have always avoided the bottom part of the bands, to take the plunge, hook up a key, and answer a CW CQ. Most send at speeds between 15 and 20WPM – plenty of them with perfectly created code. I think that's awesome, even if head copying skills are lagging. POTA is a gateway into CW interest. And I believe that's an opportunity that we CW enthusiasts should be engaging with directly.

And what can CWops as a club do to help advance the art of POTA CW? In my own practice, I like to try to work anyone and everyone, regardless of their skill level. That's not too difficult while I'm in the field, sometimes requiring just a little extra patience with a caller here and there. But more

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is needed. Most who get hooked by POTA are interested in the activating side. Activating a park on CW requires a good deal more than answering a CQ, even after figuring out the details of setting up a portable station. Here some good mentoring, likely, is playing an important role. I suspect the classes in the CW Academy and the Long Island CW Club are already addressing this. But isn't this something CWops can engage more deeply with?

Many POTA enthusiasts have discovered the beautiful art of CW. As Figure 2 shows, growth in CW has grown at about the same rate as POTA interest in general, taking off in the summer of 2020 with no sign yet of letting up. April 2023 had over 150,000 CW POTA contacts. The POTA database reveals that 3,150 POTA *activators* have logged at least one CW QSO. That's roughly 23.5% of the grand total of 13,400 POTA activators. Interesting to me is that in the POTA database there are currently about 103,000 unique hunter callsigns who have made at least one CW QSO. This is from data only recorded by the activators. But it likely includes a very large percentage of DXers and contesters, most of whom have made at least one POTA contact in the last six years. Both the CYØS and 3YØJ operations were from POTA locations and are in the dataset.



While there are of course some CW operators not counted here (like the guys that only get on during Sweepstakes or during Field Day, and likely some Europeans where POTA interest is only just beginning), this POTA data gives us a rough estimate of currently active hams who have enough interest in CW to have tried it at least once: about 100,000.

I feel that for CWops to sit by and watch from the sidelines as POTA CW grows, would be a lost opportunity. POTA is where new interest in CW is happening, and we should engage more directly with it. I'm not entirely sure how. One possibility would be an operating event, perhaps a CW Parks QSO Party (suggestions on a better name appreciated). I'm cribbing from the [Georgia State Parks On The Air](#) event begun this year by the local and talented Georgia POTA enthusiasts. It uses the POTA framework, but the rules, website, submissions, results, etc., are all completely separate with no direct involvement of the POTA leadership. And while POTA for years had an annual contest, the so-called plaque event, a few weeks after the results were published this year, POTA announced the plaque event was being discontinued (apparently related to the difficulty of ex-

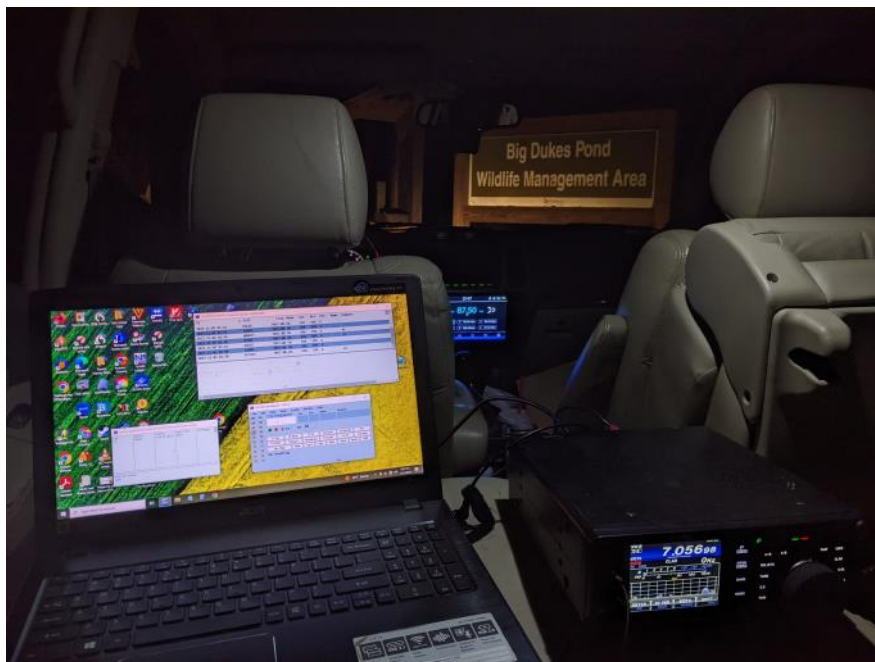
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tracting the results from the existing POTA database). CWops could fill the void. We'd need an open date – perhaps we abandon caution and just use the same weekend as the ARRL Digital contest, which in 2024 is June 1 and 2. To make it work easiest with POTA, it would likely be easiest if it were just for a 24-hour UTC day. And it could be made compatible with WWFF and SOTA enthusiasts, if there was interest. Could be a very casual operating event, or something more formal with some rules and submission requirements. Curious what the club thinks. And if not this, perhaps something else?

I've had a blast this past year with POTA. The highlight was my late May trip to Sunset Beach Island in North Carolina, for a triple activation (POTA, IOTA, and WWFF). I also now have a real mobile antenna, which makes it easier to do a quick activation, just sitting in the backseat of the car. While on a family vacation in Wyoming this summer, I was able to make the requisite 10 contacts (using CW of course) from Devils Tower National Monument, while my wife and son walked to the campground to fill water bottles. So it didn't intrude (much) on family time.

Most importantly, POTA has made me a much better CW operator. Copying unfamiliar calls, sent with unusual fists, and exchanges which sometimes go in surprising directions, all have made me sharper. And although I still will often send from the keyboard, I'm much more adept doing an entire session just with the key. Of course the one thing POTA hasn't improved is my copying speed – luckily I have the CWTs to help me with that.



¹The two tables and the overall POTA data were provided to me by the POTA helpdesk. October 2023 data is incomplete as it was pulled on October 26th.

Prepping For CQ WW CW

[Ken Tanuma](#), JN1THL (CWops #161)

Today It was very nice fine day and we had nice launch and nice meeting.

JH1GTV is making 10m LFA type 6elements boomlength 12m for next CQ WW CW.

W1NN (7J1AAI) CWops#785 Hal will QRV using those.

It should be very strong and please call him.

I will also participate CQ WW CW.

Talking how to set computer.



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L: JH1GTV, Shige, R: W1NN, Hal



**R: top 80m dipole
R: down 40m 3ele full size**

**L: 10m 5 ele stack
L: 20m 4 ele full size**

**On the ground:
10m LFA type 6ele boom 12m**

Tuner Myths and Facts

[Bruce Campbell, W8HW](#) (CWops #958)

(This article originally appeared in the Treasure Coast Ham News, January 2023)

There is a lot of misinformation about antenna tuners. To set the record straight, I'll give you the low down on tuners, what they are and are not.

"Tuners Only Fool Your Antenna." The ARRL Technical Columnist, David Casler, debunks this as myth 2:05 minutes in his [video](#).

Tuners have more than one job. In Dave's video, he starts to answer an unrelated question, but two minutes into his video, he gets into tuners' other job and how they return the reflected power back to the antenna. He explains that reflected power arriving at the tuner is then rerouted back to the antenna to be radiated. Many books have been written on reflected and re-reflected power. There is a lot more to be said on the topic, but his video is a great start. Nice video Dave and congratulations on your new QST column "Ask Dave."

Tuners do a lot more than allow your transmitter to give full power output by providing a good looking match to your transmitter. That is just the beginning. Tuners have four (4) jobs that they do for us. To support what Dave tells us, we will discuss the many benefits a tuner provides for us. Referring to a antenna tuner as a "transmitter fooler" is just wrong. That statement violates basic physics, specifically the laws of thermodynamics.

Dave Casler explains in his videos and articles that while an antenna system with high SWR does reflect power back toward the transmitter, a tuner (properly tuned) re-reflects that same power back to the antenna. That is one of the four jobs a tuner does for you.

The simple "Foolery" belief (myth) violates one of the laws of Thermodynamics ([Conservation of Energy](#)). Additionally that myth fails to understand the 4 jobs that a tuner does for you. Example: some of my antennas I run as much as 12.5 to 1 SWR. Many times I run a full 1,500 watts. If my tuner did not return the reflected power (re-reflect) back to the antenna to be radiated, it would look like the 4th of July in my shack. Additionally the myth fails to understand that resonate circuits do in fact return power (Job #2). With a tuner, the resonant circuit now becomes three parts, antenna - feed line - tuner. Not just the antenna alone.

It would be fire and sparks like the 4th of July in my shack if not for the fact that my tuner does return the high reflected power back to the antenna to be radiated. That is because something must happen with the (700w plus) reflected power. Additionally, the myth fails to understand that the job of a resonant circuit is to return power. That is what they do. Remember that a tuner, (Job 2) resonant circuit now becomes three parts, (antenna - feed line - tuner). That is how power is returned (re-reflected) back to the antenna.

Protecting yourself from myths is difficult, but it can be done. Identifying wrong information is easy if you remember the difference between a myth and a scientific fact is that the myth cannot be explained with math and scientific laws. That is why they are myths. Ask them to explain the math. If they don't know the math, then they don't fully understand the issue. Incomplete under-

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standings are how myths are generated. This also helps explain the speed with which myths travel.

Case in point: It only takes around fifteen (15) watts to melt solder. Does the solder in your shack melt because of SWR? The point of this is that reflected power can only do one of two things. It can either be returned to your antenna (by the tuner) to be radiated, or it becomes heat and will melt solder joints and create fire and noise in your shack.

Power cannot just disappear. According to the laws of Thermodynamics (Conservation of Energy) 100% of the power transmitted must be accounted for. This renders the foolery myth as impossible. Dave's video properly accounts for the re-returned power.

More fun also happens when he/she tries to tell you that an antenna has to be resonating. Some of the most efficient antennas are NON-resonant.

More on this later.

Low SWR does not mean high efficiency. Dummy loads cause the lowest SWR of any antenna and yet are the least efficient antenna of all. Almost 100% of transmitted power is converted into heat and almost 0% is radiated. This proves that SWR meters provide NO indication of antenna efficiency. Antenna efficiency mostly comes from (but is not limited to) higher antenna radiation resistance (large topic for another day).

FYI: Antennas do NOT have VSWR (aka SWR). Only a feed line can have SWR. If someone who tries to tell you that his/her antenna has SWR, they have just made it clear that they do not understand the subject. Your best bet is to just change the subject.

Use caution as SWR does increase the loss in coax. Because power (mathematically) gets returned back and forth to the antenna, the loss in coax increases with additional trips. ARRL and many others provide great charts to calculate that. However this loss too can be overcome. This loss can be reduced almost to zero even with high SWR, easily as high as 20 to 1 or more.

This is done by raising the feedline impedance to 400- 600 ohms (See figure 1). Twin lead feedline makes this easy. Note that 600 ohm feedline has better efficiency (88%) at 20 to 1 SWR than RG-8 has at a 1 to 1 SWR match (87%). Full explanations of this complicated issue are a slightly longer topic for another day. I have done long talks and demonstrations on this very topic. ([For more information](#))

To be clear, Impedances must be matched and circuits must be tuned to resonance for this to work. In the case of a non-resonant antenna, the "tuned circuit" becomes (antenna - feed line - tuner). Your tuner does both of those two jobs (1 & 2).

Figure 1: Comparing 50 ohm to 600 ohm feedline loss for 100 feet of feedline at 10 MHz.

SWR	1-1	3-1	5-1	10-1	20-1
RG-8	87%	82%	75%	60%	44%
600 ohm	98.6%	97%	96%	93%	88%

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Just for information sake, the two remaining two jobs are... 3: BPF (Band Pass Filter), and 4: If so equipped, tuners have an inverted Balun to change your transmitters output from unbalanced to balanced output.

Non-Resonant antennas have been used successfully by broadcasting stations as well as hams for years. Broadcast stations use high power and range means money. This demonstrates the reason why people should test theories before calling them facts. It is unfortunate that myths travel faster than facts. Tuners work and do all four jobs well if used properly.

The most important addition to your shack could very well be a high quality tuner.

SC

Left Handers Rule!

Compiled by [Dick Strassburger](#), N9EEE (CWops #3113)

Or so says my wife. Having lived with a left-handed spouse for nearly 50 years, I've learned to adapt to the left-handed life. At times, it puts a smile on my face when I open my closet to see a newly washed shirt hanging "backwards." Ok, the other direction than how I would hang it. The kitchen utensils are arranged from R to L. Even washing and drying the dishes in a two-sink kitchen - one for washing, the other for drip drying - has its preferences. Then there are the specialty tools as seemingly innocent as scissors that are made for lefties to make life easier for her. She was raised in a right-handed world that forced her to throw and bat like a rightie, but like many lefties, the preference to write, eat, or anything else that requires dexterity remains in the left-handed world. So what does this have to do with CW or Morse Code?

A recent thread on Groups.io (aka "the reflector") about how lefties have wrestled with the iambic keyer - go with the flow or swap hands - got my attention. One of their biggest arguments was learning to send with the right hand and printing with the left would be an obvious advantage to contest logging in a pre-computer era. As a rightie, a few years ago I even thought about switching to sending with my left hand and writing down the exchange with my right just for this reason. But the lack of comfort level with "other hand dexterity" won out. So how about it? How does the left-handed world deal with an iambic keyer? Let's find out. The comments below were gleaned from the reflector in October 2023. One of the commenters even supplied me with a picture. You may be surprised.

Bob, W6BP: Over 50 years ago, when I was a new ham, I learned to send with a bug. I'm left-handed, so I learned to send in "reverse," using my thumb for dashes. These days I'm using a single-lever paddle, and wonder if I'm handicapping myself by sending backwards. Are there any left-handers out there - or anyone who's trained left-handers - with an opinion about whether there's any advantage to relearning to send using the thumbs-are-dots convention?

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Tim, N3QE: Here's an interesting [article](#) on the speed response in different fingers (including the thumb). Quoting their abstract "Thumb [...] showed significantly shorter reaction times than did index [_ _ _] finger". Which is interesting because dots repeat more quickly so maybe that's why the default is to use the thumb for the dots?

Also of note: "Pianists showed significantly shorter reaction times".

Doug, N4IJ: From personal experience - I am left handed and learned to send dashes with my thumb, dots with other fingers. I don't know if I would have been faster or more accurate the other way. What I have found is when I operate Field Day, for example, I don't usually have to change anything if using another persons paddle.

Pete, N4ZR: FWIW, I am also a lefty, and learned to use an electronic keyer 65-some years ago using a borrowed (vacuum tube) keyer and a right-handed friend's paddle. To this day I still send CW that way. I'll have to keep a closer eye on when my sending mistakes happen, but suspect that dots are inherently more mistake-prone. Don't know if using my index finger to control them makes this worse, or if the same things would happen if I was using my thumb. I doubt I'll ever find out.

Fred ["Skip"] K6DGW: I'm left handed. Elmer was too. Taught me to send right so I could write legibly in my log. Over the years, and when logs no longer were sacred, I started putting a second paddle on the left and currently run about 50% each, contests on the right ... grabbing the paddle is still a muscle memory ... ragchews on the left. My left paddle is dots on the thumb.

Jim, AD0AB: I'm left-handed and send CW with my thumb making the dashes on a bug. I am also a classical guitar player and as such am very aware of finger dexterity. From that experience I can definitely say that the thumb is much less agile than the fingers. But, since the bug makes the dots, you don't need a lot of agility there. Dashes require more skill so your best finger should be used to make the dashes and that would not be the thumb.

I get around that limitation by using a paddle and keyer that makes both the dashes and dots. For me, problem solved. For others using bugs, fingers making dashes is the way to go.

That's all I got.

Jim, KK0U: I'm right-handed, but trained myself to send left-handed, which would free up my dominant hand for logging on paper. Never could get used to a bug with either hand. For automatic keying, it probably doesn't make any difference which digit forms which element.

Edit: I send dits with my thumb and dashes with my forefinger.

In my department at work (Tech Service, which included QA/QC, EPA, FDA, OSHA, R&D, etc.) about 50% were lefties. Chemists/biologists all. Perhaps something associated with math/science?

Mike, K5JR: Like many have similarly stated already, being right-handed, I initially learned to send with a paddle right handed in the late 60's on the Heath HD-10, a single lever "paddle", using micro switches for the contacts. Likewise, I taught myself to send left-handed to free up my right for

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paper logging. For me, I stuck with dots on thumbs, installing a Right/Left switch on the back of the HD-10. Prior to the switch, I just laid my forearm on the HD-10.

I later moved on to a "real" paddle, a Brown Bros, where my right hand eventually became proficient at iambic keying on an original Idiom keyer. The BB plugged into the HD-10, so the switch was still functional. To this day, my left hand still sends as if I'm using a single lever, never optimizing for iambic.

Yes, the computer sends most of the CW these days, but I have a paddle for the left hand in contests so the right hand is freed up to punch that "Enter" key.

Rudi de ZS2M, ZS6DX, V51VE: I am right-handed and learned to send with my right hand, thumb sending dots. With time I slowly started using my left hand as well, often changing between hands on a long ragchew (and I love long ragchews!) as my right hand might become tired and also during contests, especially if I am running SO2R where I would often use my right hand to move the VFO (and enter calls into the log) on the second radio looking for multipliers while working a run on the first radio using my left hand to send.

The result is that when using my right hand I use my thumb to send dots but with my left hand I send dots with my forefinger. It sounds a bit confusing when I think about it but the secret is not to think about it!

Very similar discussions can be found in the Radio Control community: do you use your thumb on the sticks or thumb and forefinger? Do you fly with the throttle right (called mode 1) or throttle left (mode 2)? Can you swap between the 2 modes?

Tim, N3QE: I have been told that back in days of yore that the best of best ops had learned to send with their left hand so they could simultaneously be filling out the log (pencil and paper) with their right hand. (This kinda ties back to K3KU's "human helping fill out log" question on CQ-Contest).

Of course the killer logging app was the Scripto mechanical pencil :-)

Steve, WA8Y: Before I joined CWops I copied with my hand. During FD a few times I had a Ham transcribe my scratch or verbal info to the log. Now I copy with my fingers (and head) and at FD I'm a show for other CW operators. I'm left handed but like most lefties, ambidextrous. I do sports and CW right handed, so my left can write. Unfortunately I still copy a lot of weak and poorly formed CW with my hand.

Head copy is a journey.

Mark N5OT: Interesting question with a lot of different responses. I'm not sure there is a better answer besides "do what works best."

My story is I'm left-handed, I learned to send with a straight key with my left hand, then when I got a bug I learned to use it conventionally, with my right hand.

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When I moved up to an electronic keyer, I learned to use a paddle with my right hand.

I have seen left-handed bugs. In fact, Vibroplex still lists it in the [catalog](#) but that page says they are out of stock. I saw one in an antique store once and was curious about how unusual it might be, so I looked it up.

Left-handed contesteer-friend N6AN sends with his left hand but he has to reverse the paddles. If he does not reverse the wires then he turns the whole key around and rests his palm on the works and uses the paddle essentially backwards. He's been doing that for more than 50 years. We were members of a big club station for a while where he simply added a reversing switch to the paddle so everyone could use it regardless of their preference.

I'm thinking he may have had a bug early on, and he may have learned to send on a conventional right-handed bug but using his left hand - I'm not sure.

If it was me I'd base my choice / decision on what I liked best and how I sent code the best. If those were not the same, then I'd have to think more about it.

Dave, G0DJJA: I'm normally right handed, but when I started to learn to send Morse I found that I felt better sending with my left hand, so that's what I did. As an aside, both my children are left-handed even though my ex-wife is right handed as well. Their being left-handed used to worry her grandparents, who thought that the children would be forced to write right-handed at school, which didn't happen as attitudes had changed since their days at school.

When I started to use a paddle key I found using my left hand with the thumb sending the dahs felt best so my paddle and bug keys are all wired that way round. This can confuse people who key right handed if they try to use one of my keys as it is the 'wrong' way round for them. It does, sometimes, draw comments if I post a picture of my radios with a paddle key in view as it is to the left of the desk. Like others have said, a definite advantage is not having to pick up and put down a pen when going from transmitting to receiving, although I do now tend to head read all the standard parts of exchanges only jotting down relevant parts like callsign, signal report, name, location type of antenna, power used etc., things like "TNX FER CALL UR..." I don't write down.

Mike, KC7V: I am similar to Steve. I write left handed, send CW with my right hand and play sports right handed and was a switch hitter in baseball. It is strange how I do some things left handed, but I do most things right handed.

Fred ["Skip"] K6DGW: FWIW: Many years ago when Elecraft was newly out of adolescence, this subject arose. A small survey was conducted, I volunteered to collect and report the data, and IIRC, we had somewhere around 150 responses. As has been pointed out in this thread, "Handedness" appears to be more of a continuous spectrum rather than a binary choice, and several of the survey questions were planned to determine where on the spectrum the respondent actually was [e.g. "hand to brush teeth," "... eat," "... write," and similar].

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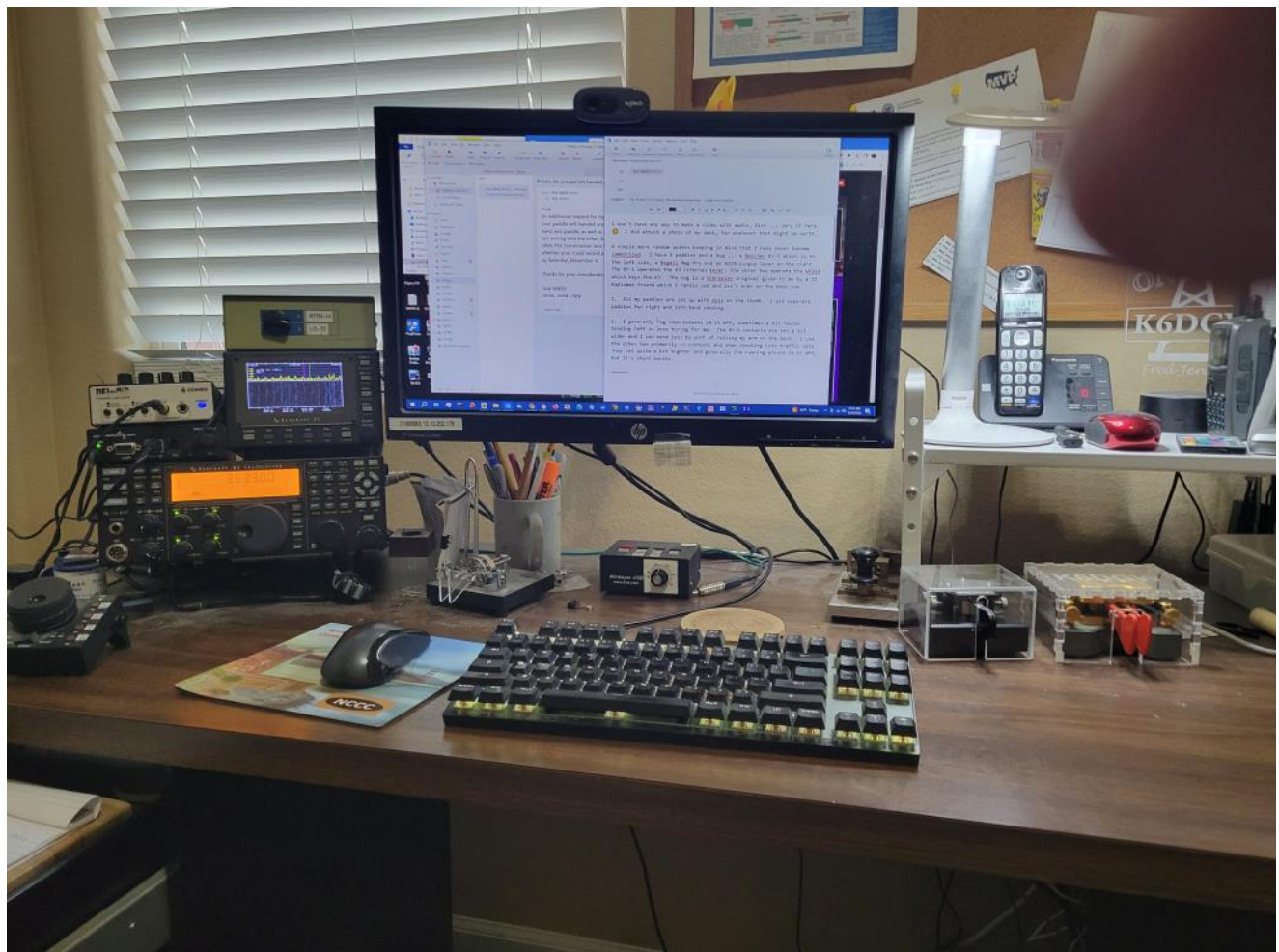
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About 22-25% of the respondents identified and scored fairly far into the left-handed end of the spectrum, and many reported learning to send right-handed often to be able to write left in the logbook.[1] I think only one who was fairly definitely right-handed learned to send left for that reason.

The survey was flawed seriously of course since the sample was self-selected ["kiss of death" in statistics] and for a few other reasons, but 22-25% of hams being naturally southpaws was interesting. The world wide fraction of left-handers runs around 10-12%, and a little more common in males.

Many of the engineering teams I was part of seemed to be somewhat over-endowed with lefties, so much so that, being in the majority for once, our CAE stations and test benches were set up left-ish. We were all lefties on two or three of the teams, and the majority of hams are male, so I've conjectured that leftiness may predispose a male kid to be interested in technical things. YMMV, but a somewhat interesting subject.

My shack...



RSGB Convention – October 14/15 2023

[Stew Rolfe](#), GWØETF CWops #919

We were once again offered a stand at the principal annual RSGB gathering in Milton Keynes, 50 miles north west of London. Nice to meet up with many CWops members, some of whom were regular attendees and some first-timers. The stand attracted a slow but steady stream of the curious and interested, and even a couple of our best known CW characters called in asking about membership. Known personally to many of our members present meant we had them nominated and sponsored by the end of the weekend, and 3 new members by the beginning of the following week. Could this be a record I wonder?

I was also invited to speak about CWops on Saturday afternoon. It seemed well received and created a few minutes of interested discussion at the end. There were just 4 members in the audience so I wasn't simply preaching to the converted. Duncan G3WZD gave a presentation on the CW Academy at last year's Convention so the CWops profile over here is going in the right direction.

Trying to gather members for a photo shoot at events like this is like herding cats – with apologies to cats. Here are my attempts.



(L to R) - Phil G4LPP, Dick G3WRJ, Roger G3LDI, Mike G4DYC and Jim (Dick's brother) G3YLA.

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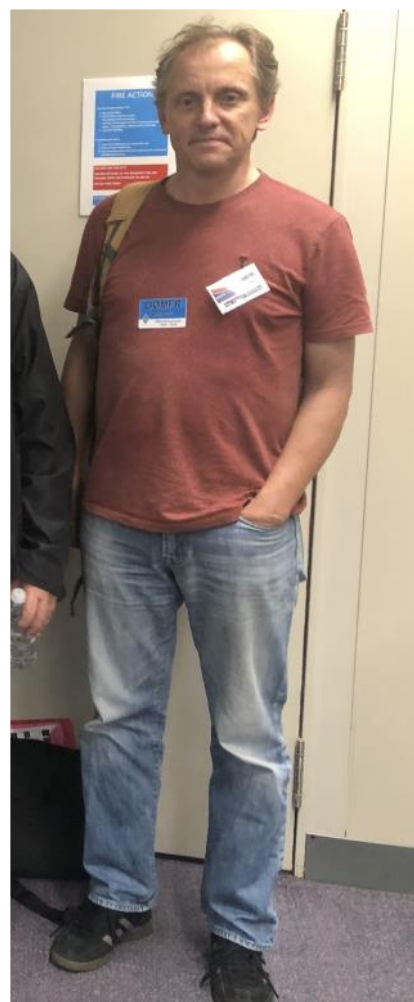


Above: Steve GWØGEI who is my contesting buddy and not a member but being recently retired is threatening to brush up his CW and join us, Martin GW4XUM and Paul G4PVM

Right: Gareth GØMFR

Bottom Right: Chris GM3WOJ

Bottom Left: Ray G3XLG



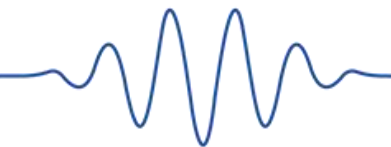
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Radio Society of Great Britain

Advancing amateur radio since 1913



Dear Stewart,

As we start to let the dust settle on what would appear to be a very successful RSGB convention, I wanted to email you personally and thank you for your input last week-end. I have no doubt that your enthusiasm and expertise directly contributed to the great feedback we have already received from those that attended or watched online. As a keen CW operator it was great to see that the mode is very much alive and able to be represented at the convention.

It is always difficult to select subjects which reach our broad membership and those with an interest in our hobby. This was made easier for me by you agreeing to present at the convention. While I did not get to see every presentation those I did see were amazing and I look forward to seeing all of them when they are released to the world by our comms team.

Please feel free to provide me with any feedback you have which I can utilise to ensure our programme and convention next year is even better.

Once again, thank you for your time and I hope you found the experience worthwhile.

Kindest regards (73)

Keith Hotchkiss, GØFEA
Convention Lecture Coordinator
Radio Society of Great Britain

rs.gb.org

The 2023 CW Open

[Bruce Meier](#), N1LN (CWops #1141)



Sponsored by THE CW OPERATORS' CLUB

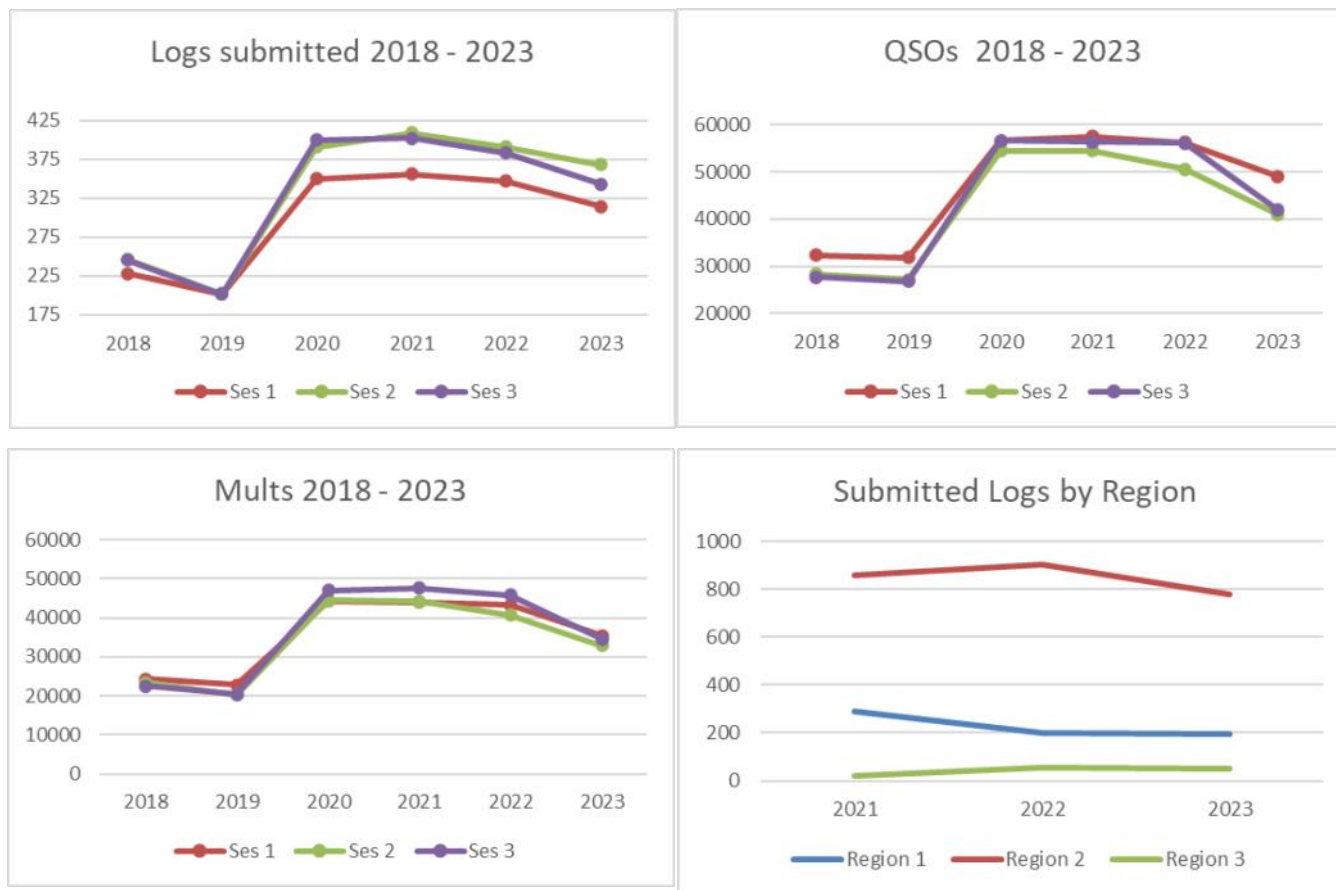
The CW Open is always held on the first weekend of September. This year it was held on September 2, 2023. CW Open Session 1 started on September 2 at 0000Z. Session 2 started at 1200Z and Session 3 started at 2000Z. This flexible session schedule and format allows participants to operate in all sessions or any combination of sessions. The winners of the trophies are selected by ITU region based on session high scores and combined scores. To qualify for an award a minimum of 100 QSOs must be attained in the individual session(s). The plaques are also ITU region based and awarded by session for high scores in each power level; High, Low, QRP. The specific winners of the trophies and plaques can be found below for each session.

Have you heard the saying "A picture is worth 1000 words"? Well, below are four pictures, actually graphs, that show the past six years of CW Open history for LOGS, QSOs and MULTS. The one to focus on is LOGS which perhaps could also be viewed as a measure of participation. My assumption is that if overall Log submissions vary the QSOs and MULTS will follow. Additionally, I only looked at the regional LOGS from 2021, 2022 and 2023 as 2020 had the COVID impact and 2021 was about the same for all statistics. For my purpose, 2021 is the base or reference year. I assumed the largest decrease would be in region 2 as the CW Open falls on a holiday weekend. With COVID mostly behind us, perhaps more families (that include CWops members) are traveling on Labor Day weekend. So, my next step was to look at the regional detail for LOGS. As you will see on the fourth graph, the largest drop from 2022 to 2023 was indeed in region 2. However, to my surprise, region 1 had the biggest drop from 2021 to 2022.

Here are the graphs.:

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So, what is my conclusion? Honestly, I don't have one other than to say, submitted Logs in Region 1 and Region 2 went down, and Region 3 is going up. Congratulations to Region 3!

We would like to, once again, recognize and thank ICOM America for providing the beautiful trophies and plaques to the CW Open winners. The CW Operators Club really appreciates ICOM's continuing support of our premier operating event. Please be sure to check out the great products at ICOM. (click on the logo)



I hope every participant had as much fun with this year's CW Open as I did. So, let us take a look at the 2023 results by Session.

Session 1 - 0000Z to 0400Z Analysis:

For Region 1 High Power, Armin (DK9PY) came in first with final numbers of 277 QSOs, 222 Multipliers and a score of 61494. Get used to reading Armin's name and scores. Once again this year he won all three sessions for Region 1! Nick (LZ3ND) came in second for Region 1 with a score of 50652. No surprise in Region 2 with Bud (AA3B) coming in first with an outstanding QSO count of 612, 334 Mults and a score of 204408. Chas (K3WW) came in second place with a score of 167007. There were no Region 3 submissions that attained the 100 QSO count for an award. Moving on to Low Power, the Region 1 winner was Ivo (9A1AA) with a QSO total of 173 and a mult total of 122 resulting in a score of 21106. As with Armin, get used to seeing Ivo's name and call in the analysis as he won all 3 sessions. Roger (G3LDI) came in second posting a score of

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5607. For Region 2 Don (N4ZZ) finished first again this year with a QSO total of 423, a mult total of 284 and a score of 120132 points. Eric (NM5M) placed second this year with a score of 97790. In the QRP category, Region 2 was the only region to make the 100 QSO required total with Paul (N6MA) finishing first with a QSO total of 181, mult total of 127 and a total score of 22987. Phil (K4PQC) finished in second place with a score of 13780.

Here are the details for Session 1. Plaque and Trophy winners are highlighted in **YELLOW**.

Rgn	Call	Op	QSO	Mult	Score	Power	Rgn	Call	Op	QSO	Mult	Score	Power
2	AA3B	BUD	612	334	204408	HIGH	2	WA8Y	STEVE	292	207	60444	HIGH
2	K3WW	CHAS	537	311	167007	HIGH	2	N2RC	MIKE	282	201	56682	HIGH
2	N5ZO	MARK	516	306	157896	HIGH	2	KC3M	JACK	295	191	56345	HIGH
2	K5GN	DAVE	528	297	156816	HIGH	1	LZ3ND	NICK	268	189	50652	HIGH
2	N5RZ	GATOR	517	303	156651	HIGH	2	NN5O	LARRY	269	188	50572	HIGH
2	K5PI	ROB	512	293	150016	HIGH	2	K1DJ	RICH	273	185	50505	HIGH
2	N3RD	DAVE	508	282	143256	HIGH	2	WA3AAN	GRANT	269	181	48689	HIGH
2	N4AF	HOWIE	463	301	139363	HIGH	2	KV0I	BILL	260	173	44980	HIGH
2	K7RL	MITCH	494	278	137332	HIGH	2	N4FP	WAYNE	234	175	40950	HIGH
2	N1LN	BRUCE	483	284	137172	HIGH	2	N8KH	KEN	257	156	40092	HIGH
2	W8FJ	JOHN	501	273	136773	HIGH	2	N4GO	JAY	215	167	35905	HIGH
2	K3MM	TY	456	283	129048	HIGH	2	N1RM	RICK	231	150	34650	HIGH
2	N3QE	TIM	425	281	119425	HIGH	2	K9MA	SCOTT	201	168	33768	HIGH
2	N5OT	MARK	417	275	114675	HIGH	2	K4WW	BO	188	178	33464	HIGH
2	N3AM	JOHN	413	262	108206	HIGH	2	N9RV	PAT	197	167	32899	HIGH
2	K3WJV	BILL	425	251	106675	HIGH	2	W2CDO	PETER	188	159	29892	HIGH
2	N3OC	BRIAN	404	257	103828	HIGH	2	WA4JUK	JOE	213	137	29181	HIGH
2	N4BP	BOB	399	259	103341	HIGH	2	VE5MX	TODD	172	169	29068	HIGH
2	KR2Q	DOUG	403	254	102362	HIGH	2	W6SX	HANK	197	144	28368	HIGH
2	W4WF	CHRIS	390	261	101790	HIGH	2	K5RC	TOM	187	151	28237	HIGH
2	W5TM	ED	391	253	98923	HIGH	2	N7US	JIM	202	138	27876	HIGH
2	K5TU	KIM	367	261	95787	HIGH	2	W2NO	DAN	190	146	27740	HIGH
2	W8FN	RANDY	379	251	95129	HIGH	2	AA4CF	CHAS	180	144	25920	HIGH
2	K5OT	LARRY	377	252	95004	HIGH	2	N5NA	ALAN	177	131	23187	HIGH
2	K6RB	ROB	366	250	91500	HIGH	2	K7WP	JOHN	165	135	22275	HIGH
2	N3AD	ALAN	367	248	91016	HIGH	2	K5UV	MIKE	164	134	21976	HIGH
2	K7QA	TOM	383	237	90771	HIGH	2	N5TJ	JEFF	163	134	21842	HIGH
2	K4BAI	JOHN	386	233	89938	HIGH	2	N5UM	AL	157	133	20881	HIGH
2	N0TA	JOHN	374	238	89012	HIGH	2	K3PP	GLENN	165	118	19470	HIGH
2	N3JT	JIM	375	236	88500	HIGH	2	W0CWO	CLEM	145	130	18850	HIGH
2	KE2D	BOB	366	236	86376	HIGH	2	WB0RLJ	JIM	146	126	18396	HIGH
2	K3MD	JOHN	368	233	85744	HIGH	2	VE3DZ	YURI	142	123	17466	HIGH
2	K4RUM	MIKE	358	239	85562	HIGH	2	K2RET	BOB	148	111	16428	HIGH
2	K1EBY	FRANK	345	235	81075	HIGH	2	K0TQ	MIKE	124	122	15128	HIGH
2	N5EE	KEN	333	237	78921	HIGH	2	KC2LSD	CODY	120	120	14400	HIGH
2	K6NR	DANA	335	234	78390	HIGH	1	GW2CWO	RON	131	105	13755	HIGH
2	AI0Y	JOE	330	234	77220	HIGH	2	KB1NO	JOHN	135	101	13635	HIGH
2	KT5C	MIKE	333	228	75924	HIGH	2	K5GQ	MARK	115	104	11960	HIGH
2	N4ZR	PETE	362	208	75296	HIGH	2	K1TH	TOM	126	93	11718	HIGH
2	N8AA	JOHN	328	225	73800	HIGH	2	K1RV	PI	117	99	11583	HIGH
2	W2GD	JOHN	356	202	71912	HIGH	1	HA3NU	LACY	108	101	10908	HIGH
2	NA4J	JIM	308	226	69608	HIGH	2	KN7Y	JACK	112	93	10416	HIGH
2	AA5JF	ANDY	319	213	67947	HIGH	2	AF4T	DOUG	117	89	10413	HIGH
2	WG3J	ERIC	310	216	66960	HIGH	2	WE5P	BILL	110	94	10340	HIGH
2	WB0SND	MIKE	296	225	66600	HIGH	2	KA5M	MARSH	113	91	10283	HIGH
2	AH6KO	STAN	303	218	66054	HIGH	2	W5JK	STEVE	109	94	10246	HIGH
2	N5TOO	VAN	283	229	64807	HIGH	2	WA6URY	DAN	113	90	10170	HIGH
2	KR2AA	ERIC	294	215	63210	HIGH	2	VE3KP	KEN	111	90	9990	HIGH
2	N6RK	RICK	287	220	63140	HIGH	2	N0KQ	BILL	115	81	9315	HIGH
2	KC7V	MIKE	291	216	62856	HIGH	2	AA3R	FRED	104	89	9256	HIGH
1	DK9PY	ARMIN	277	222	61494	HIGH	2	K9CT	CRAIG	102	87	8874	HIGH

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Rgn	Call	Op	QSO	Mult	Score	Power	Rgn	Call	Op	QSO	Mult	Score	Power
2	N1RO	DAVE	96	86	8256	HIGH	1	PA3AAV	GERT	42	39	1638	HIGH
2	N5WNG	MIKE	94	86	8084	HIGH	2	KB9ML	MIKE	40	40	1600	HIGH
2	N4LSJ	TOM	95	83	7885	HIGH	2	K5VBA	STAN	39	35	1365	HIGH
1	G4DRS	JOHN	97	75	7275	HIGH	2	N5EKO	JERRY	30	30	900	HIGH
2	WB2WPM	SHANE	92	79	7268	HIGH	3	JN1THL	KEN	32	28	896	HIGH
2	W2XYZ	FRANK	94	76	7144	HIGH	3	JJ1FXF	HIRO	21	19	399	HIGH
2	NW3Y	CC	87	77	6699	HIGH	2	K2EJ	STEVE	19	19	361	HIGH
2	K7GM	RICK	87	76	6612	HIGH	2	AG1C	LARRY	11	11	121	HIGH
2	KB3Z	MARK	90	73	6570	HIGH	2	AG5ZN	BILL	11	11	121	HIGH
2	NM5G	KEITH	91	70	6370	HIGH	1	OH9COG	ZABA	11	10	110	HIGH
3	VK2GR	ALLAN	75	71	5325	HIGH	3	JA3AVO	SUMI	10	10	100	HIGH
2	VE3KIU	DAVE	72	65	4680	HIGH	3	7K1JFM	KAKE	8	8	64	HIGH
2	K1MT	DAVID	67	60	4020	HIGH	3	JS2IMR	TODD	8	8	64	HIGH
2	KT4XN	TOM	57	53	3021	HIGH	3	E21EIC	CHAMP	8	4	32	HIGH
2	AF5J	HAL	56	50	2800	HIGH	3	JF1UOX	MISA	5	5	25	HIGH
2	NS4X	BART	51	51	2601	HIGH	3	JF1UOW	MIT	4	4	16	HIGH
2	N7AAE	MARTY	52	47	2444	HIGH	3	7K1JFM	KAKE	8	8	1	HIGH
2	WA5LXS	DENNIS	44	41	1804	HIGH							

Rgn	Call	Op	QSO	Mult	Score	Power	Rgn	Call	Op	QSO	Mult	Score	Power
2	N4ZZ	DON	423	284	120132	LOW	2	AD8J	JOHN	168	140	23520	LOW
2	NM5M	ERIC	385	254	97790	LOW	2	AG3I	MARTY	159	144	22896	LOW
2	WJ9B	WILL	383	254	97282	LOW	2	W3WHK	SAUL	167	128	21376	LOW
2	KG9X	FRED	358	212	75896	LOW	1	9A1AA	IVO	173	122	21106	LOW
2	K1VUT	DAVE	321	223	71583	LOW	2	N5XE	CARL	177	114	20178	LOW
2	W7ZRC	ROD	327	185	60495	LOW	2	K0INN	TOM	159	125	19875	LOW
2	AA2IL	JOE	295	203	59885	LOW	2	NU3A	KEN	161	122	19642	LOW
2	W0UO	JIM	289	202	58378	LOW	2	W9TD	GARY	137	128	17536	LOW
2	KY4ID	MIKE	282	205	57810	LOW	2	N2UU	BOB	149	117	17433	LOW
2	W7CXX	JACK	265	216	57240	LOW	2	VE2FK	DUB	138	119	16422	LOW
2	K5MR	STEVE	282	194	54708	LOW	2	N2EY	JIM	147	109	16023	LOW
2	KG5U	DALE	288	189	54432	LOW	2	NK4O	AJ	137	116	15892	LOW
2	WQ5L	RAY	278	195	54210	LOW	2	WU6P	NIAN	141	109	15369	LOW
2	KQ4R	ED	268	201	53868	LOW	2	N4IJ	DOUG	142	105	14910	LOW
2	W3KB	KEITH	294	179	52626	LOW	2	N0AT	RON	131	109	14279	LOW
2	KG5OA	DOUG	258	195	50310	LOW	2	AA4NP	JIM	126	112	14112	LOW
2	N2YO	CHIP	262	190	49780	LOW	2	W8OV	DAVE	141	100	14100	LOW
2	KY0Q	RICK	269	176	47344	LOW	2	N1YL	ANNE	132	103	13596	LOW
2	KK0U	JIM	258	183	47214	LOW	2	K5XU	MIKE	133	102	13566	LOW
2	K3WU	JIM	243	187	45441	LOW	2	KP3W	RENATO	129	104	13416	LOW
2	NJ3K	BRUCE	261	172	44892	LOW	2	W9NXM	GUS	128	101	12928	LOW
2	AI6O	ED	257	171	43947	LOW	2	N5GG	COLIN	124	94	11656	LOW
2	NS2N	PAUL	249	171	42579	LOW	2	AA9RK	MIKE	111	87	9657	LOW
2	KV8Q	TOM	221	166	36686	LOW	2	K0MPH	ROGER	110	86	9460	LOW
2	KM4FO	DWIGHT	206	163	33578	LOW	2	KD2KW	KEN	110	85	9350	LOW
2	VE3GFN	MIKE	215	155	33325	LOW	2	AA0AW	DOUG	108	86	9288	LOW
2	N8LR	GARY	212	155	32860	LOW	2	K4FN	DAN	96	96	9216	LOW
2	K0AD	AL	206	157	32342	LOW	2	KB3FW	HARV	101	80	8080	LOW
2	K3JT	TERRY	204	156	31824	LOW	2	AC3RA	RICH	97	80	7760	LOW
2	N3CKI	DAVE	206	151	31106	LOW	2	W4JM	STEVE	94	77	7238	LOW
2	K1TR	ED	199	154	30646	LOW	2	KE2SX	GREGG	95	75	7125	LOW
2	VE3MA	ALEX	211	144	30384	LOW	2	W3FIZ	PAT	88	74	6512	LOW
2	N0LY	JON	194	156	30264	LOW	2	N2EIM	BOB	81	80	6480	LOW
2	N1DC	RICK	204	148	30192	LOW	2	K3UA	PHIL	83	78	6474	LOW
2	WZ0W	SCOTT	184	154	28336	LOW	2	W9CF	KEVIN	85	73	6205	LOW
2	CO8NMN	NOE	179	148	26492	LOW	2	KG3V	TOM	82	71	5822	LOW
2	K1RF	STEVE	192	134	25728	LOW	2	K9CW	DREW	80	72	5760	LOW
2	K3PI	RUSS	177	144	25488	LOW	1	G3LDI	ROGER	89	63	5607	LOW
2	W0TG	BILL	191	130	24830	LOW	2	K3QP	BILL	74	73	5402	LOW
2	KY4GS	AMANDA	176	140	24640	LOW	2	KB8GAE	RICH	73	68	4964	LOW

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Rgn	Call	Op	QSO	Mult	Score	Power	Rgn	Call	Op	QSO	Mult	Score	Power
2	N7WY	BOB	77	60	4620	LOW	2	W4LT	LOU	23	23	529	LOW
1	G3YLA	JIM	70	63	4410	LOW	1	SM5IMO	DAN	26	19	494	LOW
2	NP4H	RENATO	73	58	4234	LOW	1	G0TRT	CIE	22	22	484	LOW
1	G3WW	DEZ	66	62	4092	LOW	2	K5KXJ	CW	22	21	462	LOW
2	K0GUZ	STEVE	62	62	3844	LOW	2	KI6OY	LEE	22	21	462	LOW
2	KQ4DAP	CAINAN	60	59	3540	LOW	2	N4GL	MARTY	20	20	400	LOW
2	K1GU	NED	60	58	3480	LOW	2	NJ7V	RED	20	20	400	LOW
2	WA9LEY	LEE	63	55	3465	LOW	2	WN3F	ROY	20	20	400	LOW
2	KG8Y	TOM	58	57	3306	LOW	2	KB4DE	BILL	19	19	361	LOW
2	N4NTO	TRIPP	59	55	3245	LOW	1	EI8KW	RYAN	19	17	323	LOW
2	N4JEH	JENNA	56	56	3136	LOW	3	JH4FUF	IKKAN	17	14	238	LOW
2	WS5D	JACK	56	53	2968	LOW	2	N5DTT	JIM	14	14	196	LOW
2	AC0W	BILL	53	53	2809	LOW	1	RA9AP	ALEX	14	13	182	LOW
1	HA6NL	LACI	56	50	2800	LOW	2	KP3J	RENATO	12	12	144	LOW
2	K5TS	DAVE	56	50	2800	LOW	2	N1CEO	PETER	12	12	144	LOW
2	AA6VX	RICH	57	49	2793	LOW	1	SE4E	LARS	12	10	120	LOW
2	CO8WN	MANDI	54	49	2646	LOW	2	AE5EZ	ROGER	10	10	100	LOW
2	NN4RB	RICK	52	50	2600	LOW	3	BA4TB	DALE	10	10	100	LOW
2	K8CKC	MIKE	55	43	2365	LOW	1	HA5BMS	SANDOR	9	9	81	LOW
1	M0RYB	PETER	51	45	2295	LOW	1	SD1A	ERIC	9	9	81	LOW
2	N4EEL	WIG	46	45	2070	LOW	2	KK6CN	KAT	8	8	64	LOW
1	UR7EC	ALEX	43	39	1677	LOW	2	VE2OXP	KLAUS	8	8	64	LOW
2	K9EI	MATT	39	39	1521	LOW	1	F6JOE	JEAN	7	7	49	LOW
2	W4CMG	CATHY	38	38	1444	LOW	1	UT4LW	YURI	7	7	49	LOW
2	N9TF	GENE	37	36	1332	LOW	2	KC9YL	ANNE	7	7	49	LOW
2	VA3PM	PIERRE	35	35	1225	LOW	2	NJ4Q	WILL	7	7	49	LOW
2	N7SE	STEVE	35	34	1190	LOW	3	VK5GG	GRAEME	6	6	36	LOW
2	KC3RYH	TIM	34	34	1156	LOW	2	KF3G	SAM	5	5	25	LOW
2	W7JET	BRIAN	34	34	1156	LOW	3	JK7UST	SUGI	5	5	25	LOW
2	W8EWH	MARK	34	34	1156	LOW	3	JN1KMI	TAKA	4	4	16	LOW
2	NF8M	FRANK	35	33	1155	LOW	3	E25KAE	BUN	5	2	10	LOW
2	N5DCH	DAVE	34	29	986	LOW	1	G3WRJ	DICK	3	3	9	LOW
3	J11RXQ	HIRO	32	28	896	LOW	1	UA4FDL	GEN	3	3	9	LOW
2	N1RBD	RICH	30	29	870	LOW	1	PY4XX	CARLOS	1	1	1	LOW
2	WB2PJH	DAVE	30	29	870	LOW	2	N5JGE	JIM	1	1	1	LOW
2	W2LCQ	ED	29	29	841	LOW	3	JA0JHQ	NOBU	1	1	1	LOW
2	W6GMT	BROCK	28	28	784	LOW	3	JE6PJP	TOMO	1	1	1	LOW
2	N5FZ	PAUL	29	26	754	LOW	3	JF2FIU	MARK	1	1	1	LOW
1	OH1SIC	GI	30	25	750	LOW	3	JO1PZR	MASA	1	1	1	LOW
2	K1LHO	MIKE	27	27	729	LOW							

Rgn	Call	Op	QSO	Mult	Score	Power	Rgn	Call	Op	QSO	Mult	Score	Power
2	N6MA	PAUL	181	127	22987	QRP	2	W3PAX	ADAM	37	35	1295	QRP
2	K4PQC	PHIL	130	106	13780	QRP	2	WO9B	MIKE	32	32	1024	QRP
2	N5ER	JOHN	128	102	13056	QRP	2	N6HI	JOHN	29	28	812	QRP
2	N5AW	MARV	119	106	12614	QRP	2	K2AL	AL	20	19	380	QRP
2	NQ2W	WILL	112	78	8736	QRP	2	N0MII	JEFF	19	19	361	QRP
2	W7LG	MIKE	95	80	7600	QRP	2	K6UFO	MORK	12	11	132	QRP
2	VE3SIF	RON	88	80	7040	QRP	2	WV1D	PAT	9	9	81	QRP
2	KO1H	JOHN	79	72	5688	QRP	2	W4RKU	KEVIN	5	5	25	QRP
2	KK9U	SEAN	70	58	4060	QRP	2	KN6BAZ	ALEX	3	3	9	QRP

Session 2 – 1200Z to 1600Z Analysis:

For Region 1 High Power, Peter (DK9PY) came in first again with final numbers of 334 QSOs, 263 Multipliers and a score of 87842. Chris (GM2V), came in second in Region 1 with a score of 38247. For Region 2 Bud and Steve swapped positions this year with Steve (N2IC) finishing in first place with a QSO count of 519, 302 Mults and a score of 156738 and Bud (AA3B) came in

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second place with a score of 145137. For Region 3, Allan (VK2GR) came in first with a QSO count of 110, 108 Multipliers and a score of 11880. Moving on to Low Power, the Region 1 winner was once again Ivo (9A1AA) with a QSO total of 196 and a mult total of 149 resulting in a score of 29204. Paul (G4PVM) placed second with a score of 17222. For Region 2 Will (WJ9B) claimed first place with a QSO total of 321, a mult total of 225 and a score of 72225 points. Don (N4ZZ) moved down one position finishing in second with a score of 70761. Moving on to the QRP class, John (N5ER) finished in first place for Region 2 with 128 QSOs, 101 mults and a score of 12928. Phil (K4PQC) came in second with a score of 12600.

Here are the details for Session 2. Plaque and Trophy winners are highlighted in **YELLOW**.

Rgn	Call	Op	QSO	Mult	Score	Power	Rgn	Call	Op	QSO	Mult	Score	Power
2	N2IC	STEVE	519	302	156738	HIGH	2	K5AX	TOM	229	190	43510	HIGH
2	AA3B	BUD	479	303	145137	HIGH	2	WA8Y	STEVE	231	177	40887	HIGH
2	N5ZO	MARK	478	290	138620	HIGH	2	N5TOO	VAN	226	179	40454	HIGH
2	K5PI	ROB	426	297	126522	HIGH	2	K1EBY	FRANK	221	176	38896	HIGH
2	K3WW	CHAS	421	294	123774	HIGH	1	GM2V	CHRIS	209	183	38247	HIGH
2	N5RZ	GATOR	416	287	119392	HIGH	2	AH6KO	STAN	226	167	37742	HIGH
2	K5GN	DAVE	415	277	114955	HIGH	2	N9RV	PAT	209	178	37202	HIGH
2	N4AF	HOWIE	389	275	106975	HIGH	2	KC3M	JACK	216	166	35856	HIGH
2	K8IA	BOB	387	251	97137	HIGH	1	PA3AAV	GERT	203	168	34104	HIGH
2	N1LN	BRUCE	364	265	96460	HIGH	2	K5UV	MIKE	205	165	33825	HIGH
2	N3RD	DAVE	385	246	94710	HIGH	2	KE2D	BOB	202	164	33128	HIGH
2	W8FJ	JOHN	372	244	90768	HIGH	2	N1RM	RICK	210	156	32760	HIGH
1	DK9PY	ARMIN	334	263	87842	HIGH	1	EA1X	JUAN	197	157	30929	HIGH
2	K3MM	TY	353	247	87191	HIGH	1	LZ3ND	NICK	206	148	30488	HIGH
2	K5OT	LARRY	341	255	86955	HIGH	2	N3CW	ED	194	157	30458	HIGH
2	W4WF	CHRIS	340	253	86020	HIGH	2	A10Y	JOE	183	164	30012	HIGH
2	K5TU	KIM	327	242	79134	HIGH	2	K4WW	BO	186	158	29388	HIGH
2	W2GD	JOHN	342	223	76266	HIGH	2	KV0I	BILL	186	152	28272	HIGH
2	N4BP	BOB	298	237	70626	HIGH	2	N4FP	WAYNE	183	149	27267	HIGH
2	N5OT	MARK	311	227	70597	HIGH	2	WA3AAN	GRANT	187	143	26741	HIGH
2	K6RB	ROB	319	217	69223	HIGH	1	GW2CWO	RON	180	148	26640	HIGH
2	N3QE	TIM	301	227	68327	HIGH	2	W2CDO	PETER	175	148	25900	HIGH
2	KT5C	MIKE	298	223	66454	HIGH	2	N2RC	MIKE	173	133	23009	HIGH
2	N5XZ	ALLEN	282	233	65706	HIGH	1	DF7TV	TOM	162	138	22356	HIGH
2	K4BAI	JOHN	291	223	64893	HIGH	2	AA5JF	ANDY	160	138	22080	HIGH
2	N5EE	KEN	282	221	62322	HIGH	2	W5JK	STEVE	167	132	22044	HIGH
2	KR2Q	DOUG	282	216	60912	HIGH	2	K1DJ	RICH	154	129	19866	HIGH
2	KC7V	MIKE	296	200	59200	HIGH	1	G4DRS	JOHN	154	122	18788	HIGH
2	N3AM	JOHN	287	204	58548	HIGH	1	M1X	STEVE	152	115	17480	HIGH
2	N4ZR	PETE	285	198	56430	HIGH	2	KB1NO	JOHN	143	122	17446	HIGH
2	K7QA	TOM	270	204	55080	HIGH	2	KN7Y	JACK	154	109	16786	HIGH
2	N3AD	ALAN	275	198	54450	HIGH	2	W5GN	BARRY	132	126	16632	HIGH
2	K3WJV	BILL	284	186	52824	HIGH	2	N8KH	KEN	130	127	16510	HIGH
2	N0TA	JOHN	262	201	52662	HIGH	2	W6SX	HANK	146	104	15184	HIGH
2	K3MD	JOHN	255	199	50745	HIGH	2	K9CT	CRAIG	123	121	14883	HIGH
2	N5TJ	JEFF	248	198	49104	HIGH	2	NW3Y	CC	127	116	14732	HIGH
2	N3JT	JIM	260	187	48620	HIGH	1	OY1CT	CAEN	130	105	13650	HIGH
2	N8AA	JOHN	250	194	48500	HIGH	2	VE5MX	TODD	115	115	13225	HIGH
2	K4RUM	MIKE	239	194	46366	HIGH	2	K9MA	SCOTT	110	110	12100	HIGH
2	W5TM	ED	241	192	46272	HIGH	3	VK2GR	ALLAN	110	108	11880	HIGH
2	WG3J	ERIC	235	194	45590	HIGH	2	VE3CT	ART	107	106	11342	HIGH
2	W8FN	RANDY	245	186	45570	HIGH	2	N1RO	DAVE	110	99	10890	HIGH
2	AA4CF	CHAS	233	192	44736	HIGH	2	VE3KIU	DAVE	110	96	10560	HIGH
2	K7WP	JOHN	241	183	44103	HIGH	2	WB0RLJ	JIM	103	100	10300	HIGH
2	KR2AA	ERIC	228	192	43776	HIGH	2	W2NO	DAN	115	84	9660	HIGH
2	N6RK	RICK	232	188	43616	HIGH	2	KA5M	MARSH	100	96	9600	HIGH

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Rgn	Call	Op	QSO	Mult	Score	Power	Rgn	Call	Op	QSO	Mult	Score	Power
1	SD1A	ERIC	110	87	9570	HIGH	2	AF4T	DOUG	45	44	1980	HIGH
2	AG1C	LARRY	96	96	9216	HIGH	2	KG5VK	STEVE	43	39	1677	HIGH
2	NE5A	GEORGE	103	87	8961	HIGH	3	JN1THL	KEN	44	37	1628	HIGH
2	KJ9C	MEL	95	94	8930	HIGH	2	K2YR	CARL	38	38	1444	HIGH
2	K1RV	PI	99	87	8613	HIGH	2	AI4WW	DAN	38	37	1406	HIGH
2	K1TH	TOM	96	87	8352	HIGH	1	PE6Q	AD	36	36	1296	HIGH
2	K2RET	BOB	100	83	8300	HIGH	2	AG5ZN	BILL	37	35	1295	HIGH
1	RA3DS	ALEX	101	81	8181	HIGH	2	K3TN	JOHN	33	30	990	HIGH
1	YL2PJ	SIGI	98	82	8036	HIGH	2	N4OI	KEN	30	30	900	HIGH
1	OK2QA	RUDA	91	84	7644	HIGH	2	NS4X	BART	29	28	812	HIGH
2	K5GQ	MARK	90	82	7380	HIGH	1	F5SGI	JEAN	26	26	676	HIGH
2	AA3R	FRED	94	78	7332	HIGH	2	K2EJ	STEVE	25	25	625	HIGH
2	N0KQ	BILL	95	76	7220	HIGH	2	W8EH	ERNIE	25	25	625	HIGH
2	N4LSJ	TOM	97	74	7178	HIGH	2	WA5LXS	DENNIS	23	23	529	HIGH
2	WB2WPM	SHANE	88	75	6600	HIGH	3	JJ1FXF	HIRO	23	21	483	HIGH
2	K1MT	DAVID	87	71	6177	HIGH	3	JS2IMR	TODD	23	20	460	HIGH
2	K3PP	GLENN	80	69	5520	HIGH	2	N7AAE	MARTY	21	21	441	HIGH
1	LZ1HW	SPAS	81	65	5265	HIGH	2	AF5J	HAL	21	20	420	HIGH
1	EA2KV	JC	69	67	4623	HIGH	2	KB9ML	MIKE	20	20	400	HIGH
1	HA3NU	LACY	71	61	4331	HIGH	2	NM5G	KEITH	19	19	361	HIGH
2	WA6URY	DAN	67	62	4154	HIGH	3	7K1JFM	KAKE	19	19	361	HIGH
2	K6NA	GLEN	62	55	3410	HIGH	1	SD0W	MATS	16	16	256	HIGH
2	W4PF	STEVE	58	58	3364	HIGH	2	K0TQ	MIKE	16	16	256	HIGH
1	G4R	TOM	60	54	3240	HIGH	2	K5VG	JOHN	16	16	256	HIGH
1	EA5FID	JUAN	56	56	3136	HIGH	2	VE3NZ	BEN	16	16	256	HIGH
1	OH5ZA	ZABA	59	49	2891	HIGH	1	OZ3SM	STEVE	13	13	169	HIGH
2	N5EKO	JERRY	56	49	2744	HIGH	3	JA2HYD	TOSHI	11	11	121	HIGH
2	N5EP	STEVE	52	50	2600	HIGH	3	JF1UOW	MIT	11	11	121	HIGH
2	N7US	JIM	51	49	2499	HIGH	2	VA3TNM	SIN	9	9	81	HIGH
1	EA6EJ	INI	49	49	2401	HIGH	3	JA3AVO	SUMI	9	9	81	HIGH
2	AE1T	PETER	49	49	2401	HIGH	2	KT4XN	TOM	8	8	64	HIGH
2	WE5P	BILL	47	47	2209	HIGH	3	JF1UOX	MISA	8	8	64	HIGH
2	VE3KP	KEN	46	46	2116	HIGH	2	W4NZ	TED	5	5	25	HIGH
2	WB4HRL	ED	45	45	2025	HIGH							

Rgn	Call	Op	QSO	Mult	Score	Power	Rgn	Call	Op	QSO	Mult	Score	Power
2	WJ9B	WILL	321	225	72225	LOW	1	G4PVM	PAUL	158	109	17222	LOW
2	N4ZZ	DON	309	229	70761	LOW	2	NS2N	PAUL	144	116	16704	LOW
2	NM5M	ERIC	306	228	69768	LOW	2	N1DC	RICK	138	121	16698	LOW
2	K0AD	AL	265	198	52470	LOW	1	HA6NL	LACI	147	112	16464	LOW
2	W0UO	JIM	251	208	52208	LOW	2	W0TG	BILL	145	112	16240	LOW
2	WQ5L	RAY	253	198	50094	LOW	2	N5AW	MARV	127	124	15748	LOW
2	KQ4R	ED	240	194	46560	LOW	2	W7CX	JACK	147	105	15435	LOW
2	K1VUT	DAVE	242	191	46222	LOW	2	KY4GS	AMANDA	138	111	15318	LOW
2	W7ZRC	ROD	231	171	39501	LOW	2	N8LR	GARY	133	114	15162	LOW
2	VE3KI	RICH	233	169	39377	LOW	2	K3JT	TERRY	129	111	14319	LOW
2	KG5U	DALE	228	168	38304	LOW	2	K0INN	TOM	132	106	13992	LOW
2	W3KB	KEITH	224	159	35616	LOW	2	N1YL	ANNE	126	107	13482	LOW
2	KG9X	FRED	198	159	31482	LOW	2	AC0W	BILL	116	115	13340	LOW
1	9A1AA	IVO	196	149	29204	LOW	2	N0AT	RON	123	105	12915	LOW
2	KY0Q	RICK	190	152	28880	LOW	2	W0CWO	CLEM	119	108	12852	LOW
2	KK0U	JIM	194	143	27742	LOW	2	NU3A	KEN	125	102	12750	LOW
2	KP3W	RENATO	175	146	25550	LOW	1	M0RYB	PETER	122	100	12200	LOW
2	AA2IL	JOE	179	141	25239	LOW	2	VE3GFN	MIKE	116	100	11600	LOW
2	VE2FK	DUB	157	152	23864	LOW	2	N5XE	CARL	119	97	11543	LOW
2	NJ3K	BRUCE	171	134	22914	LOW	1	HB9ARF	PHIL	122	93	11346	LOW
2	KV8Q	TOM	163	135	22005	LOW	2	K5XU	MIKE	108	99	10692	LOW
2	K3PI	RUSS	145	136	19720	LOW	2	K2ZR	DICK	108	98	10584	LOW
2	W7JET	BRIAN	138	137	18906	LOW	2	KB9S	MARK	111	92	10212	LOW
2	N3CKI	DAVE	142	122	17324	LOW	1	RA3AN	NICK	121	81	9801	LOW

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Rgn	Call	Op	QSO	Mult	Score	Power	Rgn	Call	Op	QSO	Mult	Score	Power
2	W4JM	STEVE	110	88	9680	LOW	2	KB8GAE	RICH	43	41	1763	LOW
2	KB3FW	HARV	106	90	9540	LOW	2	AC3RA	RICH	44	38	1672	LOW
2	N4NTO	TRIPP	99	95	9405	LOW	2	K4FN	DAN	40	40	1600	LOW
2	KE2SX	GREGG	100	90	9000	LOW	1	SO3O	JAN	41	38	1558	LOW
2	K1TR	ED	101	88	8888	LOW	2	N9TF	GENE	39	39	1521	LOW
2	K9CW	DREW	102	82	8364	LOW	1	EI8KW	RYAN	41	37	1517	LOW
1	G3YLA	JIM	100	83	8300	LOW	1	G0ORY	ADAM	41	36	1476	LOW
2	AI6O	ED	92	90	8280	LOW	1	PA3DBS	PETER	39	37	1443	LOW
2	VE3MA	ALEX	96	83	7968	LOW	1	R1LN	NAT	42	34	1428	LOW
2	N2UU	BOB	98	80	7840	LOW	2	VA3PM	PIERRE	39	36	1404	LOW
2	CO8NMN	NOE	93	83	7719	LOW	1	LY2CO	RIMAS	36	36	1296	LOW
2	AA4NP	JIM	87	87	7569	LOW	2	KG5OA	DOUG	36	36	1296	LOW
2	K1DW	DALLAS	91	83	7553	LOW	1	OZ3TQ	NICK	39	33	1287	LOW
1	G4ENZ	MARTIN	102	73	7446	LOW	2	AB5XM	ALLAN	35	35	1225	LOW
2	N5GG	COLIN	89	83	7387	LOW	1	SE4E	LARS	35	34	1190	LOW
1	M4N	MIKE	95	75	7125	LOW	1	RF9C	MIKE	37	32	1184	LOW
1	RA9AP	ALEX	97	71	6887	LOW	2	VE3HEU	VIC	34	34	1156	LOW
2	KD2KW	KEN	85	80	6800	LOW	2	WN3F	ROY	34	33	1122	LOW
1	EA3FZT	FRANCIS	87	75	6525	LOW	2	K9EI	MATT	33	33	1089	LOW
1	YO4RDW	ROMEO	93	69	6417	LOW	2	K3WU	JIM	32	32	1024	LOW
2	N4JEH	JENNA	80	80	6400	LOW	1	PE1EEC	TAE	32	31	992	LOW
2	NK4O	AJ	83	77	6391	LOW	2	N5FZ	PAUL	33	29	957	LOW
1	HA5BMS	SANDOR	82	77	6314	LOW	1	IV3FPX	BORIS	30	27	810	LOW
1	OH1SIC	GI	85	74	6290	LOW	2	AA9RK	MIKE	28	28	784	LOW
2	VE9KK	MIKE	82	76	6232	LOW	1	EA7Q	LEO	29	25	725	LOW
1	EA4HKF	JOSE	88	68	5984	LOW	2	K1SEC	PAUL	29	25	725	LOW
1	UA6GO	VLAD	90	65	5850	LOW	2	NJ7V	RED	26	24	624	LOW
1	SM5IMO	DAN	80	71	5680	LOW	2	W3FIZ	PAT	26	24	624	LOW
1	SM5CSS	ALLAN	88	64	5632	LOW	3	JK7UST	SUGI	26	23	598	LOW
1	G3LHJ	DERRICK	77	69	5313	LOW	1	UA4FDL	GEN	26	22	572	LOW
2	N2EIM	BOB	72	69	4968	LOW	1	OH2BN	JARMO	25	22	550	LOW
2	W8EWH	MARK	72	68	4896	LOW	3	BA4TB	DALE	23	23	529	LOW
2	W9NXM	GUS	73	64	4672	LOW	2	KB4DE	BILL	22	22	484	LOW
2	N2EY	JIM	73	63	4599	LOW	2	VE2OXP	KLAUS	22	22	484	LOW
1	2E0OBO	BOB	71	57	4047	LOW	2	W0BM	PAT	22	22	484	LOW
1	G3WW	DEZ	66	58	3828	LOW	2	CO8WN	MANDI	22	21	462	LOW
2	KW1X	MARK	61	60	3660	LOW	1	DG0KS	MIKE	21	21	441	LOW
2	VE3TM	VLAD	62	59	3658	LOW	1	IK1JIM	SERGIO	21	20	420	LOW
2	W9TD	GARY	62	58	3596	LOW	2	KM4FO	DWIGHT	20	20	400	LOW
3	J1RXQ	HIRO	62	51	3162	LOW	2	N3CS	CHRIS	20	20	400	LOW
1	SV2SKD	PANOS	59	51	3009	LOW	2	NP4H	RENATO	20	20	400	LOW
2	WS5D	JACK	59	51	3009	LOW	2	N5DTT	JIM	21	19	399	LOW
2	WB2PJH	DAVE	55	53	2915	LOW	1	G3WRJ	DICK	20	18	360	LOW
2	K1GU	NED	55	52	2860	LOW	1	SP4AP	PETER	18	17	306	LOW
1	IN3FHE	INA	52	51	2652	LOW	1	G4UZE	CHRIS	17	17	289	LOW
2	W8OV	DAVE	51	51	2601	LOW	3	JH4FUF	IKKAN	17	17	289	LOW
2	AG3I	MARTY	53	48	2544	LOW	1	M0LRQ	PETER	17	16	272	LOW
2	AC5XK	DON	54	47	2538	LOW	1	M0IPU	JULIAN	16	16	256	LOW
2	N7WY	BOB	54	46	2484	LOW	2	KC3NDU	KEITH	17	15	255	LOW
1	F6JOE	JEAN	52	47	2444	LOW	2	AE5EZ	ROGER	16	15	240	LOW
1	UR7EC	ALEX	53	44	2332	LOW	1	DL1NKB	BERND	16	14	224	LOW
1	E74EW	ZIKO	48	48	2304	LOW	1	EA5XQ	JUAN	14	14	196	LOW
1	UT4LW	YURI	54	42	2268	LOW	3	JF1JDG	HIRO	15	13	195	LOW
2	N4HAY	DICK	50	45	2250	LOW	2	N5DCH	DAVE	13	13	169	LOW
1	SP3FSM	STAN	51	44	2244	LOW	1	YT1XC	MILAN	13	12	156	LOW
1	UR7MZ	VLAD	50	44	2200	LOW	1	PC4Y	BERT	11	11	121	LOW
1	EA5OH	JOSE	51	43	2193	LOW	1	RA3BQ	MIKE	11	11	121	LOW
2	NF8M	FRANK	48	44	2112	LOW	2	K3UA	PHIL	11	11	121	LOW
1	SP7OGP	PIOTR	52	40	2080	LOW	2	WZ0W	SCOTT	11	11	121	LOW
2	W4CMG	CATHY	46	45	2070	LOW	3	JP1JZR	TOSHI	12	10	120	LOW
1	M3M	DUKE	47	44	2068	LOW	2	N5JGE	JIM	10	10	100	LOW
2	K8CKC	MIKE	47	43	2021	LOW	2	NN7O	TOM	10	10	100	LOW

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Rgn	Call	Op	QSO	Mult	Score	Power	Rgn	Call	Op	QSO	Mult	Score	Power
3	JN1KMI	TAKA	10	10	100	LOW	1	RA3XCZ	VLAD	6	5	30	LOW
1	IK2A00	CLAU	9	9	81	LOW	1	G0MFR	GARETH	5	5	25	LOW
2	K5KXJ	CW	8	8	64	LOW	1	UV1IX	IVAN	5	5	25	LOW
2	KF3G	SAM	8	8	64	LOW	2	NJ4Q	WILL	5	5	25	LOW
1	RV3AJ	ARTHUR	7	7	49	LOW	3	VK5GG	GRAEME	4	4	16	LOW
1	YU1RA	SINI	7	7	49	LOW	2	K2MN	STEVE	3	3	9	LOW
2	N1CEO	PETER	7	7	49	LOW	1	I5EFO	EMIL	2	2	4	LOW
1	DL2MM	JOSIP	7	6	42	LOW	2	W0WL	JOE	2	2	4	LOW
2	N4EEL	WIG	6	6	36	LOW	3	JO1PZR	MASA	2	2	4	LOW
1	EA5PL	FERRAN	6	5	30	LOW	1	PY2UDB	DIRK	1	1	1	LOW

Rgn	Call	Op	QSO	Mult	Score	Power	Rgn	Call	Op	QSO	Mult	Score	Power
2	N5ER	JOHN	128	101	12928	QRP	1	PE2K	ADI	47	43	2021	QRP
2	K4PQC	PHIL	126	100	12600	QRP	2	W7LG	MIKE	36	31	1116	QRP
1	SD6F	KLAS	91	66	6006	QRP	1	UA6AK	VAL	20	17	340	QRP
2	VE3SIF	RON	76	73	5548	QRP	2	N6HI	JOHN	18	16	288	QRP
2	WO9B	MIKE	72	71	5112	QRP	1	UA7G	VAL	17	15	255	QRP
2	KK9U	SEAN	69	66	4554	QRP	2	AB0CD	DICK	5	5	25	QRP
2	KO1H	JOHN	60	56	3360	QRP	1	PI40NWG	BERT	4	4	16	QRP
1	HA9RC	ZOLI	55	55	3025	QRP	2	K2AL	AL	4	4	16	QRP
1	YO4AAC	GEORGE	53	46	2438	QRP							

Session 3 – 2000Z to 0000Z Analysis:

For Region 1 High Power, Armin (DK9PY) completed a three session sweep with final numbers of 325 QSOs, 229 Multipliers and a score of 74425. Nick (LZ1NK) came in second with a score of 41013. Bud (AA3B) moved back to first place for Region 2 with a QSO count of 544, 358 Mults and a score of 194752. Chas (K3WW) came in second with a score of 180950. Moving on to Low Power, for Region 1 Ivo (9A1AA) completed his three session sweep with a QSO total of 237, a mult total of 211 resulting in a score of 50007. Dez (G3WW) finished in second with a score of 16206. For Region 2 Fred (KG9X) claimed first place with a QSO total of 297, a mult total of 238 and a score of 70686 points. Second place went to Will (WJ9B) with a score of 60200. Moving on to the QRP class, Region 2 first place was once again won by Paul (N6MA) with a QSO total of 122 QSOs, 106 mults and a score of 12932. John (N5ER) moved into second place with a score of 19896. This was the closest race for first place in any session or power level this year.

Here are the details for Session 3. Plaque and Trophy winners are highlighted in **YELLOW**.

Rgn	Call	Op	QSO	Mult	Score	Power	Rgn	Call	Op	QSO	Mult	Score	Power
2	AA3B	BUD	544	358	194752	HIGH	2	W2GD	JOHN	357	231	82467	HIGH
2	K3WW	CHAS	517	350	180950	HIGH	2	K6NR	DANA	330	245	80850	HIGH
2	N1LN	BRUCE	438	295	129210	HIGH	2	K3WJV	BILL	343	233	79919	HIGH
2	N5ZO	MARK	433	297	128601	HIGH	2	K5GN	DAVE	320	241	77120	HIGH
2	K5PI	ROB	416	306	127296	HIGH	2	N5OT	MARK	319	237	75603	HIGH
2	W8FJ	JOHN	440	289	127160	HIGH	2	K3MD	JOHN	319	236	75284	HIGH
2	K3MM	TY	422	290	122380	HIGH	1	DK9PY	ARMIN	325	229	74425	HIGH
2	N3RD	DAVE	422	275	116050	HIGH	2	N4ZR	PETE	311	236	73396	HIGH
2	N4BP	BOB	363	284	103092	HIGH	2	K4BAI	JOHN	324	224	72576	HIGH
2	N3OC	BRIAN	378	266	100548	HIGH	2	N0TA	JOHN	312	231	72072	HIGH
2	W4WF	CHRIS	353	273	96369	HIGH	2	N5EE	KEN	296	242	71632	HIGH
2	N3QE	TIM	354	263	93102	HIGH	2	K5OT	LARRY	301	237	71337	HIGH
2	K7RL	MITCH	341	272	92752	HIGH	2	N3AM	JOHN	314	214	67196	HIGH
2	N3AD	ALAN	358	244	87352	HIGH	2	K4RUM	MIKE	290	221	64090	HIGH
2	KR2Q	DOUG	356	244	86864	HIGH	2	NA2U	FRED	270	237	63990	HIGH
2	N3JT	JIM	356	235	83660	HIGH	2	K9NW	MIKE	289	221	63869	HIGH

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Rgn	Call	Op	QSO	Mult	Score	Power	Rgn	Call	Op	QSO	Mult	Score	Power
2	W8FN	RANDY	274	229	62746	HIGH	2	W9YK	TODD	101	95	9595	HIGH
2	KC7V	MIKE	256	244	62464	HIGH	2	WS7L	CARL	103	92	9476	HIGH
2	N1RM	RICK	285	219	62415	HIGH	2	WB0RLJ	JIM	100	94	9400	HIGH
2	N8AA	JOHN	281	221	62101	HIGH	2	N4LSJ	TOM	98	92	9016	HIGH
2	W5TM	ED	284	217	61628	HIGH	2	VE3CT	ART	95	93	8835	HIGH
2	KR2AA	ERIC	271	225	60975	HIGH	1	F5SGI	JEAN	94	93	8742	HIGH
2	N6RK	RICK	279	214	59706	HIGH	2	WA6URY	DAN	92	89	8188	HIGH
2	W5GN	BARRY	259	226	58534	HIGH	2	W2XYZ	FRANK	97	83	8051	HIGH
2	K1EBY	FRANK	274	205	56170	HIGH	2	K5GQ	MARK	93	85	7905	HIGH
2	K6RB	ROB	264	212	55968	HIGH	2	AD4EB	JIM	89	86	7654	HIGH
2	KC3M	JACK	274	199	54526	HIGH	2	AF4T	DOUG	86	83	7138	HIGH
2	N5TOO	VAN	252	213	53676	HIGH	2	N5EP	STEVE	88	80	7040	HIGH
2	N4AF	HOWIE	267	195	52065	HIGH	2	WB2WPM	SHANE	87	79	6873	HIGH
2	K5UV	MIKE	256	201	51456	HIGH	2	N9RV	PAT	86	78	6708	HIGH
2	WA3AAN	GRANT	258	198	51084	HIGH	2	N0KQ	BILL	76	76	5776	HIGH
2	WA8Y	STEVE	262	193	50566	HIGH	2	KT4XN	TOM	80	72	5760	HIGH
2	W2CDO	PETER	244	207	50508	HIGH	2	NS4X	BART	79	71	5609	HIGH
2	K8IA	BOB	240	210	50400	HIGH	1	GM2V	CHRIS	80	68	5440	HIGH
2	K7QA	TOM	251	200	50200	HIGH	2	K1MT	DAVID	75	72	5400	HIGH
2	K1DJ	RICH	255	194	49470	HIGH	2	WB4HRL	ED	77	70	5390	HIGH
2	WB0SND	MIKE	248	197	48856	HIGH	2	VA1MM	AL	70	70	4900	HIGH
2	K7WP	JOHN	233	190	44270	HIGH	2	AA4CF	CHAS	69	69	4761	HIGH
2	WA4JUK	JOE	234	188	43992	HIGH	2	NN5O	LARRY	69	67	4623	HIGH
1	LZ1NK	NICK	217	189	41013	HIGH	2	VE3KP	KEN	72	63	4536	HIGH
2	AH6KO	STAN	209	168	35112	HIGH	1	EA2KV	JC	65	65	4225	HIGH
2	N8KH	KEN	196	176	34496	HIGH	1	EA6EJ	INI	64	64	4096	HIGH
2	K4WW	BO	193	170	32810	HIGH	2	KB9ML	MIKE	64	64	4096	HIGH
2	AI0Y	JOE	185	177	32745	HIGH	2	NC3Y	TOM	64	64	4096	HIGH
2	N4GO	JAY	188	173	32524	HIGH	2	WA5LXS	DENNIS	64	61	3904	HIGH
2	W0CWO	CLEM	196	165	32340	HIGH	2	WE5P	BILL	51	50	2550	HIGH
2	W5JK	STEVE	194	163	31622	HIGH	2	VE5MX	TODD	50	50	2500	HIGH
2	WG3J	ERIC	187	166	31042	HIGH	3	VK2GR	ALLAN	49	49	2401	HIGH
2	KV0I	BILL	179	143	25597	HIGH	2	KN7Y	JACK	49	48	2352	HIGH
2	N4FP	WAYNE	172	146	25112	HIGH	2	VE3DZ	YURI	48	48	2304	HIGH
2	K7GM	RICK	172	139	23908	HIGH	2	K0VW	JJ	48	47	2256	HIGH
1	DF7TV	TOM	162	146	23652	HIGH	2	KG5VK	STEVE	44	40	1760	HIGH
2	VE3KIU	DAVE	168	134	22512	HIGH	2	N4OI	KEN	41	40	1640	HIGH
2	K2RET	BOB	169	132	22308	HIGH	1	HA1AS	ZSIKE	38	38	1444	HIGH
1	GW2CWO	RON	163	134	21842	HIGH	2	N7US	JIM	37	36	1332	HIGH
2	K5AX	TOM	158	134	21172	HIGH	2	AG1C	LARRY	35	35	1225	HIGH
2	N5NA	ALAN	145	143	20735	HIGH	1	PE6Q	AD	34	34	1156	HIGH
2	N5XZ	ALLEN	144	142	20448	HIGH	2	AF5J	HAL	34	33	1122	HIGH
1	G4DRS	JOHN	152	132	20064	HIGH	2	W0BM	PAT	33	32	1056	HIGH
2	K3PP	GLENN	142	129	18318	HIGH	2	AG5ZN	BILL	30	30	900	HIGH
2	W6SX	HANK	150	120	18000	HIGH	1	OG6B	ZABA	31	28	868	HIGH
1	HA3NU	LACY	138	128	17664	HIGH	3	JN1THL	KEN	29	23	667	HIGH
2	KB1NO	JOHN	146	111	16206	HIGH	2	N7AAE	MARTY	18	18	324	HIGH
2	AA3R	FRED	141	113	15933	HIGH	3	J1FXF	HIRO	13	10	130	HIGH
2	K5VG	JOHN	127	112	14224	HIGH	2	KB6CA	JEFF	11	11	121	HIGH
2	N3MN	JOHN	123	112	13776	HIGH	2	VE3NZ	BEN	11	11	121	HIGH
2	KT5C	MIKE	124	111	13764	HIGH	2	W2NO	DAN	11	10	110	HIGH
2	N5TJ	JEFF	119	112	13328	HIGH	3	JS2IMR	TODD	7	7	49	HIGH
2	K1RV	PI	124	105	13020	HIGH	3	7K1JFM	KAKE	4	4	16	HIGH
2	K0TQ	MIKE	117	104	12168	HIGH	3	JF1UOW	MIT	3	3	9	HIGH
2	KA5M	MARSH	115	103	11845	HIGH	3	JF1UOX	MISA	3	3	9	HIGH
2	K1TH	TOM	113	101	11413	HIGH							
2	K9YC	JIM	109	102	11118	HIGH							
2	AI4WW	DAN	107	97	10379	HIGH							
2	N5WNG	MIKE	110	92	10120	HIGH							
2	KC2LSD	CODY	100	100	10000	HIGH							
2	AA5JF	ANDY	100	96	9600	HIGH							

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Rgn	Call	Op	QSO	Mult	Score	Power							
2	KG9X	FRED	297	238	70686	LOW	2	N4JEH	JENNA	96	92	8832	LOW
2	WJ9B	WILL	280	215	60200	LOW	2	N0AT	RON	98	90	8820	LOW
2	W0UO	JIM	255	206	52530	LOW	2	VE2FK	DUB	102	86	8772	LOW
2	W3KB	KEITH	265	197	52205	LOW	2	K9CW	DREW	95	89	8455	LOW
1	9A1AA	IVO	237	211	50007	LOW	1	HA6NL	LACI	104	79	8216	LOW
2	AA2IL	JOE	240	192	46080	LOW	2	N4NTO	TRIPP	97	84	8148	LOW
2	W1QK	DAN	242	188	45496	LOW	1	M0RYB	PETER	99	79	7821	LOW
2	KK0U	JIM	231	196	45276	LOW	2	W3FIZ	PAT	99	79	7821	LOW
2	K1VUT	DAVE	244	185	45140	LOW	2	NM5M	ERIC	88	88	7744	LOW
2	KG5OA	DOUG	230	191	43930	LOW	2	N5AW	MARV	90	84	7560	LOW
2	K3WU	JIM	211	177	37347	LOW	2	NJ3K	BRUCE	86	84	7224	LOW
2	KV8Q	TOM	207	178	36846	LOW	2	N4EEL	WIG	87	83	7221	LOW
2	K3JT	TERRY	214	169	36166	LOW	2	K1DW	DALLAS	92	77	7084	LOW
2	KG5U	DALE	217	164	35588	LOW	2	N4IJ	DOUG	82	79	6478	LOW
2	NK4O	AJ	203	175	35525	LOW	2	K5TS	DAVE	82	76	6232	LOW
2	KP3W	RENATO	223	157	35011	LOW	2	WB2PJH	DAVE	72	69	4968	LOW
2	NS2N	PAUL	210	164	34440	LOW	2	AC5XK	DON	71	69	4899	LOW
2	VE3TM	VLAD	206	162	33372	LOW	2	CO8WN	MANDI	73	67	4891	LOW
2	N8LR	GARY	190	157	29830	LOW	2	N5KB	MIKE	73	65	4745	LOW
2	VE3MA	ALEX	179	160	28640	LOW	1	G3YLA	JIM	75	62	4650	LOW
2	K3PI	RUSS	169	166	28054	LOW	2	KB3FW	HARV	71	64	4544	LOW
2	N1YL	ANNE	183	149	27267	LOW	2	K1SM	BILL	67	67	4489	LOW
2	N0LY	JON	180	149	26820	LOW	1	EA3FZT	FRANCIS	69	63	4347	LOW
2	K3UA	PHIL	183	144	26352	LOW	2	N7WY	BOB	63	63	3969	LOW
2	KY4GS	AMANDA	169	149	25181	LOW	1	G0MFR	GARETH	72	54	3888	LOW
2	KM4FO	DWIGHT	157	138	21666	LOW	2	K0GUZ	STEVE	61	59	3599	LOW
2	N2EY	JIM	172	120	20640	LOW	2	K8CKC	MIKE	59	59	3481	LOW
2	N5XE	CARL	161	128	20608	LOW	1	G3LHJ	DERRICK	65	53	3445	LOW
2	AC0W	BILL	143	141	20163	LOW	2	VE3HEU	VIC	58	58	3364	LOW
2	N3CKI	DAVE	147	134	19698	LOW	1	EA5OH	JOSE	62	54	3348	LOW
2	K0INN	TOM	152	128	19456	LOW	1	EA7Q	LEO	55	55	3025	LOW
2	KG8Y	TOM	144	135	19440	LOW	2	N4HAY	DICK	57	53	3021	LOW
2	W7JET	BRIAN	146	133	19418	LOW	2	AA0AW	DOUG	58	51	2958	LOW
2	VE3GFN	MIKE	157	123	19311	LOW	2	W4LT	LOU	52	52	2704	LOW
2	W3WHK	SAUL	156	121	18876	LOW	1	F6JOE	JEAN	55	49	2695	LOW
2	K1GU	NED	140	134	18760	LOW	2	WA9LEY	LEE	54	49	2646	LOW
2	K0AD	AL	139	125	17375	LOW	2	KM4CH	JOHN	52	49	2548	LOW
2	NU3A	KEN	143	121	17303	LOW	1	OH1SIC	GI	55	41	2255	LOW
2	N4ZZ	DON	139	121	16819	LOW	1	G0ORY	ADAM	51	44	2244	LOW
1	G3WW	DEZ	146	111	16206	LOW	2	K1TR	ED	47	47	2209	LOW
2	K5XU	MIKE	136	118	16048	LOW	2	W4JM	STEVE	47	46	2162	LOW
2	W7CXX	JACK	125	124	15500	LOW	2	WS5D	JACK	47	44	2068	LOW
2	KY0Q	RICK	127	119	15113	LOW	1	SM5CSS	ALLAN	52	39	2028	LOW
2	NF8M	FRANK	114	112	12768	LOW	2	N3CS	CHRIS	45	45	2025	LOW
2	N5GG	COLIN	124	100	12400	LOW	2	W9ILY	JOHN	45	45	2025	LOW
2	KD2KW	KEN	118	102	12036	LOW	2	N5FZ	PAUL	45	43	1935	LOW
1	G3LDI	ROGER	125	95	11875	LOW	1	PA3DBS	PETER	42	42	1764	LOW
2	N2UU	BOB	115	102	11730	LOW	1	IK1JJM	SERGIO	43	41	1763	LOW
1	G4PVM	PAUL	129	89	11481	LOW	2	AE5EZ	ROGER	42	41	1722	LOW
2	W4CMG	CATHY	109	102	11118	LOW	2	KX6X	KEN	41	41	1681	LOW
2	K8GB	DAVE	116	94	10904	LOW	2	N2EIM	BOB	41	41	1681	LOW
1	HB9ARF	PHIL	114	93	10602	LOW	2	W9NXM	GUS	41	41	1681	LOW
2	AG3I	MARTY	109	93	10137	LOW	2	KB4CG	JACK	41	39	1599	LOW
2	W0TG	BILL	106	95	10070	LOW	2	AB5XM	ALLAN	40	39	1560	LOW
2	CO8NMN	NOE	103	95	9785	LOW	1	G3WRJ	DICK	44	35	1540	LOW
2	KG3V	TOM	104	94	9776	LOW	1	SC6O	BEN	43	33	1419	LOW
2	AD8J	JOHN	107	88	9416	LOW	1	YO4RDW	ROMEO	40	35	1400	LOW
2	K2ZR	DICK	100	90	9000	LOW	2	NJ4Q	WILL	34	34	1156	LOW
2	W8OV	DAVE	102	88	8976	LOW	2	WU6X	DENNIS	34	34	1156	LOW
2	K4FT	JOHN	99	90	8910	LOW	1	G0MCV	SANDRA	37	29	1073	LOW
2	W9TD	GARY	95	93	8835	LOW	1	SV2SKD	PANOS	33	30	990	LOW
							1	SD1A	ERIC	35	28	980	LOW

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Rgn	Call	Op	QSO	Mult	Score	Power	Rgn	Call	Op	QSO	Mult	Score	Power
2	KW9A	DAVE	31	31	961	LOW	2	N4GL	MARTY	16	16	256	LOW
3	J11RXQ	HIRO	32	30	960	LOW	1	M0LRQ	PETER	14	14	196	LOW
1	SP7OGP	PIOTR	30	29	870	LOW	2	K2NV	TONY	14	14	196	LOW
2	VA3IK	BRIAN	29	29	841	LOW	1	UA6GO	VLAD	13	13	169	LOW
1	PA3DZM	ERIC	30	26	780	LOW	1	DL1NKB	BERND	12	12	144	LOW
1	HA5BMS	SANDOR	28	27	756	LOW	1	UR7EC	ALEX	12	12	144	LOW
2	KB9S	MARK	27	27	729	LOW	1	EA5XQ	JUAN	12	11	132	LOW
2	W0WL	JOE	27	27	729	LOW	1	PY2UDB	DIRK	12	11	132	LOW
2	W9CF	KEVIN	27	27	729	LOW	1	SF6W	GEO	12	11	132	LOW
2	KP3J	RENATO	26	25	650	LOW	1	RA3BQ	MIKE	13	10	130	LOW
1	EI8KW	RYAN	28	23	644	LOW	1	RT1B	MIKE	11	11	121	LOW
2	KI6OY	LEE	25	25	625	LOW	2	KB4DE	BILL	10	10	100	LOW
2	NN7O	TOM	26	24	624	LOW	1	G3PFM	TONY	9	9	81	LOW
1	LZ4UU	ILIYA	25	24	600	LOW	2	N5DTT	JIM	9	9	81	LOW
1	M0IPU	JULIAN	25	24	600	LOW	3	JP1JZR	TOSHI	10	8	80	LOW
2	N7SE	STEVE	24	24	576	LOW	1	IV3FPX	BORIS	8	8	64	LOW
2	W2LCQ	ED	24	24	576	LOW	2	WB9DAR	JEFF	8	8	64	LOW
1	YU1RA	SINI	22	22	484	LOW	1	G4CMY	TONY	7	7	49	LOW
1	M4N	MIKE	25	18	450	LOW	3	JF1JDG	HIRO	7	4	28	LOW
2	N1CEO	PETER	21	20	420	LOW	2	K3JSJ	JASON	4	4	16	LOW
1	E74EW	ZIKO	20	20	400	LOW	2	N9DK	DAVE	4	4	16	LOW
2	VA6RCN	KEVIN	20	20	400	LOW	1	RA9AP	ALEX	3	3	9	LOW
1	G0TRT	CIE	19	19	361	LOW	2	KF3G	SAM	3	3	9	LOW
1	PE1EEC	TAE	19	19	361	LOW	3	JF2FIU	MARK	3	3	9	LOW
2	N5DCH	DAVE	19	18	342	LOW	1	OH2BN	JARMO	2	2	4	LOW
2	VE2OXP	KLAUS	19	18	342	LOW	2	N0MII	JEFF	1	1	1	LOW
2	K5KXJ	CW	18	18	324	LOW	3	JO1PZR	MASA	1	1	1	LOW
3	JH4FUF	IKKAN	18	15	270	LOW							

Rgn	Call	Op	QSO	Mult	Score	Power	Rgn	Call	Op	QSO	Mult	Score	Power
2	N6MA	PAUL	122	106	12932	QRP	1	PE2K	ADI	23	21	483	QRP
2	N5ER	JOHN	124	104	12896	QRP	2	K2AL	AL	19	19	361	QRP
2	N0UR	JIM	118	105	12390	QRP	2	W9WI	DOUG	16	16	256	QRP
2	KO1H	JOHN	65	57	3705	QRP	1	LZ2AF	RUMEN	10	10	100	QRP
2	KJ5T	STEVE	51	47	2397	QRP	1	SD6F	KLAS	10	9	90	QRP
2	W7LG	MIKE	45	45	2025	QRP	2	AB0CD	DICK	9	9	81	QRP
2	N6HI	JOHN	38	37	1406	QRP	2	WV1D	PAT	9	9	81	QRP
2	VE3SIF	RON	24	24	576	QRP	2	K4PQC	PHIL	1	1	1	QRP
2	WD4CFN	STEVE	23	23	529	QRP							

Team Scores

The 2023 CW Open also delivered in the team entry statistics. Putting together a team to participate in the CW Open is always a fun way to increase participation and friendly intra and inter team competition. This year we had 24 teams register. The team sizes ranged from a minimum of 3 members up to the maximum allowed of 10 members. All Regions had team member representation. The team scores followed the 2023 overall statistics and dropped some, but were still excellent. Even with the overall drop in scores, there were a few good horse races as you will see below. The FRC once again put forward the first place team. Team Proficiency's 10 member team was the only team scoring over 2m points and almost hit 3m. Their final combined score was a very impressive 2,906,360. The DFWCG Whiz-Bang team came in second with a score of 1,733,322. The Atlantic Coast Coders came in third with a score of 1,688,359.

Here are the detail scores and team finishes:

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FRC Team Proficiency

Call	Session 1	Session 2	Session 3	Total
1 AA3B	204,408	145,137	194,752	544,297
2 K3MD	85,744	50,745	75,284	211,773
3 K3WJV	106,675	52,824	79,919	239,418
4 K3WW	167,007	123,774	180,950	471,731
5 N3AD	91,016	54,450	87,352	232,818
6 N3RD	143,256	94,710	116,050	354,016
7 W2GD	71,912	76,266	82,467	230,645
8 W3KB	52,626	35,616	52,205	140,447
9 W8FJ	136,773	90,768	127,160	354,701
10 WA3AAN	48,689	26,741	51,084	126,514
	<u>1,108,106</u>	<u>751,031</u>	<u>1,047,223</u>	<u>2,906,360</u>

DFWCG Whiz-Bang

Call	Session 1	Session 2	Session 3	Total
1 NM5M	97,790	69,768	7,744	175,302
2 N5RZ	156,651	119,392	-	276,043
3 K5PI	150,016	126,522	127,296	403,834
4 N5XE	20,178	11,543	20,608	52,329
5 K5AX	-	43,510	21,172	64,682
6 K5OT	95,004	86,955	71,337	253,296
7 W0UO	58,378	52,208	52,530	163,116
8 WQ5L	54,210	50,094	-	104,304
9 N5TJ	21,842	49,104	13,328	84,274
10 KT5C	75,924	66,454	13,764	156,142
	<u>729,993</u>	<u>675,550</u>	<u>327,779</u>	<u>1,733,322</u>

ACC (Atlantic Coast Coders)

Call	Session 1	Session 2	Session 3	Total
1 N1LN	137,172	96,460	129,210	362,842
2 N4ZR	75,296	56,430	73,396	205,122
3 WJ9B	97,282	72,225	60,200	229,707
4 K3PI	25,488	19,720	28,054	73,262
5 N1RM	34,650	32,760	62,415	129,825
6 K3MM	129,048	87,191	122,380	338,619
7 N3CKI	31,106	17,324	19,698	68,128
8 N3QE	119,425	68,327	93,102	280,854
	<u>649,467</u>	<u>450,437</u>	<u>588,455</u>	<u>1,688,359</u>

Deep Dixie CC Team Elvis

Call	Session 1	Session 2	Session 3	Total
1 N5EE	78,921	62,322	71,632	212,875
2 N0TA	89,012	52,662	72,072	213,746
3 N4FP	40,950	27,267	25,112	93,329
4 N8AA	73,800	48,500	62,101	184,401
5 W4WF	101,790	86,020	96,369	284,179
6 W5TM	98,923	46,272	61,628	206,823
7 N8LR	32,860	15,162	29,830	77,852
8 NK40	-	-	-	-
9 NN5O	50,572	-	4,623	55,195
10 K7RL	137,332	-	92,752	230,084
	<u>704,160</u>	<u>338,205</u>	<u>516,119</u>	<u>1,558,484</u>

GEEZERS

Call	Session 1	Session 2	Session 3	Total
1 N3AM	108,206	58,548	67,196	233,950
2 N3JT	88,500	48,620	83,660	220,780
3 K3TN	-	990	-	990
4 DF7TV	-	22,356	23,652	46,008
5 W2CDO	29,892	25,900	50,508	106,300
6 K1MT	4,020	6,177	5,400	15,597
7 KR2Q	102,362	60,912	86,864	250,138
8 KO1H	5,688	3,360	3,705	12,753
9 K6RB	91,500	69,223	55,968	216,691
10 DK9PY	61,494	87,842	74,425	223,761
	<u>491,662</u>	<u>383,928</u>	<u>451,378</u>	<u>1,326,968</u>

AOCC Gunslingers

Call	Session 1	Session 2	Session 3	Total
1 K8IA	-	97,137	50,400	147,537
2 KC7V	62,856	59,200	62,464	184,520
3 W7JET	1,156	18,906	19,418	39,480
4 K7WP	22,275	44,103	44,270	110,648
5 KN7Y	10,416	16,786	2,352	29,554
6 NA2U	-	-	63,990	63,990
7 W9CF	6,205	-	729	6,934
8 N4ZZ	120,132	70,761	16,819	207,712
9 N2IC	-	156,738	-	156,738
10 W7CXX	57,240	15,435	15,500	88,175
	<u>280,280</u>	<u>479,066</u>	<u>275,942</u>	<u>1,035,288</u>

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SECC

Call	Session 1	Session 2	Session 3	Total
1 K4BAI	89,938	64,893	72,576	227,407
2 AA4CF	25,920	44,736	4,761	75,417
3 AA5JF	67,947	22,080	9,600	99,627
4 N4BP	103,341	70,626	103,092	277,059
5 W8FN	95,129	45,570	62,746	203,445
6 KU8E	-	-	-	-
7 KY4GS	24,640	15,318	25,181	65,139
8 NN4K	-	-	-	-
9 KB3FW	8,080	9,540	4,544	22,164
10 N4IJ	14,910	-	6,478	21,388
	429,905	272,763	288,978	991,646

K1USN Radio Club

Call	Session 1	Session 2	Session 3	Total
1 K1DJ	50,505	19,866	49,470	119,841
2 K1RV	11,583	8,613	13,020	33,216
3 K1EBY	81,075	38,896	56,170	176,141
4 K1TH	11,718	8,352	11,413	31,483
5 K1VUT	71,583	46,222	45,140	162,945
6 N1DC	30,192	16,698	-	46,890
7 N1RO	8,256	10,890	-	19,146
8 N5OT	114,675	70,597	75,603	260,875
9 WV1D	81	-	81	162
10 N1YL	13,596	13,482	27,267	54,345
	393,264	233,616	278,164	905,044

TDXS

Call	Session 1	Session 2	Session 3	Total
1 N5DTT	196	399	81	676
2 K5GN	156,816	114,955	77,120	348,891
3 KG5U	54,432	38,304	35,588	128,324
4 NM5G	6,370	361	-	6,731
5 K5GQ	11,960	7,380	7,905	27,245
6 K5TU	95,787	79,134	-	174,921
7 N5XZ	-	65,706	20,448	86,154
	325,561	306,239	141,142	772,942

FRC Team Competency

Call	Session 1	Session 2	Session 3	Total
1 AA3R	9,256	7,332	15,933	32,521
2 K2RET	16,428	8,300	22,308	47,036
3 K3PP	19,470	5,520	18,318	43,308
4 K3QP	5,402	-	-	5,402
5 KE2D	86,376	33,128	-	119,504
6 N2RC	56,682	23,009	-	79,691
7 NW3Y	6,699	14,732	-	21,431
8 W3FIZ	6,512	624	7,821	14,957
9 W3WHK	21,376	-	18,876	40,252
10 WB2PJH	870	2,915	4,968	8,753
	229,071	95,560	88,224	412,855

The Mighty Mighty Dahtones

Call	Session 1	Session 2	Session 3	Total
1 K9EI	1,521	1,089	-	2,610
2 K9UR	-	-	-	-
3 KK0U	47,214	27,742	45,276	120,232
4 KK9U	4,060	4,554	-	8,614
5 WB0SND	66,600	-	48,856	115,456
6 N5DCH	986	169	342	1,497
7 W0NY	-	-	-	-
8 N4EEL	2,070	36	7,221	9,327
9 KV8Q	36,686	22,005	36,846	95,537
10 WZ0W	28,336	121	-	28,457
	187,473	55,716	138,541	381,730

DFWCG Disruptors

Call	Session 1	Session 2	Session 3	Total
1 K5MR	54,708	-	-	54,708
2 W5JK	10,246	22,044	31,622	63,912
3 W8OV	14,100	2,601	8,976	25,677
4 KT5V	-	-	-	-
5 WA5LXS	1,804	529	3,904	6,237
6 WB5N	-	-	-	-
7 N5WNG	8,084	-	10,120	18,204
8 KG5VK	-	1,677	1,760	3,437
9 KD2KW	9,350	6,800	12,036	28,186
10 KG5OA	50,310	1,296	43,930	95,536
	148,602	34,947	112,348	295,897

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KCG

Call	Session 1	Session 2	Session 3	Total
1 K4FN	9,216	1,600	-	10,816
2 K4WW	33,464	29,388	32,810	95,662
3 N4GO	35,905	-	32,524	68,429
4 W4PF	-	3,364	-	3,364
5 KM4FO	33,578	400	21,666	55,644
6 WE5P	10,340	2,209	2,550	15,099
7 K4TZ	-	-	-	-
	122,503	36,961	89,550	249,014

TEAM UK

Call	Session 1	Session 2	Session 3	Total
1 GW2CW	13,755	26,640	21,842	62,237
2 G3LDI	5,607	-	11,875	17,482
3 G4DRS	7,275	18,788	20,064	46,127
4 GM2V	-	38,247	5,440	43,687
5 G3YLA	4,410	8,300	4,650	17,360
6 G4PVM	-	17,222	11,481	28,703
7 G3G	-	-	-	-
8 G3WW	4,092	3,828	16,206	24,126
9 G3PFZ	-	-	-	-
10 M3F	-	-	-	-
	35,139	113,025	91,558	239,722

Morse Manglers

Call	Session 1	Session 2	Session 3	Total
1 WG3J	66,960	45,590	31,042	143,592
2 KB1NO	13,635	17,446	16,206	47,287
3 K8CKC	2,365	2,021	3,481	7,867
4 KB9ML	1,600	400	4,096	6,096
5 WN3F	400	1,122	-	1,522
6 KC2LSD	14,400	-	10,000	24,400
7 W3GJ	-	-	-	-
8 N3ZV	-	-	-	-
	99,360	66,579	64,825	230,764

BRASS FLOUNDERS

Call	Session 1	Session 2	Session 3	Total
1 AA2IL	59,885	25,239	46,080	131,204
2 N7AUE	-	-	-	-
3 N7JV	-	-	-	-
4 NN7O	-	100	624	724
5 N5GG	11,656	7,387	12,400	31,443
6 WB0RLJ	18,396	10,300	9,400	38,096
7 AG5ZN	121	1,295	900	2,316
8 W0WL	-	4	729	733
9 KB1FGC	-	-	-	-
10 N7AAE	2,444	441	324	3,209
	92,502	44,766	70,457	207,725

CWOpS Puerto Rico

Call	Session 1	Session 2	Session 3	Total
1 NP3A	-	-	-	-
2 KP3W	13,416	25,550	35,011	73,977
3 NP4H	4,234	400	-	4,634
4 KP3J	144	-	650	794
	17,794	25,950	35,661	79,405

Santiago de Cuba Contest Team

Call	Session 1	Session 2	Session 3	Total
1 CO8NMN	26,492	7,719	9,785	43,996
2 CO8WN	2,646	462	4,891	7,999
3 CM3OR	-	-	-	-
	29,138	8,181	14,676	51,995

PVRC Yard Dogs

Call	Session 1	Session 2	Session 3	Total
1 NJ4Q	49	25	1,156	1,230
2 N3CW	-	30,458	-	30,458
3 NN4RB	2,600	-	-	2,600
	2,649	30,483	1,156	34,288

Team Asia

Call	Session 1	Session 2	Session 3	Total
1 JN1THL	-	-	-	-
2 JH1PXH	-	-	-	-
3 JA2ORW	-	-	-	-
4 JA2HYD	-	121	-	121
5 WA6URY	10,170	4,154	8,188	22,512
6 E21EIC	32	-	-	32
7 7K1JFM	64	361	16	441
8 JN1KMI	16	100	-	116
9 JO1PZR	1	4	1	6
	10,283	4,740	8,205	23,228

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PVRC Corn Crib

Call	Session 1	Session 2	Session 3	Total
1 N4NTO	3,245	9,405	8,148	20,798
2 WJOJ	-	-	-	-
3 N3CS	-	400	2,025	2,425
	<u>3,245</u>	<u>9,805</u>	<u>10,173</u>	<u>23,223</u>

FLIGHT REFL

Call	Session 1	Session 2	Session 3	Total
1 G4RFR	-	-	-	-
2 G4R	-	3,240	-	3,240
3 M0PSZ	-	-	-	-
4 M0VLT	-	-	-	-
5 G0TRT	484	-	361	845
6 G0KFM	-	-	-	-
7 G3PFM	-	-	81	81
8 YO4RDW	-	6,417	1,400	7,817
	<u>484</u>	<u>9,657</u>	<u>1,842</u>	<u>11,983</u>

Radio Officers Association

Call	Session 1	Session 2	Session 3	Total
1 G3PLE	-	-	-	-
2 G0ORY	-	1,476	2,244	3,720
3 M0ITR	-	-	-	-
4 M0URL	-	-	-	-
5 G0UXV	-	-	-	-
6 G3OGP	-	-	-	-
7 G0ELZ	-	-	-	-
8 G0MCV	-	-	1,073	1,073
	<u>-</u>	<u>1,476</u>	<u>3,317</u>	<u>4,793</u>

A1 Club

Call	Session 1	Session 2	Session 3	Total
1 JJ1FXF	399	483	130	1,012
2 JF1UOX	25	64	9	98
3 JF1UOW	16	121	9	146
4 JK1UST	-	-	-	-
5 JS2IMR	64	460	49	573
6 JH4FUF	238	289	270	797
7 JP1JZR	-	120	80	200
8 JG1BGT	-	-	-	-
9 JF1JDG	-	195	28	223
10 JA3AVO	100	81	-	181
	<u>842</u>	<u>1,813</u>	<u>575</u>	<u>3,230</u>

Trophies and Plaques:



Below is a listing of the 2023 Trophy and Plaque winners. As in the past, should the same individual qualify for more than one award, the awards will be grouped on one Trophy or Plaque.

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Trophies: High Score, each session, each ITU Region

Armin Sturm, DK9PY

Combined Scores, ITU Region 1 Winner

936 QSOs 714 Multipliers 223761 points

Session 1, ITU Region 1, Winner

277 QSOs, 222 Multipliers 61494 points

Session 2, ITU Region 1, Winner

334 QSOs, 263 Multipliers 87842 points

Session 3, ITU Region 1, Winner

325 QSOs 229 Multipliers 74425 points

Bud Trench, AA3B

Combined Scores, ITU Region 2 Winner

1635 QSOs 995 Multipliers 544297 points

Session 1, ITU Region 2, Winner

612 QSOs 334 Multipliers 204408 points

Session 3, ITY Region 2, Winner

544 QSOs 358 Multipliers 194752 points

Steve London, N2IC

Session 2, ITU Region 2 Winner

519 QSOs 302 Multipliers 156738 points

Allan Mason, VK2GR

Session 2, ITU Region 3 Winner

110 QSOs 108 Multipliers 11880 points

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Plaques: High Score, All power levels (HP, LP, QRP), each session, each ITU Region

High Power -

Armin Sturm, DK9PY

Session 1, ITU Region 1, Winner

277 QSOs, 222 Multipliers 61494 points

Session 2, ITU Region 1, Winner

334 QSOs 263 Multipliers 87842 points

Session 3, ITU Region 1, Winner

325 QSOs 229 Multipliers 74425 points

Bud Trench, AA3B

Session 1, ITU Region 2, Winner

612 QSOs 334 Multipliers 204408 points

Session 3, ITU Region 2, Winner

544 QSOs 358 Multipliers 194752 points

Steve London, N2IC

Session 2, ITU Region 2 Winner

519 QSOs 302 Multipliers 156738 points

Allan Mason, VK2GR

Session 2, ITU Region 3 Winner

110 QSOs 108 Multipliers 11880 points

Low Power -

Ivo Novak, 9A1AA

Session 1, ITU Region 1, Low Power Winner

173 QSOs 122 Multipliers 21106 points

Session 2, ITU Region 1, Low Power Winner

196 QSOs 149 Multipliers 29204 points

Session 3, ITU Region 1, Low Power Winner

237 QSOs 211 Multipliers 50007 points

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Don Binkley, N4ZZ

Session 1, ITU Region 2, Low Power Winner

423 QSOs 284 Multipliers 120132 points

Will Baber, WJ9B

Session 2, ITU Region 2, Low Power Winner

321 QSOs 225 Multipliers 72225 points

Fred Sanborn, KG9X

Session 3, ITU Region 2, Low Power Winner

297 QSOs 238 Multipliers 70686 points

QRP -

Paul Gagnon, N6MA

Session 1, ITU Region 2, QRP Winner

181 QSOs 127 Multipliers 22987 points

Session 3, ITU Region 2, QRP Winner

122 QSOs 106 Multipliers 12932 points

John Clark, N5ER

Session 2, ITU Region 2, QRP Winner

128 QSOs 101 Multipliers 12928 Points

In summary: A BIG CONGRATULATIONS to the winners of trophies and plaques in the 2023 CW Open. Thanks to all the participants in the 2023 sessions, both CWops members and non-members. Hopefully everyone agrees with me that this was another great way to spend a few hours on the bands, talking to friends and perhaps making a few new ones. I would like to thank Rob, K6RB, for the outstanding quick turnaround of the log processing and checking. I would also like to thank the regional communications volunteers that helped me get the message out there. Listed by region: Region 1; Bert (F6HKA) and Roger (G3LDI) Region 2; Kat (KK6CN). Region 3; Barry (VK2BJ). As we all start looking toward the 2024 CW Open, hopefully conditions will be improved on the high bands. Most recently both 10 and 15 have been open world-wide with excellent signals. Fingers crossed for great propagation and participation for next year. Let's make the 2024 activity graphs reflect the change to an upward slope! Based on the September 2024 calendar, the CWO will be held on September 7, so time to mark your calendars and keep the date and times open!

Until then, I will see you on the bands and in the weekly CWTs.



New Members

Trung Nguyen, W6TN

With great pleasure we welcome the following new members to CWops:

CWops	Call	Name	CWops	Call	Name	CWops	Call	Name
3419	NQ2W*	Will	3428	VA7XU	Dave	3437	KJ4ASE*	Mike
3420	ZS6DX*	Rudi	3429	G0TRT*	Cie	3438	G4LXX	Ian
3421	G4V*	Marius	3430	W2TJ*	Tom	3439	KE4I*	Dennis
3422	NI9F*	Noah	3431	G7BED*	Chris	3440	N4EEL	Wig
3423	G4FNL*	Graham	3432	W0GIB*	Craig	3441	GM4ZUK*	Allan
3424	KN4YTA*	Matt	3433	KD9UYC*	Mark	3444	W4YDL*	Joe
3425	G4MKP*	Tel	3434	NK8O*	Chas	3488	M0WXG*	Shirley
3426	G0KYA	Steve	3435	G4WWZ	Alan			
3427	NN7O*	Tom	3436	G0FGE	Baz			

* Lifetime member

As of November 7, 2023:

Need Sponsors: G4TVH, KA6AAE, N2PLG, VE6GL, KF5JC

For more details about nominees and up-to-date status, check the ["Members only"](#) page on the website.
For information about joining CWops, check the ["Membership"](#) page on the website.

Notes: If you have updated your personal info, e.g., new QTH, new callsign, or additional callsign, please send it to membership@cwops.org so I can add it to the roster. Vice versa, if your callsign becomes inactive I can remove it, too. Then the roster will be accurate and current for our usage.

73, Trung W6TN (CWops #1707) Membership Manager

— **SC** —

Did your **CALL SIGN** change recently?

Did you move to a **NEW ADDRESS** or change your **NAME** ?

Congratulations!

Help us keep our **DATABASE UP-TO-DATE**

Click [HERE](#) to update your contact information.

Giving Back Update

[Rob Brownstein](#), **K6RB** (CWops #3)

CWops' Giving Back (GB) program is meant to provide on-air QSO experience and practice for anyone who wants it. It was initially intended as a way for our CW Academy students to get some on-air experience. We all know that when there is activity on the bands, these days, it's usually a DXpedition pileup or a contest. Today's CW aspirants have had little chance to work others who are skilled at CW, operate at moderate speed, and are committed to helping. That's the mission of Giving Back. The GB volunteers get on the air at approximately 7 PM local time and seek out CQers, or call CQ, and engage in routine QSOs including some conversational tidbits. The operators' schedule appears on the next page.

Here are the September results (GB hosts are shown in **bold**):

AA0YY	KA0SIX WA3SCM	W9GPP WB8APR GW2CWO	K9LWA KC9YI RA5CC	WD5BVQ KF0LRQ I4VOL	KJ6WU W2CW OK2PXX	N3A/4 AG4UX RW3HR	K8NS EA8/ SP7OGP
DK6XM	SP9BPE PA0SIM DF6IA GI3BBE	M6MPC OK5MM G0HFL PA3JD	R2VQ PA3HEN G4MZN IN3CEL	G0IHK PI4NTC G0GAO	G3RXA (2) MI0MUM S57FF	RU9UX US7WA G4IVV	PI4VAD G4HXY
GW2CWO	RA5CC R2VQ PA3HEN G4MZN IN3CEL	I4VOL G0IHK PI4NTC G0GAO	OK2PXX G3RXA(2) MI0NUM S57FF	RW3HR U9UX US7WA G4IVV	EA8/DK6XM SP7OGP PI4VAD G4HXY	SP9BPE PA0SIM DF6IA GI4BBE	M6MPC OK5MM G0HFL PA3JD
JG1UQD JJ1FXF	JF5XPJ JF5XPJ JL1RAP	JA6HTQ JA4IJ JN1MET	JE7ZFE JQ3FRX	JF1EPL JS2OVO	JG1BGT(5) VK2NNW	JJ1DRW	JJ0SFV
JM4AOA	7N1OEX JA3NUH JG5POO/5 JJ1VNV/5 JM4RRC(4) JS6ULKJ	BX2AKP JA4IJ JH1LVB JJ1VNV/6 JN1FAO G1BGT(5)	HL1MIM JA7WTH JH2HTQ JK1BET JP2HYX	HL5BLF JE6WVC JH2URW JK1FYU(2) JQ3FRX	JA0SFE JF5XPJ(2) JI7KNV(3) JL1RAP JR0DIL	JA3EBL JF7NWP JJ0SFV(3) JL1STV JR1ADA	JA3LCH/4 JG1LHB JJ1SWI/1 JL2AQE JR2AWS
JO1DGE	HL1IWD JF5XPJ (6) JQ3FRX (2) JF3AUB (2)	HL1LUA JG1BGT(7) JQ7CWD JM4RRC (7)	JA3LCH/4 JH8PLY (2) JR2AWS JN1FAO (3)	JA4IJ JJ0SFV JR6SBI	JA6RDG JK1QYL JS2AHG	JE6AJO JL1RAP (2) KE7LOY	JF3RTZ JQ3CQQ N8AI
K6RB	K0CDJ VE7BGJ	K1MBF W1WY	K7XU VE7BGJ	W7SBE KF7WX	KN6BAZ	W0GAS	AA6GA
K7NJ	EA3BV KD0RC W7PAU KN6BFZ	KI5OEZ KD2FSH KY4GS KA9DCU	WQ5X AA6GA/5 WB3BTQ WB2KMR	WM4X K9UCX K7XU	K0AJ KD7ZNC KD9Z	WA3SCM KE7LOY WB5HOW	ZS1CF K8IU WB9UDL
K8UDH	VP9KD	W8HOG	KA6CPM				

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N4TMM	KA5TJS	N4SNB	K2ZDX	W2GIW	KB4U		
W5DT	W3JRR	K4EVT	NP3K	W8MDE	K4LFL		
7N2XZB	JR2FBM(3)	JQ3FRX(3)	JF5XPJ(2)	JG1BGT(7)	JK1QYL	JJ1VNV	JN1FAO

Giving Back Operating Schedule - 7 PM Local

October - April: 40m & 80m | May - September: 40m & 20m

Frequencies: 14.035 - 14.039, 7.035 - 7.039, 3.535 - 3.539 MHz

UTC+9	UTC+7	UTC+3	UTC+2	UTC+1	UTC/BST	UTC-1	EST UTC-4	CST UTC-5	MST UTC-6	PST UTC-7	Hawaii UTC-9
MON											
JO1DGE							W2XS	AAØYY			
TUE											
JR1WYW	E25JRP		SV2BBK		GW2CWO		WE5P	K8UDH	K7NJ	W7ZDX	
7N2XZB										K6RB	
WED											
JM4AOA								AF4PX			
THURS											
JJ1VNV			SV2BBK				KV8Q	N5OT	K7NJ	W7ZDX	
FRI											
JR1WYW			SV2BBK		GW2CWO		N2GSL	AAØYY		K6RB	
SAT											
JJ1FXF											
JM4AOA											
JG1UQD											
SUN											
JJ1FXF							W5DT			K6RB	
JM4AOA											



CW Academy

[Bob Carter, WR7Q](#) and [Roland Smith, K7OJL](#)

It is an unfortunate situation in the world where we have so many people trying to do harm and create chaos for many sad reasons. DQRM being a most egregious example. However, that is a discussion for another time. A little closer to home, we are seeing more efforts to try to 'hack' into our programs and websites on an on-going basis.



We have been successful in preventing or stopping this in most cases. However, we've some instances where we've had to correct 'issues' that have been created by unwarranted attacks.

In an effort to thwart these incursions, a few years ago we implemented a somewhat weak effort the prevent people getting into advisors files and records by checking their personal callsign, email address and phone number against the information in the database. This has worked to some extent, but that information is not all that secure and could be 'gleaned' by anyone doing a bit of diligent searching. We have a number of files and reports that we would like 'only' the appropriate advisor to see.

Starting around December 1st 2023 we are going to initiate a new program that will require all current and future advisor to start using a username and password to access their information as well as the information on their students. The username will most likely be the advisor's callsign but the password must be somewhat secure. This should actually be easier to use than what we currently have since you will no longer need to be concerned about the effect from changing email addresses or phone numbers. However, changing your callsign will still require you to contact CW Academy Admin (see <https://cwops.org/cwa-class-resolution/>) to effect that update. You will have the ability to be able to change your password at anytime on your own.

We are also considering how to implement 'two-step' verification or the new passkey process down the road.

This process will improve the security of our system significantly. It will also make it easier for CW Academy to make additional information and capability available to the advisors. If you have questions, concerns, or suggestions about this next steps, don't hesitate to contact one of us at the link listed above.

Here are the latest statistics at the completion of the 2023 Sep/Oct semester as of November 9:

We greatly appreciate the work and contribution of the 57 advisors for this semester:

Joe AA2IL; Ken AC5EZ; Buz AC6AC; Jed AD7KG; Dave AD8WR; John AJ1DM; Klaus-Dieter DL8TG; Lorenzo EA3IEB; Chris GØJPS; Roberto IK1HGE; Bruce K1BG; Rich K1DJ; Dallas K1DW; Michael K1LHO; Mark K5GQ; Kate K6HTN; Peter K6PB; Roland K7OJL; Jeffrey K9VEG; Gregg KA7MDM; Ken KD2KW; Christian KF7WX; Randal KG5IEE; Mike KI7OMH; Joseph KK5NA; Roy KK6M; Serge KK7RR;

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Rich KN4CQB; David KT5V; Chris KT9N; Tom KV8Q; Enzo MØKTZ; Danny MØSDB; David MØWDD; Roger MIØWWB; Randy N1SP; Sean N3RTW; Marcus N3VO; Mike N5KB; Gary N8LR; Dick N9EEE; Kevin NB7O; Philip NEØS; Manos SV1DAY; Tony VE2KM; Ron VE3FXX; Chris VK3QB; Bill WØEJ; Tom WØFN; Carl W4IF; Gregg W7GEM; Mark W8EWH; David W8OV; Steven WJØC; Bob WR7Q; Nianfeng WU6P; Hanz YL3JD.

The following 39 students successfully completed the **Advanced** level class:

Jonathan 2EØVGI; John AC7FX; Jeffrey AE5JT; Juan A. EA5XQ; Basil GØFGE; Dunville GØTRT; Ian G4LXX; Alan G4WWZ; Chris G7BED; Simone IU3QEZ; Allen K4WSD; Gary K7UOU; Cathy KAØRTB; Mike KAØRTM; Owen KD2VXW; Brian KD5RXP; Mark KD9UYC; James KF5JC; Kurt KI7JRZ; Steven KM6VOV; Shirley MØWXG; Frank N2PLG; John N6FVY; Charles NE7TE; Jeremy NM5D; Tom NN7O; Hannu OH1HAQ; Antoon PE1IDG; Akerstrom SA4ZAB; Jim VE6GL; Stuart VK6MK; Justin WØABE; Byron WØBM; Craig WØGIB; Gilbert WØMN; Scott W1MVY; Tom W2TJ; Denis W5DLM; Paul WA2TAX.

The following 60 students completed the **Intermediate** level class:

Lawerance AB9NE; Doug AC2LI; Terry AE6ST; Ed AE8Q; Chris AG6CK; Richard AI7JN; Tim AJ6VB; Martin DH4NWG; Andre DJ4DX; DL4VK Valentin DL4VK; Ingo DM5DK; John EI7IG; Ray GØOKR; David G4TVH; Jonathan G6VSM; Keller HB9HNT; Aaron K3THS; Jeffrey K4EVT; Mark K4LFL; Jeff K4LFL; Matthew K8SNH; Chuck KA6AAE; John KB2GKC; William KB4DE; Noah KC1NWN; Keith KC3NDU; Bradley KC6EOA; Ryan KC7TAK; Matthew KD2WAI; Tom KD2WYO; Ralph KG8ZY; Paul KJ7DT; Tim KO4ELL; Santiago KQ1O; Justin KW6SEA; Dimitrios MØSUY; Mark MØUFC; Wheatstone MWØSAW; Andrew N4EEL; Robert N6DOG; Martin OE3KME; Brusque PP5BRU; Zielak SP9PAZ; Volodymyr US7IGN; Eric VA3DXP; Bruce VA7SGY; Chad VE3NGN; Adrian VE6ADZ; Ian VK6EA; Jeff VK6JK; James W4IU; Joe W4YDL; Sue W7QF; Craig WA3RGH; Dave WE7DW; James WI6X; Velez WP4TZ; Mike WV7M; Ruben XE2NI; Pete ZL4SA.

The following 61 students completed the **Fundamental** level class:

Lisa AC3JX; Jean AD2EK; Marilyn AD3DX; Michael AE6MO; Jason AG7EG; Milnes AI7LF; Melonantha Amen; Brian BX2AKP; Ian GØPDZ; Huw G8IBL; Micah K5MEC; Glenn K8WS; John KB7ZDK; Michael KD2WX; Charles KD2ZZN; James KE8EON; Ben KFØKDI; Ronald KJ7VRI; Victor KK6WKI; Jim KM4AOR; Alan KM6QLF; Ligia KM6VOW; Ryan KN6BKS; Don KN6TAC; Ky KY5VAR; Damian M1VPN; Chris M7SVB; Dave MMØGGG; Kevin MWØKXN; Elawar N3PQ; Walt N4NMN; Dwight N5WRW; Sutliff N5ZY; Kevin N7KV; Kenneth N8KDC; Elina OH2ZUU; Terry Roberts; Andrzej SP9NT; Mikołaj SQ2C; Jacek SQ3HLB; Maciej SQ3HLL; Vasilios SV1JMC; Eleni SV4SUR; Clayton VE1MJF; Mary VE3INE; William VE4WJM; Randy VE6DKE; Jens VK4PE; Clement VU2CWO; Lewis WØADL; Walt W3FNZ; David W4CLR; Ronald W4RJF; Yoel W4YOE; Jim W5JCS; April R C W7ANC; Michael W7TDM; Emmitt WA4CAS; Ross WB2WJF; Laird WB7TGP; Greg WGØMEZ.

And finally, the following 114 **Beginner** students successfully completed the semester:

Ingwahang 2EØMHJ; Simon 2EØHFO; John AA1RB; Robert AD9S; Michael AF7KB; Gary AG9GG; Stefan DB6SM; Ulrich DC1ULI; Karsten DC2ZC; Dominik DC8DFI; Martin DG2SMB; Jürgen

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DG5SFW; Carsten DH7CB; Steffen DL1SX; Juergen DL2NJM; Florian DL9FK; Lennart DM2MM; Christian DO3RCX; Paula Doyel; Kevin EI8IBB; Vallauri F4IYY; John GØSDF; Patrick G5PJK; Jonathan KØARG; Patrick K3BBG; Mitch K4MNA; David K7JCK; John K8YYZ; Ray K9PYR; Prasad KB3MDD; Russell KB4RK; Garry KC3KUO; Horace KC4IGO; Jonathan KC8HCF; Richard KC9FHA; Donald KD2VIU; Jason KD4BJW; Frank KD9HTQ; Mike KD9WMJ; Hugh KE2BRV; Everett KE5MMT; Drew KE5UBO; John KE8OKY; Ronald KFØLRQ; Daniel KF5VLO; Colby KG5XR; Larru KI5OEZ; David KI5TRF; Janice KI6WCK; John KI7YWO; Mart KJ5BNP; Dale KJ7CJG; Jack KJ7UHG; Justin KJ7YFQ; Mark KKØO; Jonathan KK4KWF; John KK4QYM; Brian KK6BDF; Al KK6MVT; Slava KK6ONG; Catherine KK6VYX; Mark KK7DKF; Bridgedale KM6UXE; Tom KO4TCL; Matthew KQ4CCP; Michael KQ4DFV; Richard KQ4FCI; Marianna KQ4HNC; Daynah KQ4JKO; Cena KY1V; Mike KY4EAR; Neale MØKFZ; Martin MØKHx; Glyn MØOGD; Sarder MØOSK; Victor M7IBM; Alan MMØVPM; Matthew MWØKAX; David N1AHF; Jason N3WPA; Steve N7SRR; Byron N8BF; Tim N8TDV; NA4DL Danny; Howard NZ5U; Ralph PHØRAL; Giannis SV1PMQ; Miltiadis SV1SXV; Theodoros SV1SYM; John SV2SZS; Andreas SV3SPD; Dimitrios SV8LMQ; Maria SV8OVH; Jesus VA2JDZ; Jim VE3LMK; Peter VE6FPV; Graeme VK6HIL; Srinivas VU2SFJ; SB VU3OVK; Ed W3ETO; Monte W4MJH; Jerry W5JBF; Todd W5MTN; Jack W6UA; John W7SMZ; Rich W9ABE; Carter W9ERR; Lloyd W9SFG; Thomas W9VN; Norm WA1NLG; Dave WB9SXG; Raymond WU3Z; Nicholas WYØO; Amrulloh YD1SKA.

73, Bob WR7Q (CWops #1423), CWA co-manager

sc

CWops Tests (CWTs)

[Rich Ferch](#), VE3KI

As I am writing this, the ARRL's November Sweepstakes CW contest has just taken place. This is one of the major CW events of the year for amateurs in the US and Canada. Many of the call signs I heard were familiar from the CWTs.

After comparing the list of callsigns in my log with the CWops member roster, I found that nearly 60% of the callsigns in my Sweepstakes logs were callsigns of members. I was operating QRP and spent most of my time searching and pouncing, so my log was dominated by active testers who may have been more likely to be CWops members than some of the less active participants. As a result, the percentage of CWops members in my log may be unrepresentative. Nevertheless, the data from my log suggests a strong representation of CWops members within the North American testing community at large.

Returning to the CWTs, as of October 31 we had completed 172 out of the 208 total CWT sessions for 2023. K4PQC and N4BP have continued their "perfect attendance" records, with KO4VW

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and G3LDI one and two sessions behind respectively.

At this point, 54 people have reached the NAEU gold medal level of 120 CWTs. With two months yet to go, this number is sure to increase. Extrapolating from the totals so far, we can expect that somewhere between 130 and 140 participants will reach the gold medal level by the end of the year, with similar numbers likely at the silver and bronze medal levels.

Participation numbers are slightly lower now than earlier in the year. During the last two months, the numbers of reported scores have been in the range 347-388 at 1300Z, 326-375 at 1900Z, 210-239 at 0300Z and 77-102 at 0700Z. For comparison, the averages for January to August were 376, 388, 258 and 89 respectively. I expect that the participation numbers will be affected somewhat by the time change from Daylight Savings time to standard time, which takes place on the last weekend in October in Europe and on the first weekend in November in North America. Based on past experience, we might expect in particular to see an increase in participation in the 0300Z CWT from eastern North America when the local time for this session changes from 11 PM to 10 PM local time.

Enjoy the CWTs and keep those reported scores coming!

73, Rich VE3KI (CWops #783)

SC

SPEED	XST	DAY	TIME (UTC)	EXCHANGE	SPONSOR LINK
20 - 25	MST	Monday	1300 -	Name and QSO serial	International CW
20 - 25	MST	Monday	1900 -	Name and QSO serial	International CW
20 - 25	MST	Tuesday	0300 -	Name and QSO serial	International CW
25+ wpm	CWT	Wednes-	1300 -	Name and CWops #	CWops
25+ wpm	CWT	Wednes-	1900 -	Name and CWops #	CWops
25+ wpm	CWT	Thursday	0300 -	Name and CWops #	CWops
25+ wpm	CWT	Thursday	0700 -	Name and CWops #	CWops
< 20 wpm	SST	Friday	2000 -	Name and S/P/C	K1USN
< 20 wpm	SST	Monday	0000 -	Name and S/P/C	K1USN

CWops Member Awards

[Bill Gilliland, WØTG](#)

Be sure to check next month's Member Awards column for the announcement of a new award that starts in January of 2024.

Monthly Update

During October, additional members submitted logs and the number of active participants in the awards program increased to 250 participants. The QSO totals and rankings for the first week of November 2023 have the same familiar calls in the top five positions with **KR2Q** remaining in first place and leading second place **AA3B** by **246** QSOs. The changes in the top ten rankings this month have **N5ZO** moving into sixth place followed by **K7QA**, **NA8V**, **N5TJ** and **DL6KVA** in seventh through tenth place. The top ten this month are **KR2Q**, **AA3B**, **K3WW**, **N5RZ**, **KG9X**, **N5ZO**, **K7QA**, **NA8V**, **N5TJ** and **DL6KVA**. The separation between first place and tenth place is **558** QSOs.

The number of members who have contacted CWops members in 100 or more DXCC entities remained at **70** this month. The number of participants who have accomplished CWops WAS grew to **207** this month with the addition of **KN7T**, **AA4GA**, **IT9SSI**, **EA1X**, and **N5ER**. You can see complete rankings for all award categories at <https://cwops.telegraphy.de/scores>.

CWops Award Tools Participation

The Top 100 ACA scores reported in Solid Copy represent **active** participants only, meaning you must have submitted a log in the current year. Since ACA scores reset to zero at the beginning of each year, active participants are those shown with a non-zero ACA score.

At the end of 2022 we had **289** active participants in the Member Awards Program. As of November 5, 2023, we have **250** active participants. If you have not yet submitted any logs for 2023, please do so soon, and we can include your score among the participants.

Inactive participants previously achieved scores in categories other than ACA that are not shown in the Searchable and Sortable Scores Table. To see rankings and scores for both active and inactive participants please use the Score Overview Table where inactive participants are listed with ACA scores of zero, but their scores in other categories are listed at the highest level that was previously submitted.

You can see the final 2022 scores or final scores for any other year by going to the Score Overview Table and selecting the desired year from the "Final scores:" list at the top of the page. All scores categories on the page will then show the final scores and standings for the end of the selected year.

The Searchable and Sortable Table can graph your current year's ACA scores by date and allows you to compare your progression to that of others. Check the Plot button for the calls you wish to see plotted and they will all appear on the same graph.

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The CWops Award Tools [website](#) main page provides a means of printing your CWT Participation Certificate. You may request a downloadable certificate by clicking the "CWT certificate download" selection at the top of the page. View this webpage for more information about [CWT Participation Awards](#).

About the CWops Member Awards Program

Several operating awards are available for contacting CWops members. These include Annual Competition Award (ACA) recognizing the total number of CWops members contacted in a single year, Cumulative Membership Award (CMA) recognizing the total number of members contacted on each amateur band since January 3, 2010, CWops WAS Award for contacting members in all 50 states, CWops DXCC Award for contacting members in countries on the ARRL DXCC list, CWops WAE Award for contacting members in Europe, and CWops WAZ Award for contacting members in each of the 40 CQ zones. All contacts must be via CW and between current CWops members. To qualify for these awards, you must submit your logs via the tool at the CWops Award Tools [website](#). You can also print out your awards certificates at that same website.

A set of tools for managing your awards status is provided on the CWops Award Tools website and if you regularly upload your logs your awards will be automatically tracked for you. To view complete data for all currently active participants and see where you and others rank among active participants in the awards program, use the [online tools](#). For more details on the tools provided, see the August 2021 *Solid Copy* article.

Please Join Us!

Fabian, DJ5CW, who created the website and the tools, made it extremely easy to participate in the awards program. If you are not among the CWops members who are currently participating, please join us! It adds a lot of friendly competition and fun to your operating.

More Information

View our website for more information on the [CWops Awards Program](#). Send your feedback, questions or comments to cwopscam@w0tg.com.

Current ACA Top 100 as of November 5, 2023:

Rank	Call	ACA	CMA	DX	WAS	WAE	WAZ	Rank	Call	ACA	CMA	DX	WAS	WAE	WAZ
1	KR2Q	1883	8809	181	50	60	37	13	N7US	1282	6676	117	50	45	34
2	AA3B	1637	13423	132	50	49	38	14	OM2VL	1253	6789	101	50	44	33
3	K3WW	1549	10592	135	50	50	38	15	AA2IL	1226	3480	82	50	29	28
4	N5RZ	1517	9381	129	50	47	37	16	K1VUT	1193	5969	81	50	41	26
5	KG9X	1461	6828	103	50	44	31	17	W1RM	1178	8997	220	50	62	38
6	N5ZO	1359	9209	114	50	47	35	18	K3QP	1164	3733	83	50	41	26
7	K7QA	1343	6696	91	50	40	31	19	K3WJV	1146	7651	118	50	49	32
8	NA8V	1342	8574	113	50	47	35	20	K9WX	1142	5708	110	50	44	33
9	N5TJ	1336	4788	89	50	43	32	21	K1DJ	1129	5353	116	50	46	32
10	DL6KVA	1325	8013	198	50	66	38	22	VE3TM	1108	4475	99	50	47	29
11	KY4GS	1314	3641	75	50	35	24	23	W0UO	1105	4559	74	50	39	27
12	KC7V	1296	6374	94	50	39	33	24	VK2GR	1104	3234	86	50	42	31

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Rank	Call	ACA	CMA	DX	WAS	WAE	WAZ	Rank	Call	ACA	CMA	DX	WAS	WAE	WAZ
25	K4WW	1094	5594	85	50	39	29	65	N1DC	793	5283	91	50	40	26
26	K3JT	1086	6078	104	50	46	31	66	N4CWZ	789	3611	63	50	34	23
27	KO4VW	1084	3055	64	50	34	24	67	F6HKA	786	7690	204	50	58	38
28	WT9U	1060	6142	104	50	41	31	68	KC4WQ	781	3769	63	50	29	26
29	W8FN	1055	4683	76	50	38	24	69	N4FP	774	3129	61	50	33	20
30	AA5JF	1047	4614	99	50	44	31	70	K4TZ	773	3039	43	50	20	16
31	NJ3K	1035	4155	80	50	41	28	71	KM4FO	771	3349	48	50	19	18
32	9A1AA	1032	5018	127	50	52	38	72	K4PQC	770	1696	46	50	24	20
33	N5AW	1024	6461	104	50	48	34	73	SM0HEV	766	3023	117	50	50	35
34	K6NR	1023	5301	71	50	35	29	74	K8JQ	764	5405	70	50	35	23
35	N5KD	1015	3209	94	50	43	33	75	W6AYC	759	3953	59	50	27	26
36	WN7S	1011	4904	82	50	39	28	76	NA4J	756	3913	78	50	37	24
36	WS7L	1011	3689	67	50	30	28	77	N2EIM	754	988	46	49	30	18
37	KW7Q	1006	2662	81	50	38	30	78	K2YR	752	2849	54	49	33	20
38	W0VX	983	6324	131	50	46	37	79	N2UU	745	5548	112	50	46	31
39	SM6CUK	980	5379	160	50	57	38	80	VE7KW	726	2326	42	50	20	21
40	VE3KI	976	7677	144	50	53	37	81	AF4T	723	3295	75	50	38	28
41	CO8NMN	971	4834	77	50	36	25	81	KY0Q	723	3309	68	50	31	28
42	K0WA	965	3146	48	50	24	19	82	W4WF	717	5066	97	50	44	32
43	WT3K	945	4872	88	50	43	28	83	VE3MV	709	3957	89	50	41	27
44	WA4JUK	941	4345	87	50	42	27	84	K1RF	700	1687	44	50	27	15
45	KK0U	939	3075	61	50	32	23	85	VE3KIU	694	1906	42	49	28	18
46	EA1X	918	3729	87	50	44	33	86	W3WHK	692	3399	76	50	37	21
47	W9ILY	916	6591	136	50	45	37	87	K5VG	691	1344	50	48	29	17
48	DF7TV	904	3459	112	50	50	34	88	M0RYB	678	2778	88	49	47	30
48	KW1X	904	1765	49	50	30	18	89	W8EWH	673	1507	48	50	27	21
49	W1AJT	891	4337	98	50	45	33	90	K0TC	670	3444	64	50	29	22
50	K1SM	889	4594	133	50	46	37	91	EA3FZT	664	2746	82	50	45	30
51	N9UNX	886	1929	30	50	17	12	92	W2CDO	659	3065	68	50	38	24
51	W4CMG	886	2491	49	50	24	20	93	W0TG	654	3499	71	50	31	27
52	OZ3SM	885	3523	108	49	51	36	94	OK1RR	651	4164	150	50	52	38
53	F5SGI	876	2881	106	50	52	33	95	DJ5CW	646	3546	105	48	55	35
54	EA6BF	869	2841	82	50	43	30	96	EA2KV	642	2342	78	48	43	27
55	N3CKI	862	2658	57	50	31	18	97	W2VM	641	2683	64	50	33	20
56	KV8Q	858	3301	70	50	35	23	98	G4PVM	640	3142	108	50	50	34
57	K3ZA	847	2928	56	50	34	21	99	W1UU	631	4621	115	50	41	33
58	AF5J	844	3202	64	50	26	24	100	G3LHJ	628	1684	66	45	41	21
59	K3PP	840	5767	110	50	46	31								
59	KT5V	840	3727	83	50	33	29								
60	N5XE	836	3979	82	50	37	31								
61	AC6ZM	823	4617	70	50	38	25								
62	WU6P	821	2544	46	50	25	21								
63	NE2V	819	2756	71	50	36	26								
64	W0GAS	818	2774	55	50	26	22								

73, Bill WØTG (CWops #1873)

CWops Operating Awards



QTX Report: Enjoying the Art of Conversational CW

[Enzo](#), MØKTZ

I have received several emails about the article on ragchewing appeared in *Solid Copy* last month, all of them with positive and enthusiastic comments. A few emails included congratulations to me, a reaction that I did not really expected: I am sure any of us would have written more or less the same things, and most probably anybody else would have done a better job at cobbling these things together in an article. It looks like we simply just needed to talk about ragchewing in *Solid Copy* HI.

There were a couple of comments that I found particularly interesting. A fellow QTX supporter shared: *"The way you introduce ragchewing by describing how CWops supports it and why it's so rewarding and so much fun makes everyone want to continue reading. I enjoyed it so much I had to share these passage with my wife. I think it helped her understand why I ragchew on CW and why I enjoy it so much"*.

Another fellow contributed: *"I think that some in the club might say that we are just very emotional people and have directed our emotions to this business of CW as conversation, but I am very happy that you did break through the barrier of "CW as radio technology" or "CW as a competitive football field" to "CW as human communication." As you said, most of us love (or at least understand) the technology appeal, and the competitive thrill. We don't reject those, we just add to them the relaxation and the humanity of QTX."*

I am happy to see that the article was well-received, and I really hope several more fellow operators will join the QTX gang in the future.

A recurrent question by those who approached me via email was along the lines of: "Where do most of the CWops ragchewers hang out - 28 KHz above the bottom edge of the HF bands?" This seems to be a common doubt, which has also appeared in our QTX Soapbox recently. The last question in the [FAQ](#) section of our website has something about it:

Does CWops have particular frequencies where members gather? Yes. Primary frequencies are 1818, 3528, 7028, 10118, 14028, 18078, 21028, 24908, and 28028 kHz., plus or minus QRM of course. If these are busy, try others ending in '8': for example, 3518, 7038, etc.

So in principle we should be able to find other CWops members hanging around "the eights." In practice, I don't think I personally have any specific QRG where I "find ragchewers." I usually tend to call on a free QRG (after having listened for one minute or so and having asked "QRL?" at least twice, leaving some 5 seconds between them!) and have never thought of a specific watering hole dedicated to ragchewing. As a matter of fact, I have had ragchews all across the CW sections of almost all the HF bands. Following the suggestion provided by Dick N9EEE in the soapbox, I promise I will try to hang out more around the "eights" in the next few months, in an effort to establish some "ragchewing centres of activity"?

I thank Sam VE3WH for reporting a discrepancy in his totals for QTX/MQTX this year, as discov-

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ered through the CWops Award Tool by Fabian DJ5CW. His scores for October have a "*" to indicate that such a correction happened. If you discover any inconsistency in the scores reported, just shout. I also would like to welcome back Craig K7VM, who has enjoyed meeting fellow ragchewers again.

I would like to thank our editor Dick N9EEE and our president Stew GW0ETF for their continued support and encouragement, and each of you for making this column interesting every month. Just keep getting on the air, enjoy ragchewing, and have it fun. I expect your reports by the 5th of December, as usual.

72/73 de Enzo MØKTZ (CWops #3206)



WØGAS: Traveling too much, I need to settle down and get on the air.

DF7TV: Very nice to meet Keith-san, JH3SIF from Kobe again. His cubical quad antenna helped to enjoy our ninth conversational CW QSO since 2018. I could copy him with RST 569 on 20m; so no problem at all.

K6DGW: Started to get a lot colder after mid-Oct, and a series of house guests departed, so more time for radio. Skip, K6DGW

KG5SSB: It was nice to have some QTX and Mini QTX contacts on the 10 meter band.

MIØWWB: Just one QSO on 40M, three on 60M and all the rest on 30M, which has become my go to band! All QSO were QRP.

N9EEE: Normally, I hunt for a ragchew. But this month I challenged myself, a QRPer, by calling CQ on the CWops watering holes, the .028s. Nary a contact, unfortunately. Maybe blame the Mid-west black hole vortex? I'll shift more emphasis to the night time hours and hope to work someone...maybe you?

W8OV: My one QTX with WB2WIK was notable as we both ran only 10 W for a 24 min. QSO.

KR2Q: Longest duration QSO was with K7SF: 80 minutes on 30m. A new record for me. And we weren't even trying. Sometimes, things click and you just get carried away with the conversation.

AF4PX: I've been traveling some, several MQTX even got some qsl cards from my new friends. GA to DC, then KY back to GA.

ND4K: I'm having a great time meeting new folks and visiting with some I've known for a while. One of my most notable QSO's was an MQTX on 10m with Suke, JM7OLW, who was very loud in GA.

AAØYY: WB2AWQ was using all WW2 equipment. A little drifty but very fun QSO. KD4MV great QSO and woodworker. Built all his kitchen cabinetry. Great work. See on [QRZ bio](#).

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N7HCN: As the days get shorter, the QSOs seem to get longer! Hoping to work Enzo DX QTX...

PG4I: Been a great month. Got active on the 80m European sideswiper net which resulted in 19 QTX QSO's. For the SKCC I have done 2 marathon QSO's. They take one hour, the goal is to reach 100 contacts with different members. See [Marathon Award](#)

WB4IT: Not much time for radio this month, but the colder WX and lack of daylight will flip the switch in Nov. and Dec. I think.

W3WHK: Too many contests, not enough QTX. Enjoyed getting to know Armin DK9PY, with an MQTX.

K5KXJ: Great chat with Vic, WT9Q

KB6NU: I started out slow in October, but finished strong, and managed to hit my target of one QTX QSO per day.

JS2AHG: Highlighted QSO in October, 2023 were 25min QSO on 12m w/ Tord, SM3EVR and 22min QSO on 40m w/ John, K1JD.

KF6NCX: My most interesting QSO this month was on 10 meters with Phil, WA5OBV, from Stillwater, OK. Phil was sending with a Western Union key that's more than 100 years old. His sending was very FB, too. He was first licensed when he was just a kid (pre-teen) in 1961.

N2DA: Mainly sked ragchews this month, always fun catching up.

K7VM: Just getting back to QTXs. It's always nice to learn more about fellow hams.

WA4IAR: Did a little better this month more free time.

YL3JD: Easy month not that many ragchew qso's.

AJ1DM: I'm pleased to say that two of my QTX QSOs this month were with my CWA Intermediate students!

Awards and Medals for 2023

Gold – 400 QTX QSOs

Silver Medal – 300 QTX QSOs

Bronze – 200 QTX QSOs

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QTX for September 2023

<u>Call</u>	<u>QTX</u>	<u>Call</u>	<u>QTX</u>	<u>Call</u>	<u>QTX</u>	<u>Call</u>	<u>QTX</u>	<u>Call</u>	<u>QTX</u>
VE3WH	112*	KR2Q	25	K7VM	9	KG5SSB	4	WØGAS	2
WA4IAR	69	N7HCN	23	K6DGW	9	WB4IT	3	GW0ETF	2
WS1L	60	PG4I	21	MØKTZ	8	N9EEE	3	YL3JD	1
ND4K	34	KY4GS	21	K8UDH	7	MIØWWB	3	W9EBE	1
KB6NU	31	AAØYY	19	WT9Q	5	KF6NCX	3	W8OV	1
K9OZ	30	N2DA	15	WA2TAX	5	JS2AHG	3	K5KXJ	1
F5IYJ	27	AJ1DM	10	N1ZX	5	AF4PX	3	DF7TV	1

MQTX for September 2023

<u>Call</u>	<u>MQTX</u>	<u>Call</u>	<u>MQTX</u>	<u>Call</u>	<u>MQTX</u>	<u>Call</u>	<u>MQTX</u>	<u>Call</u>	<u>MQTX</u>
VE3WH	73*	JS2AHG	21	KG5SSB	10	N7HCN	4	WT9Q	1
WA4IAR	69	AAØYY	18	AF4PX	10	N9EEE	3	W3WHK	1
WS1L	68	YL3JD	17	GW0ETF	9	KF6NCX	3	WØGAS	1
MIØWWB	38	N1ZX	17	WA2TAX	8	K7VM	3		
KR2Q	35	ND4K	13	WB4IT	6	AJ1DM	3		
KY4GS	33	PG4I	12	DF7TV	6	W8OV	2		
MØKTZ	24	K6DGW	12	W9EBE	4	K8UDH	2		

QTX Totals for 2023

<u>Call</u>	<u>QTX</u>	<u>Call</u>	<u>QTX</u>	<u>Call</u>	<u>QTX</u>	<u>Call</u>	<u>QTX</u>	<u>Call</u>	<u>QTX</u>
VE3WH	572	ND4K	173	N9EEE	53	JS2AHG	16	W7JRD	9
WS1L	415	N5IR	144	K6DGW	51	W8OV	15	K7VM	9
KY4GS	320	KR2Q	113	KF6NCX	45	K4AHO	15	AB4PP	4
K9OZ	319	MØKTZ	104	W9EBE	44	GW0ETF	15	WA9ZZ	3
WA4IAR	303	KG5IEE	101	PG4I	41	WA2USA	14	MIØWWB	3
KB6NU	244	K5YQF	94	EI7LC	31	W3WHK	12	SV2BBK	2
F5IYJ	239	AJ1DM	86	N1ZX	27	AF4PX	12	NØBM	2
KCØVKN	210	N2DA	76	DF7TV	27	WT9Q	11	AB7MP	1
WB4IT	196	K8UDH	64	WØGAS	22	YL3JD	10	NØBM	2
AAØYY	176	KG5SSB	61	KK6CN	22	WA2TAX	10	AB7MP	1
N7HCN	174	KØALT	57	K5KXJ	20	NEØS	10		

MQTX Totals for 2023

<u>Call</u>	<u>MQTX</u>	<u>Call</u>	<u>MQTX</u>	<u>Call</u>	<u>MQTX</u>	<u>Call</u>	<u>MQTX</u>	<u>Call</u>	<u>MQTX</u>
KY4GS	423	EI7LC	170	GW0ETF	64	K8UDH	27	WT9Q	6
MØKTZ	369	KG5SSB	116	MIØWWB	58	SV1DAY	20	K4AHO	5
VE3WH	262	PG4I	110	KF6NCX	57	W8OV	19	G3WZD	4
AAØYY	255	KR2Q	103	N1ZX	50	WA2TAX	14	K7VM	3
WA4IAR	248	DF7TV	93	AF4PX	49	WØGAS	13	W7JRD	2
WS1L	247	ND4K	89	AJ1DM	45	AB7MP	13	NEØS	2
KG5IEE	201	JS2AHG	84	N7HCN	34	N9EEE	11	K5KXJ	2
YL3JD	186	SV2BBK	75	K5YQF	32	KK6CN	9	NØBM	1
WB4IT	178	W9EBE	70	K6DGW	29	W3WHK	7		



My Story: New Member Introductions

Compiled by [Tim Gennett, K9WX](#) (CWops #1462)

Graham Bubloz, G4FNL #3423

I was a short-wave listener from approximately ten years old and obtained a full licence at seventeen, and received my callsign. I learnt CW in my teens. Got stuck as everyone does at various speeds but after persevering, I managed to get up to a decent speed in a relatively short timescale. I enjoy CW QSOs – either rag chewing or contest style. I'm happy on SSB too, but it's rare for me to venture anywhere higher than 30Mhz. I am a member of a number of CW and DX Groups.

As far as gear goes, I have an aging but fully loaded Elecraft K3 and a Yaesu FTdx10, which I frequently use together for SO2R operation. I have 2 x Alpha 89 amplifiers and tend to operate mostly from a local University site, where there's a bit more space for antennas and much lower noise levels. The University has an old triband Yagi at around 18 m plus wire dipoles for the LF bands, slung from trees.

I've been married to Karen, for 34 years and we have two grown up children and (currently) a grandson who's 2 ½ years old.

My working life started as an electronics / repair technician before moving into IT and subsequently project and program management (in IT) and then in construction industries.

I am happily (and gladly) retired and am really enjoying life. We love to travel – the attached photo was taken on a recent trip to KH6. Just after retiring, Karen, as a Christmas present, gifted me a one-day beekeeping taster session at a local farm. Four years later, I now have five hives.....



Paul Reeber, N5FZ #3418

When I was in high school, my electronics teacher offered to give anyone who got licensed an "A" for the year. He taught us what we needed to know for the written and we had to learn the code on our own and he administered the tests. So five of us got our licenses; however due to the cost of rigs in the 70s none of us got on the air. This experience helped perk my interest in electronics and I got an electrical engineering degree from Michigan State.



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After graduation, I went to work for Texas Instruments in their military group as a design engineer and later transferred to their semiconductor group as a DSP marketing manager. After about 5 years, I was recruited by Samsung Semiconductor to be the worldwide sales manager for sales to Compaq/HPE selling server memory and I retired from that position earlier this year.

In 2019, for some reason, YouTube suggested a ham radio video which perked my interest and a month later was licensed. At the time I focused on SSB; however I was very disappointed in the level of activity: basically the only contacts I got were during the occasional weekend contest and my activity level dropped off.

In 2022 while looking at all my equipment I decided to try CW. I spent the next year listening to an app on my phone, I thought I had to be able to ragchew to get on the air. Then I stumbled upon LICW they pushed students to get on the "fast" and I realized I already had the basic skill needed to do POTA hunting and SST.

In late April, I made my first contact during a SST and have since become a contest junkie. I now do 6+ contests (including 2, sometimes 3 CWops tests) a week and it has really accelerated my instant character recognition. I'm now on track to hit my goal of 40 wpm by May 2024. Also, in an effort to move to the next level of decoding comprehension, I am also trying to listen to CW audio books (I have a long way to go on this goal).

My big surprise on this journey has been the level of CW activity on the bands compared to SSB; there is always something going on and a contact to be made. I look forward to participating in the CWops activities as a member and would like to thank my sponsors W6SX, NE5A, K5UV, N4BP, KC7V, N5NA, KM4FO, KR2Q.

Marius Lizunas, WG4V #3421

My ham journey started with a coincidence. I was preparing for a trip to Philmont Scout Ranch, New Mexico, and asked my good friend Valdas, 5B4AOF about a good way to communicate in case of emergency. His answer was to get licensed in ham. Six months later, I got a Technician license in 2017, and my first HT - ready to hit Philmont Scout Ranch. Long story short, there was a minor emergency where I was able to use my HT to help the boy scouts in wilderness by getting medical help. Diving deeper into my ham hobby and in order get more "freedom on the air," I got a General and an Extra license in 2020.

My love of electronics goes all the way



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back to when I was growing up in Lithuania. I liked soldering and assembled numerous electronic schematics and have always liked phones and telecommunications. Professionally, I am a radio frequency engineer working for one of the biggest wireless cell service providers in the US. I currently live in Georgia (Northern part of Metro of Atlanta) with my wife, my daughter, 24, and my son, 21.

I quickly understood that, living in a HOA community, there are big limitations as far as having tall and towering antennas. Soon enough, I learned about POTA and SOTA programs and was able to combine my new hobby with my love of being outdoors and enjoying hiking in nature.

Further exploring my hobby, I understood that Morse code is the way to reach other ham friends further using limited antennas. Learning Morse code is like another language needing a lot of dedication and effort. I joined CWops Beginner and Basic classes but still I was shy to get on-air. I had no confidence while trying to enhance my knowledge in CW.

In 2021, I joined a local North Fulton Amateur Radio League's club and met a lot of friendly and knowledgeable hams. The club has weekly "CW Chat" sessions led by Steve, KO4VW. By his encouragement and help, he pushed me "off a cliff into the air" to participate in SST sessions. Later that progressed into MST and CWT sessions. A year later, I was nominated into CWops by Hank, W6SX, and sponsored by George, NE5A, John, WE4AUB, Steve, KO4VW, Chad, N9UNX, Jim, N7US, and Douglas, KR2Q. Thank you all for your support and welcoming me to CWops. I really appreciate being a part of a CWops family and can admit there are endless opportunities and no limits to becoming a good CW operator.

Tom Hardy, NN7O #3427

Unlike many CWops members, I am not a life-long ham, and I am not technically oriented. Like a lot of kids, I was interested in radio, but like a lot of kids, I lacked the focus to do anything about it. Life led to a small-town law practice, and to the last ten years as the elected District Attorney in Inyo County, California.

I've always enjoyed outdoor activities, but as retirement was looking like something that was really going to happen, I started thinking about "indoor" hobbies and remembered amateur radio. When I learned that you didn't need to pass a code test anymore, I thought that I would try. I got my Tech license in the fall of 2019, and quickly moved to Extra in 2020.

While I found a great indoor hobby, I discovered that it is a great outdoor hobby, too—I discovered Parks on the Air, and then Summits on the Air. That's a big reason that I wanted to learn CW—all the cool SOTA and POTA activators run CW. Given that I live in a place surround-



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ed by mountains, SOTA has become my big outdoor activity.

I was also drawn to CW because it just seems special, and maybe a little mysterious. I am not in the “you’re not a real ham if you don’t know code” camp, but the operators who do know code seemed special, and I wanted to try to be one of them. I am also impressed by the camaraderie and good nature of CW operators.

I am very grateful to be a CWops member, but I am just starting off on a long CW journey. CW Academy has had a huge part in pushing me along the road. Big thanks to my Intermediate Advisor, Mark K5GQ and co-Advisor Ken KD2KW, and to my classmates Jerry KØES and Rob AE7AP, and my non-classmate but study group member Bill JP3REM.

Continuing huge thanks to my Advanced Advisor Joe AA2IL (who nominated me for membership), Co-Advisor Jim (aka “Muley”) N7AUE (one of my sponsors), and classmates Justin WØABE, Jeffrey AE5JT and John AC7FX. Thanks also to Doug, KR2Q, for his sponsorship, and a very special thanks to Hank, W6SX for his sponsorship. Hank has been amazingly encouraging and helpful to me. I will always play radio “exuberantly” because of his influence.

I owe a lifetime of gratitude to my wife Nancy, but as it applies to this bio: I had a big speech ready to give as to why I really “needed” to get an Elecraft K4, but when I started to give it she just said “life is short, we have the money, so get the radio.” So I did. Best spouse ever.

In addition to SOTA and POTA, I also enjoy low power contesting (CW, SSB and RTTY), and am a member of the Northern California Contest Club. Given other time and life commitments, I’m a fairly “casual” contester. I also have fun hunting DX.

And retirement isn’t too far off. When that happens, you’ll likely be hearing me from our home overlooking the Columbia River in Astoria, OR. Or from some summit . . .

Anthony “Will” Jaacks, NQ2W #3419

First things first...Thank you to AJ, NK4O, for my nomination and to N3JT, K1DJ, NS8O, K1EBY, K6RB, WØBM, N7US, KR2Q, N5OT, and KO4VW for sponsoring me. Your support is very much appreciated.

It's hard for me to believe that all this started officially back in 1984. That's when I received KA2VAJ. I remember how nervous I was during my first CW QSO with Jerry, KA2FKO (SK), who was just across town. About two years later, in the spring of 1986, I earned NQ2W after struggling to get to 20 wpm. The



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struggle was a result of learning code the wrong way.

Don, WA2OEP (SK), was shaking his head when I walked in to the Novice class (two or three weeks after it started) proudly claiming I knew Morse code, "An A is dot dash, a B is dash dot dot dot..." At the time, I knew no better because I never really talked to anyone about amateur radio or Morse code and how you should learn it. Suffice it to say, I learned the hard (aka wrong) way.

Unofficially, my interest in radio communications started in the late '60s with a portable shortwave receiver and a set of walkie talkies. In the '70s, CB radio caught my attention. Throughout those early years of my life I knew about amateur radio; we lived next door to a ham in New Jersey. He had a ground mounted vertical in the backyard but he never talked to me about it; maybe I was too young. One of my uncles who lived in California was a ham; way too far away for a shack visit and long distance phone calls were expensive. At Clarkson, I knew fellow students who were hams; heck, they even talked to the space shuttle. But, I never really knew amateur radio.

So, I'm NQ2W living in Lowville, NY using an Icom 745 mostly SSB. I buy an HW-8 and never look back. I'm all in CW QRP, having a blast. A move to a new residence puts HF amateur radio on pause for about 15 years. A move to Albany, NY and the kids at college allows me the chance to get back into HF. This was about a 10-year period all CW QRP, chasing DX and contesting. New radios - the computer and internet playing a huge role in hamming - LoTW. Wow!

I retired in 2016. We moved and built a new house on the side of a mountain (Dixon Hill). In the fall of 2021, I was finally able to get an HF station back on the air. Still CW QRP - contesting and chasing DX. I really enjoy the contesting. It wasn't that long ago that I entered my first CWT, fast, seemed even faster than the NAQP or CQ WWDX. Even as I write this, I am in awe of the CWops; you guys and gals are good. I hope to someday be as proficient at CW as you are. I may have learned the hard way but I'm doing my best to keep learning and improving.

I am a life member of ARRL, NAQCC, FPQRP, and SKCC and a member in good standing of HVCDX (Thank you Mike, K4RUM, for your encouraging wisdom and support).

When I'm not doing ham radio, I'm doing something else. Usually, I'm working on the house or maintaining our 20 acres of woods. In my spare time, I enjoy fishing out of my Hobie Pro Angler 14, walking (and not working) in our woods, or tinkering/building station accessories. My wife and I have been married for 29 years. We have two adult children with families of their own. Our four grandchildren are getting the amateur radio exposure that I never received. I don't know if they'll ever become hams. If they do, I'm certain they will be introduced to and learn Morse code the right way!

We share a great hobby. Radio technology, itself, is amazing but it's the people you meet behind the radio that seals the deal. A lot of us will never meet face to face. Heck, a lot of us will never actually "talk" to each other. But, we will communicate and make lifelong friendships. We will have a positive impact on someone's day, week, month, year, and life. I know how much amateur radio has enriched my life. I am honored to be a member of CWops!

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Rudi Venter, ZS2M/ZS6DX/V51VE #3420

First of all I would like to thank Raoul (ZS1C) for nominating me and my sponsors who supported my nomination!

I have been a licensed ham since 1996 and a SWL long before that when I was still at school. I still clearly remember my first short wave receiver, it was a Phillips valve set. The magic of the glowing valves in the dark while listening to exotic stations will always be with me, and then there was the smell of hot valves and Bakelite, maybe that is why I still love old radios and valve amplifiers even though I no longer use them!



I built my first (CW) transmitter when I was 10 years old, long before I had a licence. My first call was ZR6VE, restricted to 50 MHz and above only. To get HF access I needed to do 12 wpm CW. Since DX was my main interest I started learning CW immediately but I soon found out that I hit a "barrier" at around 8 to 10 wpm, I struggled to get my speed consistently above that.

I almost gave up but fortunately a very good friend, who was a radio operator on a RAF bomber in WW2, suggested I start at a higher speed, around 25 wpm and listen for words and not dots and dashes. I followed his advice and only a few weeks later I managed to pass my CW test at 25 wpm.

This allowed me to upgrade my call to ZS6VER with full HF privileges. I soon changed my call to ZS6DX because I found that the VER suffix on my old call caused many repeats on CW. I also hold the calls ZS2M that I use when at my second QTH. When I am on holiday in Namibia, where I was born, I am on the air as V51VE.

Since passing the CW test, CW has always been my main and preferred operating mode. The only time I can be found on SSB is when chatting to a few local friends, the rest of my time on the air is spent DXing and partaking in contests.

Towards the end of 2002 I had worked most DX entities that was on the air during those years and I became a bit bored looking for a new challenge. Up till then I was running between 100W and 400W, our legal limit at that time, but this felt all too easy. I made the decision beginning of 2003 to start my DXCC count again from scratch but this time QRP only, so from 2003 I have been running QRP exclusively for all my CW activities. It is not always easy but it sure is fun!

Other than DXing and entering contests I do enjoy a good rag-chew on CW and I have a few regular QSO's with friends and anyone else who wants to chat. I also enjoy restoring and collecting older radios. My collection of older radios is slowly growing, at the moment I am concentrating

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on older "flagship" radios from the three major players in the field. I often use them on the air so they do not just collect dust.

I have quite a few other hobbies as well, the main ones being photography, mostly landscapes, astronomy and microscopy. I have also been flying radio control planes since I was around 13 and I still fly competitively today. My model aircraft hobby resulted in me studying aeronautical engineering, learning to fly full-size aircraft and building a few aircraft at home over the years.

My one other big passion is sailing, I currently own a 53 foot Bruce Roberts yacht that I hope to take on an extended trip in the future. I did spend 28 months at sea on a 37 foot yacht from 1999 to 2001. So look out for me with a /MM added to my call!

Thanks for accepting me into the group, I hope to work many of you in the future!

Ciemon Dunville, GØTRT #3429

My earliest memory of CW was picking up a library book about Morse code as a young lad, and whilst I didn't start learning then, it was the spark for my interest in communications and radio. Some 8 years later, Dave G3XYV #356 introduced me to Amateur Radio during lunch breaks in teaching me and my fellow classmates Morse code; watching him work stations at a speed that I couldn't fathom helped to nudge me into taking the Radio Amateur Exam, quickly followed by the 12 wpm Morse code test in April 93.

Armed with my FT-817 and Palm Paddle key I dipped my toe into SOTA and quickly realised that my 12 wpm Morse test hadn't prepared me for real CW, and without an Elmer to guide me, it became clear that CW proficiency would be a long path. At the same time work and life took over and CW stopped.

When life calmed down, I was drawn back to CW by Thomas K4SWL and his POTA adventures where those simple exchanges showed that CW could be easy and great fun. I found it to be a blast and great at improving instant character recognition. TJ K9KJ #3228 showed me that high speed CW whilst mobile was also a thing (and something to aspire to), and he was also an advocate of CWops, something I'd not heard of until then. K4SWL showed the fun, K9KJ showed the skill; YouTube is a powerful tool.

CW Academy under Buzz AC6AC and his co-advisors has been a real eye-opener, and provided education in ways that I didn't expect. The culture of CW, the broadness, acceptance, humility, the daily practise, and the skill of course, shift focus from speed alone, to the well-rounded oper-



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ator who has the ability to participate at the highest levels of all aspects of CW. Thanks must go to AC6AC, WN5T, K7EFW, AH7RF, and W5DT for shaping me into a CWop, and to N5NA, W0BM, DF7TV, EA6BF, K1DJ, and G0MFR for sponsoring me.

A strong advocacy of the CW Academy is an obvious enduring way ahead for me as I emerge as a new CWops member; in time I'll give back more, until then, more CW required!

Chris Rayner, G7BED #3431

A massive thank you to AC6AC (Buzz, my dedicated and fun Advisor), my sponsors; W0BM (Pat), K1DJ (Rich) and EI7LC (Eamon), my co-advisors (Mike, Nathan, Heather, Marv) and all my classmates from the CWA Advanced class (Sept/Oct'23 semester).

Twelve months ago, I'd never picked up either a key or a paddle and was spending my (radio) life chasing DX on SSB/FT8.

To gain full licence privileges (and access to the HF bands), my late father (G3NYR) and most of those licensed on/before early 1992, all sat a GPO (General Post Office) Morse test (12wpm). That was something I avoided (for one reason or another). Eventually inheriting HF privileges with the removal of the Morse requirement, I felt somewhat guilty. Even more so, considering I volunteer at the Bletchley Park (of Enigma Code Breaking fame) National Radio Centre (NRC). The NRC is a showcase on Amateur Radio, and in particular, describes the role of the Voluntary Interceptors (the likes of you & me in their time) during WWII. Doing all of this without any CW skills didn't rest easy with me.



I needed a new challenge, so I decided something had to be done.

Self-taught (using the G4FON trainer) up to 15 wpm, I threw myself into CWA, first the Intermediate class, then the Advanced curriculum. And here I am now, more-or-less CW only when on air.

I am originally from Yorkshire ('eh up lad'), but for the last 33 years living in Northamptonshire, East Midlands (100 km north of London).

Licensed in 1986 as a UK Class B Operator, I have held a full OFCOM licence since 3rd March 1992. As a graduate electronic engineer, I have spent my working life in the mobile and satellite telecommunications industry. Initially on Inmarsat signalling systems, but for the last 20 years,

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with mobile carrier service providers across the UK and Europe - focused on mobile radio, core network and signalling. I have travelled extensively with work and managed to spend many years working in Norway as LA/G7BED in the early 1990s.

Mostly using an ICOM 7610 with a fan dipole at 40' (12m) and an ICOM 7300 into a multi-band EFHW antenna - I try to make all my own antennas. If I'm feeling particularly nostalgic, a YAESU FT920, my late Father's radio. I very much enjoy portable QRP operation, for which I use either my trusty YAESU FT-818, or my recently acquired QRP Labs QCX Mini.

With four children, life is busy. However, in my spare time, I enjoy many hobbies and pastimes - hill walking, music (piano and clarinet), motorbikes and volunteering at the National Radio Centre at Bletchley Park (GB3RS). I hold a Commercial Pilot's Licence and a UK CAA Instructor & Aerobatic Rating and, in the past, have taught flying at Sywell Aerodrome. Sadly, my flying now takes a back seat due to family and other commitments.

CWops has been instrumental to my journey, with nothing but support, inspiration, and encouragement at every step of the way. Thank you for the warm welcome, and I look forward to working you on air soon.

Dennis "Den" Ledford, KE4I #3439

My name is Dennis but I go by Den on CW.

I'm 73 and have been a ham since 1968 except for 1970 & 1971. My Novice expired while I was in the Marines. In 1972 I became WB4AEH as a Tech and later got my General and Advanced. In 1997 I got my Extra and in 2000 I applied for a vanity call and received KE4I.

I have wanted to be a CWops member for a long time a now my dream is reality.

I look forward to becoming a better CW operator.



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