

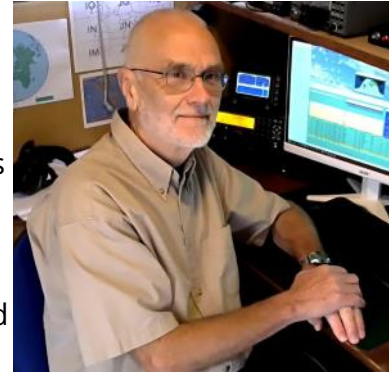


President's Message



The fastest CW operator; 217 wpm! And you saw it happen at the CWops dinner.

Another May has passed and with it another Dayton CWops gathering. Like last year it was held at the Rona Banquet Hall and be sure to check out the reports and photos later in this edition.



(Continued on page 2)

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"

CWops Officers and Directors

President: Stew Rolfe, [GWØETE](#)
Vice President: John Glover, [W2QL](#)
Secretary: Jim Talens, [N3JT](#)
Treasurer: Craig Thompson, [K9CT](#)
Director: Theo Mastakas, [SV2BBK](#)
Director: Raoul Coetzee, [ZS1C](#)
Director: James Brooks, [9V1YC](#)
Director: Bert Banlier, [F6HKA](#)
Director: Barry Simpson, [VK2BJ](#)
Director: Riki Kline, [K7NJ](#)
Director: Ken Tanuma, [JN1THL](#)
WebGeek: Dan Romanchik [KB6NU](#)
Newsletter Editor: Dick Strassburger, [N9EEE](#)

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The success of 2023 seems to have been repeated and it's been reported as being a 'full house' of around 110 attendees. I'm not a great fan of airline travel and have never managed to persuade myself that getting myself over to Dayton for a short few days is worth the stress. I do regret not meeting up with the many CWops characters who attend year on year though and realise I'm missing out on what would be a memorable event. Maybe one year?

Amongst the several face to face CWops meet ups throughout the year Rona/Dayton with its dinner, prizes and awards is undoubtedly the most notable. It also takes much effort and hard work to organise so we must thank all those individuals who make it happen. The others mainly follow the 'club stand' format as happens during the Hamvention itself at Dayton; some spawn informally organised restaurant gatherings too like the famous 'Visalia breakfast'! Having a CWops presence at a large ham radio event is a great way of advertising ourselves as well as meeting up with fellow members. These events take place globally and our Ambassadors can be key in instigating and organising them successfully. For the past few years RSGB have provided us with a free stand at their annual convention at Milton Keynes in October and I recall Duncan G3WZD ('Mac' #1979), who had just taken over from me as North West Europe Ambassador, being instrumental in the negotiations. The huge Tokyo Ham Fair in August is another example of our Ambassadors helping to put on a very successful CWops presence at a major ham fair. Naturally a club stand at a busy event requires manning so if you're ever attending an event with a CWops stand an hour or two of your time will be much appreciated to help spread our message. And to close out this particular topic I would point out that we still have some glaring gaps in our Ambassador coverage in some highly populated areas of Europe – see the website for details and if you feel you could help please get in touch!

Those of you who have attended the annual get-together either previously at the Spaghetti Warehouse or recently at the Rona will be familiar with Peter Butler W1UU; I gather he takes on the role of orchestrator and makes an excellent Master of Ceremonies! Peter has been Vice-President for over 10 years now but as you may have seen on the group reflector he has decided it's time to step down and focus on family and a second residency in Portugal. He's been sharing Cape Cod and the Algarve for a few years now; he even plays alto-sax in a local band but still can't get a 'native' CT7 callsign despite seeking advice from myself and some CT British ex-pats (complicated residency rules relating to US citizens apparently). So for now we'll be hearing W1UU with or without the leading CT7/ and we all wish him well. Meantime we are fortunate to have an enthusiastic and capable replacement in the form of John Glover W2QL (#2331) who will take over as interim Vice-President. Many thanks and welcome to the Board of CWops John!

If you worked the club call GW2CWO in last month's CQ WPX contest that was me. I decided to see out my 'QRP month' and fitted in a few spells of operating in between other activities with my K3 pegged at 5 watts. Running QRP in the melee of WPX can be a struggle for much of the time but Sunday evening was enjoyable with some good spells of running on 40m and 80m. I use DXLog's 'Extra Information' feature loaded with the CWops membership list so I could see whenever I was working a club member. Thanks for all the QSOs!

73, Stew GWØETF, President (CWops #919)

Editor's Note: On Being A Social Group

CWops is more than on-air activity; we're very much a social group, too. This came to light during Hamvention following a rousing CWops dinner at Rona Banquet Hall where dinner was very much the second intent of the evening. Oh, the food was great, don't get me wrong. How can you not like an Italian buffet? But, they had to ring the bell several times to break up conversations and get everyone seated for dinner. People who previously never met face-to-face before were carrying on like best of friends. Even then, the conversation spilled over into the food line and then to the dining tables. There was a dynamic I had never seen before and I can only rationalize as being the adept nature of being a CW operator in a pile-up; there could be three conversations at the table yet one interesting comment could pause the other two with everyone focused on that one comment. It took several attempts for Peter W1UU, our master of ceremonies, to get everyone quieted for the evening's program. This being my first time, I was told this is standard for the CWops dinner.

Then there's the CWops booth at Hamvention. While indeed our booth ambassadors received many inquiries from CW operators interested in what our club was all about, it also was the central meeting spot for CWops members to "innocently walk by" and get sucked in to conversation. Rob K6RB and those setting up the booth knew this was bound to happen and prepared for it by bringing in multiple chairs and tables for members to linger and carry on inside the confines of a 10x10' display area. Thanks to those wearing CWops member badges, introductions were effortless with many conversation starters such as "So you're (name). I recognize your callsign" which of course led to discussing how many times they worked each other in the CWTs or perhaps an explanation of the team name in the CW Open.

Then there's walking the Hamvention grounds wearing a CWops name tag. If I could tell you how many times I was stopped and greeted with, "Hi dit dit dit," I'd have a page full of CWops members who were excited to be there and tell me why. CWops members are avid hams, no doubt. Next year when CWops t-shirts are more easily obtained, we may see a sea of club members clustered in their own talk groups.

Away from the convention, the rest of the CWops universe is mingling on Groups.io with a daily barrage of commentary. There is a trickle of post on Facebook. And the fledgling group on Discord is evolving the social media channels for our club members. So, if anyone thinks we're all about the CWTs, they haven't taken off their headphones in a while.

Back to Peter W1UU, our former VP who made the CWops dinner at Hamvention his final duty. What a class act. He never stops smiling, is as gracious as one can be, and a great conversation starter. Thanks for being our VP of CWops for the past 10 years. Enjoy your new found time with family and amateur radio!

73, Dick N9EEE, (CWops #3113)

Editor, Solid Copy (SolidCopy@cwops.org)



News and Notes

[Duncan \(Mac\) Fisken, G3WZD](#)

We regret to report that the following members have become Silent Keys:

Dave Dixon, G0AYD #2159 on 24th February, 2024

Dave Ferigan, G3ZYV #356 on 7th May, 2024

Condolence cards have been sent on behalf of CWops.

Welcome to another News and Notes, albeit a slightly thin mailbag this month, and my usual thanks for the contributions. Do keep the submissions coming and there's no need to wait until the monthly call for articles or reminder (thank you to those who sent items early) Deadline for the next issue is 1st July.

Hiro, J11RXQ #2223 Last week I received a plaque for 2023 ARRL DX CW CONTEST. I hear it's sponsored by CWops. Thank you very much. I'm looking forward to seeing you again next time.

Joe, K9UR #2102 Semi-annual Reminder: CWops Discord server. An active group of CWops members and aspiring CW enthusiasts can be found on the Discord channel below. All are welcome. Discord has many active ham communities, CWops being one of many hundreds. It is a real time collaboration and communication tool that augments our CWops on air activities. It can be used from smartphone, tablet or desktop/notebook across many operating systems.

Follow this [link](#) to join the CWops Discord channel.

Guy, VA7GI #3256 "Reinventing Spark Gap Radio" was inspired by a visit to Signal Hill in St. Johns, Newfoundland, the site of Marconi's transatlantic experiment in 1901.

Most the pioneering work on radio done in the early 1900s is now obscure or lost, with only dusty remnants in museums. No living hams have ever used a spark gap transmitter. Marconi kept details of his technology secret – his radios saved 710 lives on the Titanic in 1912. Spark gap transmitters were prohibited by international law in 1934, ending an era by fiat. From then on, CW (continuous wave) signals ruled the airwaves.



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Adding to the romance are mysteries. Marconi had no idea why radio signals bent around the curvature of the Earth. Even today, there is no consensus on how the coherer detector works. Practical details generating sparks and using a coherer to receive Morse code needed to be reinvented. Unlike Marconi, I wanted extreme QRP (the average power of the spark gap is about 40mW) with a maximum range of about 25 feet (to minimize interference during short tests).



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Josep, EA6BF #3072 The EA6BF remote station has been closed for the summer, so until next Autumn, I will be QRV only from my home station.

Josep EA6AOV and Noe CO8NMN (CWops #2082) helped me in the tasks of dismantling the SpiderBeam antenna. Noe CO8NMN, has now moved over here but he still has not a local callsign. He will need sometime but sure he will finally get one!



EA6AOV Josep and CO8NMN (#2082) Noe helping dismantle the antenna.



EA6BF and CO8NMN with the antenna down. CWops 3072 and 2082 together!

The Remote station has worked pretty good, with lots of satisfaction and enjoyable QSOs.! The SpiderBeam 5 band antenna has performed really good at only 10m height.

Can't tell exactly how many Qs I have done in remote, but sort of +3,000! I started in Nov. 20 with **KA2DDX** on 10m for the first QSO in the log, and the last one was **KF2AT** on 20m on May 10, almost 6 months of operation.

Well, next Autumn/Winter I will put it up again, and this time, I will upgrade the station with a KPA500/KAT500 that I already have waiting for the coming winter season!

Thanks all for the QSOs and see you again in *Remote* from October/November!

Till then, see you from my home station!

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Allen, N2KW #2827 Bug fist?



Doug, KR2Q #438 In Solid Copy, each month, Bill, WØTG, provides a listing of Award Tracking for ACA, ACMA, and CMA. This is nice for member-to-member comparison. Thanks Bill (and thanks Fabian, DJ5CW, in the background)!

But I was curious to see how these numbers look year over year on a month-by-month basis. Since I only have access to my own historical numbers, that is what I used for a study of ACA results. YMMV! Shown below is my monthly ACA tracking, based on QSO date:

Year	01-Jan	02-Feb	03-Mar	04-Apr	05-May	YTD
2024	1,072	317	104	73	80	1,646
2023	1,102	241	123	77	91	1,634
Variance	-30	76	-19	-4	-11	12

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As is shown, the YTD number is “about the same” from year to year. Each month, for March through May, the numbers show a negative trend. So is CWops activity, as measured by ACA tracking, somewhat stagnant? I then looked at CWops callsigns (actually, I used the CWops ID number since some members use multiple callsigns), year over year. Things are hardly stagnant! For Jan – May (for each year), I worked 299 members only in 2023, while I worked 311 members only in 2024.

type	count
2023 KN	299
2024 KN	311

Sure, some members join the SK list, but not that many. What happened to the 299 members from 2023? Just bad timing? Equally, we add new members each month, but again, not that many. Some studies do not lend themselves to any obvious conclusions, which is actually a conclusion in and of itself.

Duncan, G3WZD #1979 Finally, and also by way of a reminder, there are several CWops UK club calls available for use by appropriately licenced members, including overseas members when visiting the UK. The calls are [G2CWO](#), [GD2CWO](#), [GI2CWO](#), [GJ2CWO](#), [GM2CWO](#), [GU2CWO](#) and [GW2CWO](#) Follow the links to applicable pages in QRZ where you will find details of how to apply to activate the calls.

Until the next News and Notes, QAC...

73, Duncan, G3WZD (CWops #1979)

NewsAndNotes@CWops.org

sc

Antenna Adventures

Tom Weaver, WØFN (CWops #2364)

Or “how not to fix aluminum tubing damaged in shipment”

After we installed a fancy new [tower](#) at the Fort Des Moines Museum and Education Center, we ordered a [Mosley Pro-57-B-40 beam](#). Winter was closing in so we planned to assemble and install it when spring sprung (April/May in Iowa).

Looking forward to a flawless assembly process, Dean NØXR and I arrived at the Museum on Thursday last week and started opening the boxes. Uh-oh, one of the bigger tubes was squashed on one end. We looked at it and scratched our heads – what now? It wasn’t going to allow another tube to fit into it and it sure wouldn’t fit over other tubing – rats!

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The tubing was about 1.25" in diameter so I figured we needed a tapered pin about 1.5" on the big end and about a half to three quarters of an inch on the small end (the tube was squashed to an oval shape less than an inch across). Now all we had to do was call Harbor Freight about a mile or so down the road, buy the tapered pin, and pound it into the end of the tube until it was back to round again. A "taper what?" was the response. OK, let's call in the big guns: Grainger and/or McMaster Carr. Grainger guy was very polite and professional but said, "we don't have anything like that". McMaster Carr guy was even more professional, but he agreed with the Grainger guy. No tapered pins of that size were available.

More head scratching as we realized our antenna assembly wasn't going well at all. We emailed Mosley Electronics support (mosley@mosley-electronics.com) and sent them a picture. They were also professional and emailed some helpful suggestions (wooden dowel, big hammer, a pry bar or pipe, etc.). As we were leaving I remembered that I had borrowed a 5-foot pry bar from a neighbor (since deceased), and I thought about four feet of it was tapered and round. Hey – that might work!



I walked down the street to the neighbor's widow and knocked on her front door. She knew me as the crazy guy up the street with the big umbrella antenna 60' in the air (a hexbeam) that her husband had helped with projects from time to time. I tried to explain why I needed to borrow her pry bar, but she stopped me and asked what it looked like, and did I know where it might be. I remembered that Craig (her husband) had taken it out of their backyard shed so that's where we went. There it was, and it was tapered and round!

I texted Dean and told him the solution was at hand – our problems were over. We met at the Museum the next day (Friday before Memorial Day), and sure enough, the pry bar was about a half inch on one end and a little bigger than the tube on the other end before changing shape to a square prying end. We went outside to the parking lot and slid the tube onto the pry bar. Holding on to the tube with the pry bar sticking out of the bottom, I raised it up and slammed it into the concrete parking lot. It was working – the end of the tube was less oval shaped! I slammed the tube and pry bar harder into the parking lot, almost back to round now. With a few more confident whacks the tube looked perfectly round once more.

I picked it up and tried to pull the tubing and pry bar apart. Geez, they're stuck. Hey Dean – pull on that end and I'll pull on this end. No luck. How about we twist as we pull? After more tug of

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war, we knew were in real trouble. We found some rebar and thought about pounding on it inside the tubing on the end of the pry bar inside the tube but wait – the rebar might glance off the small end of the pry bar and deform the tubing from the inside and ruin it. OK, let's put a 1 1/8" diameter socket down the tube on top of the end of the pry bar to give the rebar a flat surface to pound on.

After our genius socket idea, we slid a socket into the tube, inserted the rebar, and whacked on it until we got tired. Hmmm, the pry bar isn't budging. Oh well, let's slide that socket out and consider other options. Geez, the socket's stuck in there now, and there's a tiny bulge in the tube at the end of the stuck pry bar and socket. I decided to start calling local machine shops; this was obviously more than we could handle. Remember, this was Friday afternoon before Memorial Day.

Several Machine shops listened to my description of our problem and most of them laughed and said, "that's a great story but we can't help you". I finally started driving around to ask machine shop guys for help face-to-face. On my third stop, one guy saw me come in the door and before I could open my mouth he started laughing and asked me if I was the guy who had just called them. He said everyone in the shop enjoyed hearing how we had gotten into this fix.

I said, 'please help us' and he sighed and said, "go ahead and bring it in, but we may destroy the tube". I hurried out to the car, pulled out our pry bar and tube assembly and brought it in. He put it in a big vice, got a long pipe that fit into the tube perfectly, and a sledgehammer. When every whack only moved the pry bar two inches it became apparent that it was now the socket that was stuck in the tube. He and his helper finally got the pry bar and socket out of the tube, but now the socket was stuck hard on the end of the pry bar! They looked at each other and started laughing and said, "it'll be an extra charge to get that socket off of the pry bar". Now everyone in the shop started laughing and looking at me. I told them money was no object at this point, I just wanted the humiliation to end. More laughing.

They got the socket off of the pry bar and told me there would be no charge. They had so much fun hearing how we got ourselves into this fix that they were just glad to help. I insisted on paying them for their time, tools, and help. After thanking them profusely and shaking hands I went back to my car and headed back to the Museum where Dean was continuing to work on the antenna.

This was my cautionary tale to other antenna assemblers out there – don't call me for advice.

sc

My First 65 Years in Ham Radio

Tom Taormina, K5RC (CWops #108)

On June 15, 1959, next door neighbors, Jack Hartley, W2GFX, and Tom Taormina, W2GGB, received their novice licenses on the same day. Tom was interested in HiFi and Jack in Ham Radio. A neighbor, W2OBE, had a beam on his roof and they finally got the courage to knock on the

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door. Al had a Collins 75A-3 and 32V-1 station. He put us on the air and we were hooked. Jack moved to Florida where he is now K4WSB. Tom moved to Texas where he was WA5LES and finally K5RC. The two have stayed in touch ever since. They have had two "reunions" over the past 60+ years. Both are avid DXers and Tom hosts the W7RN Super Station in Nevada.

Tom has earned DXCC Top of Honor Roll (374 Mixed) and CQ Contest Hall of Fame (#50)

I would like to share a video of [my interview](#) by Kevin Thomas, W1DED

Here's a [photo tour](#) of my amateur radio journey.



WA2GGB circa 1961



Jack (left) and Tom (right) at 2000 reunion

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ESSEX CW BOOT CAMP 2023

[Andy Kersey](#), GØIBN

Submitted by Enzo, MØKTZ (CWops #3206)

Essex CW Amateur Radio Club does well to attract CW enthusiasts from across the UK to their annual event in Witham, Essex.

Ed, G1RUZ, from Liverpool, returned for another day of CW punishment; Ed also attends the weekly Skype sessions on a Thursday evening, obviously he has masochistic tendencies!

CW enthusiasts from around the country joined in the proceedings, some for the first time. These include John, GMØNYD, from Jedburgh, Stuart, MØSGV and Pete, G4UIX from Weymouth, and many from counties surrounding Essex .

The "Beginners" table, conducted by Andy, GØIBN, consisted of enthusiasts of varying capabilities, some lacked experience of having QSOS, while others appeared more experienced and were advised they should really have been on another table! But they were happy to stay at a speed where they felt comfortable, although the point of the day was to push attendees to their limits.

Sending groups of letters and characters tested the skills of some; QSO techniques were analysed - everyone was slightly different in this respect but it was explained that we are "Amateurs," and a degree of leniency is allowed as long as we can send and receive the basics of a QSO - signal report, name and QTH.

Sending techniques were analysed but the standard of sending was very high.

By the end of the day brains were getting a little tired so figures at 35 wpm were sent! Many were surprised at their own capabilities at this late stage of the day.

Hopefully many will now be encouraged to attend Essex CW Thursday evening session to improve these skills.

The "Improvers" table, conducted by Keith, G3WGE, consisted of operator's seeking to improve accuracy, speed and their own confidence to be able to get back on the air. The morning started with everyone getting to send a piece of prose and then taking a friendly critique from around the table. The operators were asked to



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send at their own comfortable speed and later at some faster speed. Operators were surprised to realise that they actually had something extra in their tank. Typical sending issues were: character spacing and general rhythm. 'Best Bent Wire' proved to be a useful sending exercise for rhythm. We discussed keys and their adjustments - straight keys, paddles, gaps and tension; also looking at tension gauges (dynamometers) and home made gap or feeler gauges. The 'Improvers' enjoyed a period of 'Head Copy Practice' before moving onto Number Groups and finally Practice QSOs around and across the table.

The last table was for candidates looking to improve from 20 wpm and Dean G4WQI had the pleasure of putting them through their paces. The day started with some variable speed receiving from 20 up to 28 wpm so that Dean could get a feel for where the group were. This was followed by each candidate sending short passages and the group discussing the quality of the keying.

In the afternoon session the emphasis was put on head copying, and a conversation using CW was conducted using abbreviations and Q-codes, very similar to what might be conducted on air.

At the end of the day a Q and A session was carried out. Questions were answered and advice on what Essex CW can offer to members, which includes Skype training and on air nets to gain confidence having a QSO on the bands

(Presentation key to Lee, 2E0DYH tall chap by G3WGE, short chap)

A presentation was made, The Peter Hale, G4OAD, Memorial Key. This is presented annually to the person considered by his peers to have either:

1. furthered the use of morse code during the past year
2. to be the most promising CW operator of the year - not necessarily the best CW operator but will be considered as one who has the most promise, making the most progress
3. to be the best ambassador to the CW mode.

This year, Lee, 2E0DYH, is a worthy recipient. Lee has shown the committee his sending and receiving skills. Lee works mobile with low power, patiently working very good DX across the globe



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During the day thanks must also go to Keith's wife, Margaret, who kindly distributed tea, coffee and cakes which she and Andy's wife, Isobel, had made, this certainly helped to make a brilliant day of chatting to CW friends and CW activities.

"CW may die; but if it does, it will be because we stood by and let it", Gus Taylor G8PG, SK.

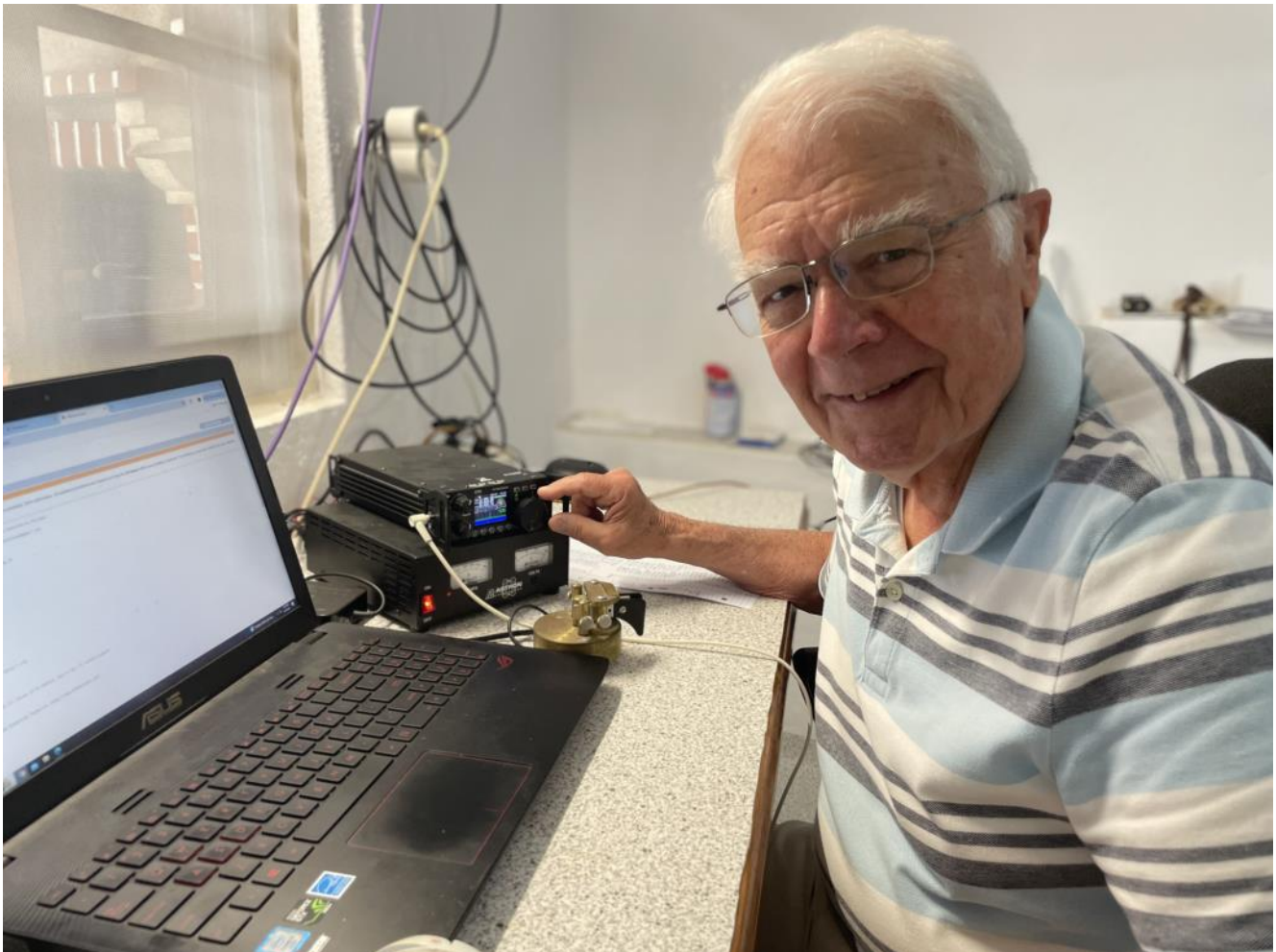
With the enthusiasm of clubs like CWops, Essex CW, the German HSC, FISTS club and many other CW clubs we will ensure this never happens!

sc

A Vice Presidential Wave

by [Peter Butler](#), W1UU (CWops #91)

W1UU took over for the VP K5ZD who served in the earlier years up to the end of 2013. N3JT asked him to consider being VP, and he was elected to start his time as VP in January 2014, as published in the *Solid Copy* list of members on the Board of CWops.



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From a personal management point of view, he was President/Owner of an Internet System company pioneering many "offshore Internet systems applications" using his interests in the microwave industry. He also served as president of various organization including the Portuguese American Society where he learned to "deal with people" and also build the profitability of the organization providing several management situations to rent out the facility to 150-160 people, somewhat like CWops was doing in the years when he joined CWops as an early adopter.

Little did he know that COVID was approaching, and he looked for ways to project the CWops philosophies from an Internet point of view, and organized a series of 3-5 minute videos to highlight the diversity of CW interests especially those who were not able to attend the venue of the Spaghetti Factory during the Dayton Hamvention where early CWops members use to visit. During another year CWops had a virtual booth at the inaugural launch of a new effort by another group as a means of spreading the International character of CWops. Members AC6ZM and W1UU developed the virtual aspects presentations of CW to continue rapidly growing CWops membership.

During the last two years, a new venue was made available called RONA after a significant search, especially to take advantage of the Hope Hotel activities as well as access to the Hamvention. This proved successful as a venue to build membership and attract overseas membership. The highlight this last year included a young CW amateur from Romania who could copy the "impossible" speed of 200+ wpm! The RONA was a "full house" event and demonstrated the possibilities of even further expansion, if desired, for future meetings and presentations.

Thanks to the management team of CWops showing the willingness to expand its concept of CW in Amateur Radio, that many new ideas will evolve from the camaraderie of CWops in the coming years. Personally, W1UU will enjoy his amateur radio CW events as CT7/W1UU when vacationing with his wife and family where he will enjoy his many years of enjoyment that include playing the alto saxophone in a "Banda Portuguesa". Did you know he learned the Morse code when he was first licensed as WN1BPW by tooting the horn as his code-practice oscillator! One has to start someplace! He toots well!

sc

Vice Presidential Successor

By Jim Talens, N3JT (CWops #1)

Our long-standing vice president of CWops, W1UU (Peter Butler) has decided to step down in order to pursue family issues and his part-time residency in Portugal. Peter has been our VP since January 2014 and has been the driving force behind our annual CWops dinners and a support to the president and other officers of the club throughout this time. Peter's activity in CWops will not slow because he will be operating from Portugal during his stays there, as well as in Cape Cod when back home. We are pleased to announce that John Glover, W2QL, has been approved by the Board to serve as interim Vice President commencing immediately. John has been a member since June, 2019, #2331 (originally KN4VV). He is an avid CW operator but still works as an attorney with a government agency. We welcome John as our new Vice President.



The Founding Innovators of Amateur Radio

[Fred Eisel](#), HB9DAX (CWops #687)

Are You Aware: No "amateur radio" without these personalities?



G. Kirchhoff



H. Hertz



A. Ampere



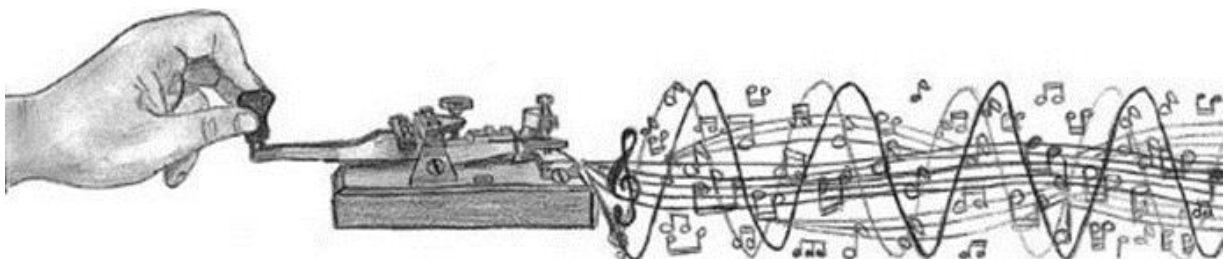
S. Ohm



S. F. Morse



G. Marconi



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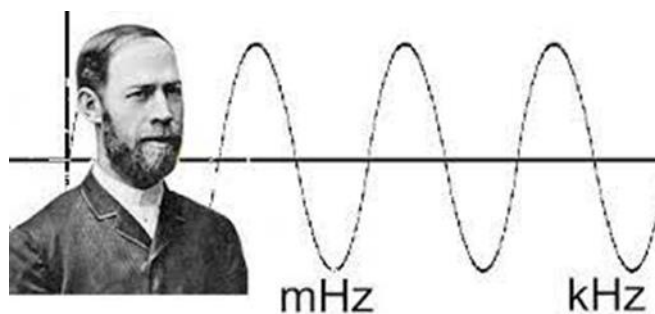
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G.R. Kirchhoff:

G.R. Kirchhoff German physicist 1824-1887 is known for his "Rules for electrical circuits", which specify the dependence of electrical voltage, electrical current and electrical resistance and which form the basis for the structure of the analysis of electrical circuits and electromechanics

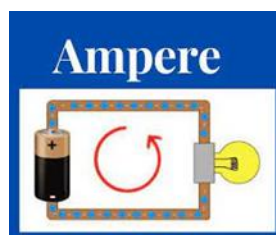
H.Hertz:

Heinrich-Rudolf Hertz: 1857-1894 was a German physicist. On November 13, 1886, he successfully conducted an experiment on the generation of electromagnetic waves and their transmission from a transmitter to a receiver. The unit (Hz) is named after him. The unit of measurement Hz indicates the number of oscillations per second.



A.M.Ampere:

French mathematician and physicist 1775-1836, is designated by the unit symbol A, is the SI base unit of electric current and also the SI unit of the derived quantity of magnetic flux.

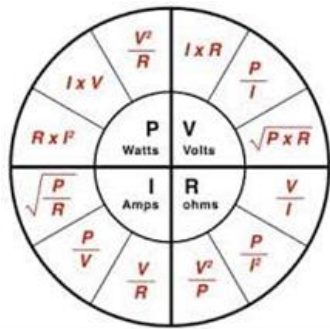


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G.S. Ohm:

Georg Simon Ohm 1789-1854 was a German physicist. Ohm proved that the resulting electrical "current strength I" in a current-carrying metallic conductor corresponds to the quotient of the applied electrical "voltage U" and the respective electrical "resistance R". In honor of Ohm, this physical relationship is known as Ohm's law. In 1881, the SI unit for electrical resistance was named after him.



Ohmsche
Formeln



G. Marconi:

With radio technology, we have a tool that "brings the people of the world together", as G. Marconi (1874-1937), the inventor of telecommunications, said. On June 2, 1896, he applied for a patent for wireless telegraphy, which describes an apparatus.

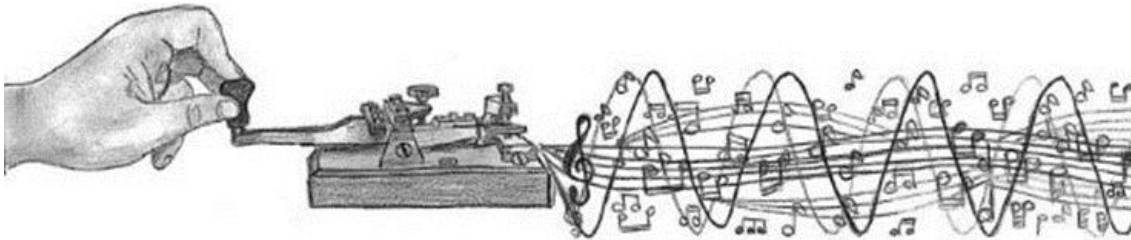


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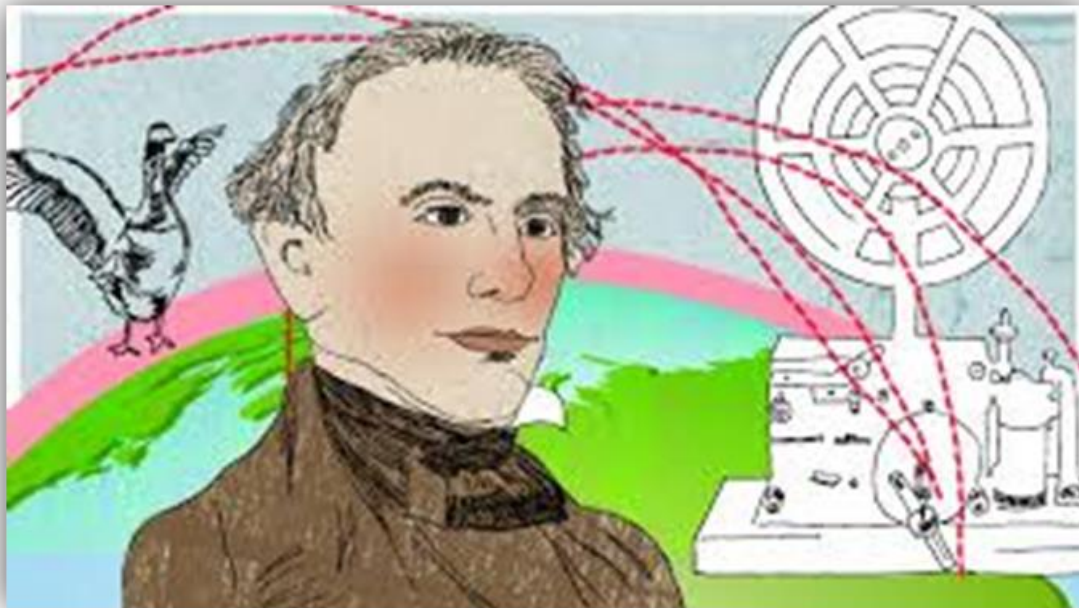
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S.F.B.Morse

Samuel Finley Breese Morse was born on April 27, 1791 in Charleston, MS. Samuel F. Morse developed electrical telegraphy as a hobby, which he advanced by inventing the "Morse alphabet", later named after him, and an electronic technology suitable for this type of transmission. He thus created a good electromechanical communication system, which came into use shortly afterwards.



On September 4, 1837, S. Morse presented his electromagnetic telegraph: His invention transformed speech into electrical signals and revolutionized communication around the world. The first word S O S . . . _ _ _ . . .



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The ham shack of Fred Eisel, HB9DAX

SC

A1Club Weekly Contest Guidelines - AWT

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

AWT is the weekly one-hour CW contest presented by A1CLUB, Japan's historic CW club. We expect not only the A1CLUB members but also invite all the world CWers to participate. You can enjoy AWT with any kind of key such as a straight key, bug key, paddle and even PC keying using software like N1MM Logger+. Also SO2R (Single Operator with 2 Radio), and those QRV from a remote shack are all welcome.

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GUIDELINES

- Date:** Every Wednesday 12:00Z-13:00Z (21:00-22:00 JST)
Mode: A1A (CW)
Frequencies: 1.9, 3.5, 7, 14, 21, 28MHz
*+25-40kHz from lower edge of each CW band plan is recommended.
(ex 7.025-7.040MHz)
CQ Format: CQ AWT
Exchange: RST + CW Name (Handle)
Operation Class: QRP: =<5W, LP: =<100W, HP: Others
Score Calculation: "# of QSOs" x "# of Call Signs"
"# of QSOs" does not include DUP QSOs on the same band at one AWT
"# of Call Signs" does not include DUP Call Signs on all bands at one AWT.
Score Submission: <http://3830scores.com/> (Submit your score by next Monday from AWT)
Score Tally: From the February to January of the following year,
all the submitted scores will be tallied and the result
will be announced on the A1CLUB Webpage.

NOTES

QSO Example

CQ STN: CQ AWT JE1TRV

TAKER: JJ1FXF

CQ STN: JJ1FXF 5NN ATSU

TAKER: 5NN HIRO TU

CQ STN: TU JE1TRV AWT

Point Calculation Example

1. 2021/02/02 12:00Z 7MHz JN1THL
2. 2021/02/02 12:12Z 7MHz JF1UOX
3. 2021/02/02 12:25Z 14MHz JJ1FXF
4. 2021/02/02 12:37Z 14MHz JE1TRV
5. 2021/02/02 12:48Z 14MHz JJ1FXF
6. 2021/02/02 12:59Z 3.5MHz JF1UOX

of QSOs: 5 (JJ1FXF is DUP and not counted)

of Call Signs: 4 (JF1UOX will be counted as 1)

Total Points: 20 (5x4)

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Advice for Operating Frequencies

1.9, 3.5, 7, 14, 21, 28 MHz are the AWT operable frequencies and please do not QRV on WARC bands such as 10, 18, 24MHz. Also +25~40kHz from lower CW band plan is recommended for AWT. Please pay attention to QSOs and avoid making QRM. And it is allowed to QRV out of the recommended AWT frequencies if the AWT frequencies are busy. But please avoid some conventional frequencies such as the DXpedition and digital-mode frequencies.

Advice for Keying Speed

AWT is also intended for CW contesting practice. Therefore, calling back at QRS is preferred if the sending station is not a fast sender. AWT accepts all speeds. Feel free to CQ at your comfortable keying speed. When calling back QRS CQs, adapting the keying speed will always cause more efficient results.

Contest Logger

The world most famous contest logger, N1MM Logger+ provides AWT module on its website.

<https://n1mmwp.hamdocs.com/mmfiles/categories/userdefinedcontests/?CMDsearch=>

Look for A1AWT.UDC for download

\$HOME/documents/N1MM+logger/UserDefinedContests folder.

A note from Ken Tanuma, JN1THL -

It is almost same as CWT except for exchange.

CWT name CWops# AWT RST name. and using 3830 score.

Some CWops members asked me to increase participants of CWT and I tried to ask many JAs participating CWT but results were not good.

One idea is setting up small contest same as CWT before or after CWT.

I asked JE1TRV CWops#141 and JJ1FXF CWops#2898 they are A1Club member to start new contest.

I expected JAs will move CWT but few were moved.

For JA there are some difficulties to participate CWT.

Most of JA their antenna are small and output power are only 50 to 100W.

It is difficult calling US 1200 to 1300UTC on 40m.

US to US signal is very strong and we need high power and nice antenna.

Almost US their antenna is beaming to opposite direction.

US do not imagine there are JA participants.

I hope to ask CWops members please participate AWT and please listen there are JA and HS .

The Decreased Summer MUFs

[Carl Luetzelschwab, K9LA](#) (CWops #920)

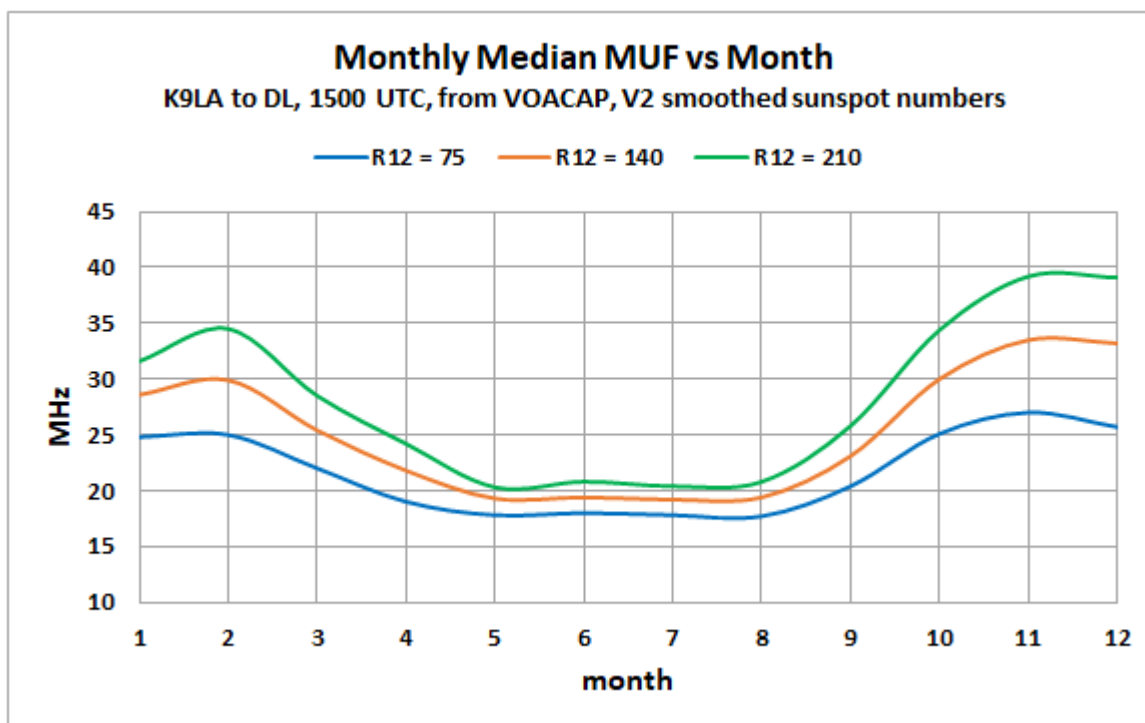
I like summer. Up here in northeast Indiana it's a great time to do outdoor activities. One of those activities is doing yard work. Most of the time it is a satisfying job keeping our property in good shape. But when it's hot and humid, it's not enjoyable.

Another 'not enjoyable' activity tied to the summer months is the decrease in the MUF (maximum useable frequency) that comes with summer in the northern hemisphere. This is due to the change in composition of the atmosphere, and the resultant change in ionization in the F₂ region of the ionosphere.

The two main atmospheric constituents in the F₂ region of the ionosphere are atomic oxygen (O) and molecular nitrogen (N₂). Atomic oxygen is good for electron production, which results in more free electrons to refract our signals back to Earth. Molecular nitrogen is good for electron loss, which results in less free electrons.

In the fall and winter months in the northern hemisphere, atomic oxygen is much more abundant than molecular nitrogen. Thus the O/N₂ ratio is high. But in the northern hemisphere summer, the O/N₂ ratio is lower – meaning there will be less free electrons and a lower F₂ region MUF.

Take a look at the accompanying Excel plot. It shows the MUF versus month for a path from K9LA to Germany at 1500 UTC for three levels of solar activity: a small solar cycle, a medium-sized solar cycle and a big solar cycle. R₁₂ is the smoothed sunspot number.



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During the fall and winter months, the size of the solar cycle is extremely important. The increase in the MUF when going from a small solar cycle to a big solar cycle is dramatic. But the MUF doesn't change that much during the summer months. What does this mean for our Amateur Radio activities?

It means that during the summer months the MUF is around 20 MHz regardless of the size of the solar cycle. During the summer, 20-Meters should be good, 15-Meters will be 'iffy' and propagation on 10-Meters via the F₂ region will likely be non-existent. The higher bands, 15-Meters and 10-Meters, will take a hit for ARRL Field Day in June, for the IARU contest in July and for the many state QSO parties in the summer months.

In every dark cloud there is a silver lining. For the summer months, sporadic-E is the silver lining. Let's hope that we have a great sporadic-E season this summer to liven up 10-Meters and 6-Meters (and possibly 15-Meters).

SC

Scenes from CWops Dinner at Hamvention

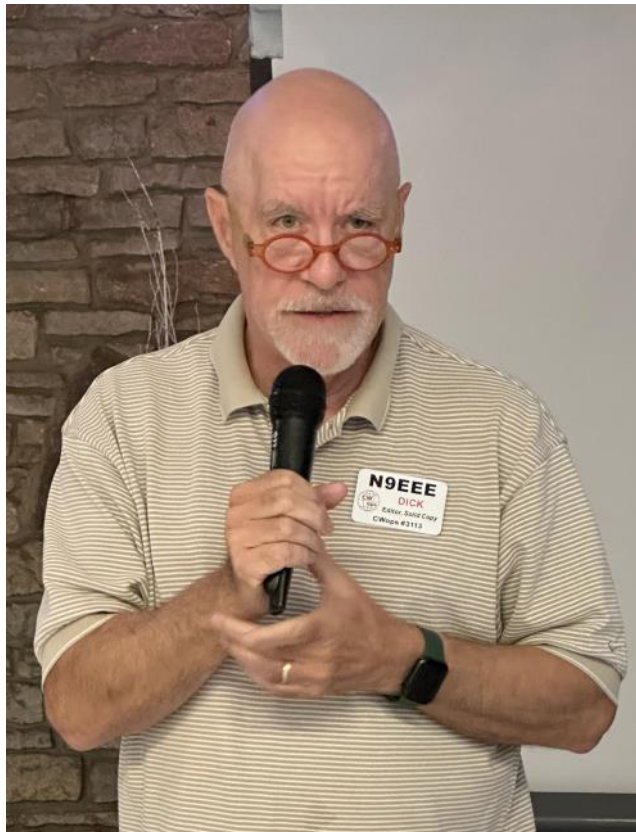


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Riki, K7NJ presenting the CWops Advancing the Art of CW Award.



Dick, N9EEE divulging the inside workings of creating the Solid Copy newsletter.



Adrian, KO8SCA, gauging the fastest sending speed of CWops members. (prelude to YO8YNS)



Peter, W1UU, our master of ceremonies heading to the door after a job well done.

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Video download of record-breaking CW performance by Ianis, YO8YNS.

More From Hamvention



Hans, KØHB and Rob, K6RB greeting visitors to the CWops booth.

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Bruna at Begali Keys



Tony at N3ZN Keys



Scott at Vibroplex



Mike at March Keys



N9EE operating the W8BI special event station on an IC-7610 into a telescopic dipole.

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Prize List from CWops Dinner

Gift	Donor	Winner
1. Telegraph Repeater	K8GU	WS1L, Chuck Chandler
2. Begali CW Machine	N6KI/W6QX	K7NJ, Riki Kline
3. Mastrant Wire GC \$10	VE3MV	Joyce Dickens
4. Mastrant Wire GC \$10	VE3MV	W4CMG, Cathy Goodrich
5. Mastrant Wire GC \$20	VE3MV	N5ABE, Abraham Loeb
6. MFJ Morse Code Book	MFJ	NA8V, Greg Chapoton
7. GC VP5M/\$50	K4QPL	K1VI, Mike Bragg
8. High Power Filter Designs Book	K0ZR	N3JT, Jim Talens
9. ARRL GC \$50	ARRL	K0VBU, Bill Henderson
10. ARRL GC \$50	ARRL	KJ5T, Steve Anness
11. The Daily DX 1 yr	W3OR	N8DNA, Michael Goltz
12. Cross Woodcraft Carved Plaque	Michael Byars	K5VBA, Stan Prevost
13. On The Air Sign	AE5EZ	WA1NLG, Norm Cantin
14. Engraved Plaque	March Magnetic Paddles	WB4AJL, David Baker
15. KC8J Laser Cut Dust Cover	KC8J	KO8SCA, Adrian Ciuperca
16. Elecraft GC \$75	Elecraft	WG3J, Eric Hudson
17. Elecraft GC \$75	Elecraft	K4GM, George Marzloff
18. Antenna Zoning Book	K1VR	W1HRB, Howard Belkin
19. K1EL MiniKeyer	K1EL	KS4VJ, Vikki Ivey
20. DX Engineering GC \$100	DXE	K6RB, Rob Brownstein
21. DX Engineering GC \$100	DXE	KM4FO, Dwight Orten
22. DX Engineering GC \$100	DXE	W6QX, Steven Edenson
23. DX Engineering GC \$100	DXE	K8CMO, David Yockey
24. Flex Radio GC \$200	Flex Radio	N3AM, John Silva
25. RF Kit GC	RF Kit	KA3VFT, Gary Hagan
26. MFJ Straight Key	MFJ	W8WZ, Carl David
27. MFJ Miniature Travel Paddle	MFJ	KY7M, Lee Finkel
28. MFJ 566P Key	MFJ	W1RD, Robert Dargel
29. GM0EUL Tiny Travel Paddle	GM0EUL	N7WLC, Michael Bass
30. MFJ 403P Travel Keyer	MFJ	KB0QEP, Jan Uzlik
31. K8UT MORTTY-MORSE Keyer	K8UT	AF4SG, Walter Miller
32. K8UT MORTTY-MORSE Keyer	K8UT	NM5G, Keith Dutson
33. CT1ICT Mini Dual Paddle	CT1ILT	W7JET, Brian Betz
34. CT1ICT Single Lever Paddle	CT1ILT	N4LSJ, Thomas Glascock
35. CT1ICT Dual Lever Paddle	CT1ILT	KT1OK, Donald Dygert
36. Vibroplex BY1 Paddle	Vibroplex	K1BG, Bruce Blain
37. UR5CDX CT73MX Paddle	UR5CDX	WC3W, Mark Wohlschlegel
38. N3ZN ZN9RZ Paddle	N3ZN Keys	W0EO, Richard Brethold
39. Begali Paragon Paddle	Begali Keys	YO8WW, Gabi Paisa



North American CW Weekend Wrap-up

[Don Lynch](#), W4ZYT (CWops #55)

Beautiful weather in the national capital area and good attendance made for a successful 2024 North American CW Weekend. The Weekend has made a successful comeback from being shut down for two years by the pandemic, and this year the following hams and many of their wives/partners were able to join for all or part of the weekend.: N3JT and Nina (K4NML), W4ZYT, NF8M, KC4D, WB4DNL, N3AM and Sharron, K9MA and Bonnie, AA3B and Deb, WA3RGH, K4QS and Vicki, WN7S, WK2G and Maryanne, AA4JJ, N4BA, K3EW, K4HQK and Sheila, KR3E, and K1VR. We welcomed international participation from 7Q6M (K6ZO), VE3GFN, and VE3RSA. We did miss several regulars who this year had scheduling conflicts. Participation is heavily weighted towards members of the CWops and FOC organizations, but anyone - ham or non-hobbyist - with an interest in Morse code communication is welcome.

We kicked off with an informal pizza get-together at The Italian Oven in McLean, followed by an informal social gathering back at the Fairview Park Marriott. We elected not to have a formal hospitality suite this year, but the newly renovated lobby area provided plenty of space for conversation and socializing.

Saturday morning we were hosted by N3JT and Nina at their home for the usual spectacular brunch. Many of us view this as the high point of the weekend, and Nina and Jim deserve much credit and thanks for the effort they put forth to put it on each year. Jim's ever-evolving station was on display, and stimulated much discussion of remote operation, as part of the year he runs it from their Florida location. We also enjoyed an update on ham radio in Malawi, where K6ZO has fostered a growing interest among locals in the hobby, resulting in several new young hams with more in the pipeline. Saturday afternoon was free time for shopping, touring, or simply resting up.

Saturday evening we met at Metro Diner 29 in Arlington, which despite its "Diner" name is a fine family restaurant with an excellent menu and pleasant space amenable to good conversation. Some said their goodbyes following the meal, and others repaired to the hotel for some additional conversation. All in all, a nice weekend of congenial ham radio discussion, collegiality, and relaxation among friends.



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Brunch at N3JT's QTH



N3AM using K6ZO's remote system to operate 7Q6M, from N3JT's living room



Pizza party in McLean, VA. L-R: W4ZYT, WB4DNL, KC4D, K6ZO, K3EW

How We Were

[Ian Capon](#), GWØKRL

Jim Talens, N3JT, CWops #1



N3JT and 4X6TT camel-mobile in 1984 or thereabouts, in the Sinai!

(Note the IC-2AT)

[4X6TT QRZ.com page](#) Quite the pictorial and call sign history.

[N3JT QRZ.com page](#)

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)

New Members

[Trung Nguyen, W6TN](#)

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

<u>CWops</u>	<u>Call</u>	<u>Name</u>	<u>CWops</u>	<u>Call</u>	<u>Name</u>	<u>CWops</u>	<u>Call</u>	<u>Name</u>
3541	PP5WX	Martin	3543	K8XCO*	Char	3544	M0KHX*	Marty
3542	KO4OL*	Glenn	3588	VE3INE*	Mary	3545	DK9IP*	Win

* Lifetime member

As of June 5, 2024:

Need Sponsors: K6SAL, WD4MSM

Invitations Extended: YB2DX

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

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.

CWops Tests (CWTs)

[Rich Ferch, VE3KI](#)

In last month's column I mentioned that there were no new record high scores recorded during the first four months of the year, but that changed on May 1. In the 1900z CWT that day, former CWops member LZ5DB, operating remotely under his new NJ5M callsign from the K1LZ superstation, rang up a score of 316 QSOs (82,476 points), demolishing the previous high of 298 (set by K3WW in February 2023) and breaking the 300 QSO barrier for the first time.

In total, there were 23801 CWT scores posted in the first 5 months of 2024. The highest QSO total, as mentioned above, was 316, with the next highest at 296. If at any time during those 5 months you had posted a score with a QSO count of 223 or more, that score was in the top 1%. Scores of 157 or more QSOs were in the top 5% overall, scores of 129 or more were in the top 10% of posted scores, and a QSO count of 97 or more would have put you in the top 20%.

Coming down closer to earth, the median score reported was 48 QSOs. This varies between sessions: the median for the 1300z session was 47, for the 1900z session it was 51, for the 0300z session it was 52, and for the 0700z session it was 32. Scores at 0300z are lower than in the other sessions because there simply aren't as many participants, making it impossible to run up really high scores. The highest score posted so far for the 0700z session is 161 QSOs, also by LZ5DB (operating as KC1TEK).

The most common reported score is 20 QSOs; there have been 606 CWT scores posted this year with a QSO count of exactly 20 QSOs. That's over 2.5% of the total of 23,801 submitted scores. There were 1,444,968 QSOs claimed in all.

That's all very interesting, you say, but what does it actually mean? Not very much, really, but it all seems to keep a lot of us coming back for more.

Enjoy the CWTs and keep those reported scores coming!

73, Rich VE3KI (CWops #783)
CWT Manager



K6RB's workstation for prepping the CWT medallions for mailing to 2023 recipients.

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 April results (GB hosts are shown in **bold**):

AAØYY	AA7TQ	WB6NMR	AC9HP				
AF4PX	KE7LOY	W2KEZ	W6EO	WDØBC	KØFHG	W8RIK	NS7E
GW2CWO	M7TSM G4GMZ	M6MPC DG4OI	G4LGX G4ZHZ	SP9BRP	G4PPG	GØAOE	MØNYW
JG1UQD	JK1QYL	JA4MRL	JJØSFV				
JJ1FXF	JS2OVO(2) JFØIUN JN3WRT JR3FOX	JM4AOA(2) JA4IJ(2) YJ8CW JFØRRH	JN1FAO JJ1VNV(2) JK1PWT JE1FMZ	JK1QYL(2) JQ3FRX JF7NWP VK2SS	7J1ATG/2(2) JQ2NUD VK4TJ JM8NSW/8	JJØXEQ JG1BGT(3) JR2JWI	JA4MRL JJØSFV JF2EVE
JM4AOA	DW1NBX JE1OFR JF7NWP JJ2OXS JN1FAO	JA4BSX JE1TRV JG1BGT JK1PWT JP3ASW	JA4IJ JE3PTA JG8XTU JK1QYL JQ3FRX(2)	JA4MRL JE6XFK JH6QIL JK1WCW(3) JR1ADA	JA5IOY JE8CXM JJØXEQ(2) JK6UPC JS2OVO	JA6BZH JFØIUN JJ1FXF(2) JL1STV	JA6FGC JF6BFJ JJ2KJN JL1TQV
JO1DGE	7L2VPL JA5IOY JK1QYL JQ3FRX	HL4/DG5CW JFØIUN JK1WCW (3) JR3FOX	JG1BGT (7) JK2IMG JS2OVO	HL5JZ JJØXEQ (2) JK6UPC KE7LOY (2)	JA1CBF JJ2KJN JN1FAO KE7LOY (2)	JA4IJ (2) JK1MVC JO1DFG	JA4MRL JK1PWT JQ2NUD
K6RB	KC6PGA						
K7NJ	AF5LS	KD6GBY	AI7JJ	ZS6UT	AC8PL	KB3ND	AB5X
K8UDH	WB6UBK						
KV8Q	NU3A						
MØWDD	2E0MHJ HB9EPE MØTJU	DL9ZP I1OXO M1JSC	GØEYO IW3DEK MM7BFL	GØGZN MØIYP MWØKAX	G4BSF MØKBJ PA3BFO	G4SEZ MØKCJ PA3CVV	HA5MK MØMCL

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N4TMM	K2HT	N5OMK	W4OSS	K2ZDX	AB8MR	KI4DBK	W4FO
N5OT	AC9HP XE1CT	EA1FL HC5CW	Z39M	CE2SV	HK1MW	HC5AI	OH2IPA
VK1CWO	VK3CGB	JO1IJG					
7N2XZB	JK1QYL(2) JK1WCW(2)	JQ3BSO JA5FGC	JJØSFV(2) JO1XGM	JA4IIJ(2)	JN1MET	JFØIUN	JG1BGT

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 | JA - 7.028

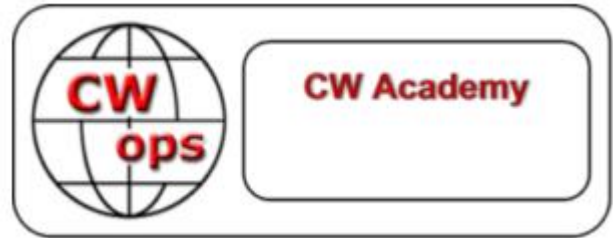
UTC+11	UTC+9	UTC+7	UTC+3	UTC+2	UTC+1	UTC/BST	UTC-1	EST UTC-5	CST UTC-6	MST UTC-7	PST UTC-8	Hawaii UTC-10
MON												
VK1CWO	JØ1DGE							W2XS	AAØYY			
TUE												
	JR1WYW	E25JRP		SV2BBK		GW2CWO		WE5P	K8UDH	K7NJ	W7ZDX	
	7N2XZB										K6RB	
WED												
	JM4AOA								AF4PX			
THURS												
	JJ1VNV			SV2BBK				KV8Q	N5OT	K7NJ	W7ZDX	
FRI												
	JR1WYW			SV2BBK		GW2CWO MØWDD		N2GSL	AAØYY		K6RB	
SAT												
	JJ1FXF											
	JM4AOA JG1UQD											
SUN												
	JJ1FXF							W5DT				
	JM4AOA											



CW Academy

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

The subject of 'Associate Advisors' as an official CW Academy designation has been a topic of discussion for quite some time. As presently implemented, the management system does not recognize nor accommodate Associate Advisors. Since several Advisors have Associate Advisors, we've been considering the idea and how it might be incorporated into the CW Academy Management System.



Here's what we've been thinking. Your thoughts and ideas are welcome! If there is enough support and agreement, the updated capability could be available for the 2024 September / October semester. Please send Roland K7OJL (rolandksmith@gmail.com) your thoughts and suggestions.

A function would be added to the Advisor Portal to enable an Advisor to designate someone as an Associate Advisor and specify which class(es) the Associate Advisor would be associated with. Multiple Associate Advisors could be assigned to a class. An Associate Advisor could only be an Associate Advisor during the semester and not also be a student or an Advisor.

The designated Associate Advisor would have access to an Associate Advisor Portal. This portal would have a subset of the functions available to the Advisor:

Portal Function	Advisor Capability	Associate Advisor (AA) Capability
Manage Advisor Class Assignments	Advisor sees and can update all students in all Advisor classes	AA sees and can update students in the class(es) the AA is assigned by the Advisor
View a student's Morse code assessments	Advisor sees all assessments for all students in all classes	AA can see Morse code assessments for any students in the class(es) the AA is assigned by the Advisor
Display Recent Reminders	Advisor can call up recent reminders	No capability
Sign up for an advisor class	Sign up for a class, modify signup information	Can sign up to be an advisor in a future semester
Manage account (new capability)	Manage account information, including username, password, address, phone, and related contact information	Manage account information, including username, password, address, phone, and related contact information

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Show advisor class assignments	This function shows upcoming advisor registrations (if any), current class makeup, and all past students and their status	No capability
Order Morse code proficiency assessments	Advisor can order a proficiency assessment for any student in any of the advisor's classes	AA can order a Morse code proficiency assessment for any student in class(es) the AA is assigned by the Advisor

At the end of the semester, CW Academy would acknowledge any Associate Advisors in Solid Copy as we recognize graduating students. No service awards are contemplated.

CW Academy wants your feedback!

1. Should CW Academy set up a process for Associate Advisors as described above?
2. What capabilities should the Associate Advisor have?
3. Is there any additional functionality beyond that listed above that an Advisor and / or Associate Advisor should have?

Please send your and ideas to Roland K7OJL (rolandksmith@gmail.com).

73, Roland Smith, K7OJL CWA Admin and Advisor

SPEED	XST	DAY	TIME (UTC)	EXCHANGE	SPONSOR LINK
20 - 25	MST	Monday	1300 - 1400z	Name + QSO serial number	International CW Coun-
20 - 25	MST	Monday	1900 - 2000z	Name + QSO serial number	International CW Coun-
20 - 25	MST	Tuesday	0300 - 0400z	Name + QSO serial number	International CW Coun-
10+ wpm	AWT	Wednesday	1200 - 1300z	RST + Name	A1Club
25+ wpm	CWT	Wednesday	1300 - 1400z	Name + CWops # (or S/P/C)	CWops
25+ wpm	CWT	Wednesday	1900 - 2000z	Name + CWops # (or S/P/C)	CWops
25+ wpm	CWT	Thursday	0300 - 0400z	Name + CWops # (or S/P/C)	CWops
25+ wpm	CWT	Thursday	0700 - 0800z	Name + CWops # (or S/P/C)	CWops
< 20 wpm	SST	Friday	2000 - 2100z	Name + S/P/C	K1USN
< 20 wpm	SST	Monday	0000 - 0100z	Name + S/P/C	K1USN



CWops Member Awards

[Bill Gilliland](#), WØTG



Monthly Update

During May, seventeen additional members submitted logs and the number of active participants in the awards program is currently 221.

The **ACA** QSO totals and rankings for the end of May 2024 have **KR2Q** in first place and leading second place **AA3B** by 246 QSOs. The top ten ACA totals this month are: **(1) KR2Q, (2) AA3B, (3) KY4GS, (4) N5RZ, (5) K3WW, (6) NA8V, (7) KC7V, (8) K7QA, (9) OM2VL** and **(10) KG9X**. The separation between first place and tenth place is 575 QSOs.

The **ACMA** QSO totals and rankings for the end of May 2024 have **AA3B** in first place and leading second place **KR2Q** by 594 QSOs. The top ten ACMA totals this month are: **(1) AA3B, (2) KR2Q, (3) N5RZ, (4) KY4GS, (5) OM2VL, (6) NA8V, (7) K7QA, (8) KC7V, (9) K3WW** and **(10) DL6KVA**. The separation between first place and tenth place is 1527 QSOs.

The **CMA** QSO totals and rankings for the end of May 2024 have **AA3B** in first place and leading second place **K3WW** by 3157 QSOs. The top ten CMA totals this month are: **(1) AA3B, (2) K3WW, (3) N5RZ, (4) N5ZO, (5) KR2Q, (6) W1RM, (7) NA8V, (8) DL6KVA, (9) F6HKA** and **(10) K3WJV**. The separation between first place and tenth place is 5977 QSOs.

The number of members who have contacted CWops members in 100 or more DXCC entities grew to 83 with the addition of **DM6EE**.

The number of participants who have accomplished CWops WAS grew to **235** this month with the addition of **KE0EK** and **NN7O**.

You can see complete rankings for all award categories at <https://cwops.telegraphy.de/scores>.

CWops Award Tools Participation

At the end of 2023 we had 271 active participants in the Member Awards Program. As of June 5, 2024, we have 221 active participants. If you have not yet submitted any logs for 2024, please do so soon, and we can include your score among the participants.

The Top 100 and the Searchable and Sortable Scores Table show rankings and scores for active participants only. To be an active participant and be included in awards scoring including the ACA, ACMA and CMA competitions, you must have submitted a log during the current year. To see rankings and scores for both active and inactive participants please use the Score Overview Table where inactive participants are listed with ACA and ACMA scores of zero, but their scores in other categories are listed at the highest level that was previously submitted.

You can see the final 2023 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.

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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.

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. For more information about CWT Participation Awards, please go to <https://cwops.org/cwops-tests/>.

CWops Member Awards Program Overview

Several operating awards are available for contacting CWops members. These include **Annual Competition Award (ACA)** recognizing the total number of CWops members contacted during the current year, **Annual Cumulative Membership Award (ACMA)** counting QSOs with members on all bands (once per band) during the current year, **Cumulative Membership Award (CMA)** counting QSOs with members on all bands (once per 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.

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Here are the Top 100 ACA, ACMA and CMA QSO totals as of June 5, 2024.

ACA

Rank	Call	ACA
1	KR2Q	1648
2	AA3B	1402
3	KY4GS	1344
4	N5RZ	1232
5	K3WW	1219
6	NA8V	1185
7	KC7V	1183
8	K7QA	1140
9	OM2VL	1076
10	KG9X	1073
11	KO4VW	1070
12	DL6KVA	1059
13	AA2IL	1055
14	F6HKA	1043
14	N5AW	1043
15	N7US	997
16	K3QP	987
17	N5TJ	978
18	K1VUT	973
19	NJ3K	944
20	N5ZO	932
21	K9WX	918
22	W4CMG	917
23	WT9U	892
24	K3WJV	886
25	DM6EE	876
26	W0UO	874
27	WN7S	871
28	VE3TM	870
29	VK2GR	869
30	W8FN	846
31	K0WA	834
31	K1AJ	834
32	WT3K	829
33	KM4FO	820
34	N5KD	819
35	EA6EJ	818
36	KW7Q	813
37	NA4J	808
38	K1DJ	794
39	W9ILY	792
40	OZ3SM	784
41	F5SGI	771

ACMA

Rank	Call	ACMA
1	AA3B	4492
2	KR2Q	3898
3	N5RZ	3566
4	KY4GS	3137
5	OM2VL	3084
6	NA8V	3030
7	K7QA	3027
8	KC7V	2999
9	K3WW	2977
10	DL6KVA	2965
11	KO4VW	2453
12	N5AW	2416
13	KG9X	2358
14	N5ZO	2307
15	AA2IL	2276
16	K1VUT	2225
17	N7US	2116
18	F6HKA	2090
19	N5TJ	2051
20	K3WJV	1935
21	K9WX	1889
22	WN7S	1887
23	W8FN	1854
24	WT9U	1825
25	NJ3K	1811
26	W4CMG	1750
27	W0UO	1738
28	DM6EE	1732
29	K3QP	1709
30	KW7Q	1707
31	OZ3SM	1698
32	EA6EJ	1686
33	VE3TM	1683
34	WS7L	1667
35	K6NR	1659
36	KM4FO	1626
37	NA4J	1606
38	K0WA	1595
39	K1AJ	1594
40	VE3KI	1584
41	N5XE	1534
42	W9ILY	1532
43	K1DJ	1490

CMA

Rank	Call	CMA
1	AA3B	14007
2	K3WW	10850
3	N5RZ	9940
4	N5ZO	9726
5	KR2Q	9463
6	W1RM	9216
7	NA8V	9071
8	DL6KVA	8833
9	F6HKA	8366
10	K3WJV	8030
11	VE3KI	7901
12	OM2VL	7381
13	K7QA	7284
14	KG9X	7253
15	N5AW	7251
16	N7US	7096
17	KC7V	7061
18	W9ILY	6939
19	W0VX	6588
20	WT9U	6565
21	K1VUT	6417
22	K3JT	6368
23	N4DW	6255
24	K9WX	6184
25	K3PP	5902
26	N2UU	5743
27	K6NR	5722
28	K1DJ	5689
29	N1DC	5634
30	SM6CUK	5607
31	N5TJ	5445
32	W4WF	5408
33	WT3K	5376
34	9A1AA	5353
35	WN7S	5337
36	G4BUE	5238
37	W8FN	5056
38	AA5JF	4977
39	W0UO	4944
40	KY4GS	4907
41	K1SM	4900
42	AC6ZM	4870
43	VE3TM	4867

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ACA

42	K6NR	765
43	VE3KI	755
44	WS7L	737
45	N9UNX	730
46	K3JT	726
47	9A1AA	719
48	EA6BF	712
49	K1SM	710
50	KK0U	709
51	AF5J	700
52	W1RM	693
53	N5XE	688
54	K3ZA	679
55	KW1X	671
56	PA0INA	668
57	SP1D	666
58	AC6ZM	652
59	N1DC	649
60	W0VX	646
61	WA4JUK	636
62	N9FZ	630
63	KV8Q	622
64	WS1L	621
65	W1AJT	618
66	VE3MV	615
67	N2EIM	613
68	K4GM	609
68	N2UU	609
68	W8EWH	609
69	N3CKI	607
70	KY0Q	603
71	K1RF	598
72	M0RYB	595
73	W3WHK	594
74	W2CDO	592
75	K4TZ	572
76	W0GAS	562
77	W9CF	559
78	AA5JF	551
79	K0TC	546
79	VE9KK	546
80	DJ5CW	542
81	WU6P	540
82	VA4ADM	536
83	W2VM	533
84	VE3KIU	530
85	N4LSJ	529
86	NN4K	516
87	W4WF	505

ACMA

44	VK2GR	1485
45	EA6BF	1468
46	N5KD	1457
47	WT3K	1428
48	F5SGI	1427
49	AF5J	1413
50	SP1D	1410
51	K3JT	1406
52	PA0INA	1399
53	9A1AA	1382
54	KK0U	1349
55	W0VX	1325
56	N9UNX	1302
56	VE3MV	1302
57	N2UU	1284
58	W1RM	1283
59	WS1L	1271
60	M0RYB	1208
61	K4GM	1189
62	K1SM	1165
63	W0TG	1151
64	KY0Q	1141
65	K1RF	1138
66	KW1X	1137
67	W2CDO	1118
68	AC6ZM	1109
69	K3ZA	1104
70	W3WHK	1086
71	KV8Q	1085
72	W9CF	1050
73	W1AJT	1048
74	N1DC	1039
75	DJ5CW	1025
76	SM0HEV	1021
77	W8EWH	1019
78	WA4JUK	1016
79	N3CKI	1005
80	K4TZ	977
81	WU6P	949
81	W2VM	949
82	N9FZ	937
83	W0GAS	929
83	VE9KK	929
84	F6JOE	927
85	NN4K	926
86	K0TC	925
87	OK1RR	918
88	VE3KIU	917
89	N4LSJ	916

CMA

44	W1AJT	4764
45	F6JOE	4729
46	NJ3K	4700
47	GW0ETF	4625
48	NA4J	4520
49	WA4JUK	4478
50	N5XE	4461
51	K4GM	4373
52	OK1RR	4334
53	K3QP	4216
54	VE3MV	4210
55	AA2IL	4189
56	WS7L	4175
57	I2WIJ	4172
58	W6AYC	4150
59	K1AJ	4107
60	KT5V	4078
61	OZ3SM	4038
62	KO4VW	3901
63	VK2GR	3876
64	DJ5CW	3858
65	KM4FO	3802
66	N1EN	3785
67	DF7TV	3773
68	KY0Q	3751
69	W0TG	3741
70	W3WHK	3694
71	K0TC	3690
72	WS1L	3668
73	N5KD	3661
74	AF5J	3572
75	DM6EE	3569
76	KV8Q	3511
77	K0WA	3508
78	W2CDO	3505
79	EA6BF	3494
80	KK0U	3485
81	G4PVM	3463
82	F5SGI	3422
83	AF4T	3373
84	AF8A	3345
85	K9OZ	3311
86	KE4S	3261
87	W0GAS	3249
88	SM0HEV	3234
89	HB9ARF	3232
90	KW7Q	3228
91	K4TZ	3205
92	M0RYB	3183

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ACA

88	W0TG	500
89	KR3E	485
90	DF7TV	484
91	W7LG	481
92	G4IZZ	479
92	KC8J	479
93	SM0HEV	477
94	F6JOE	472
95	SP4JFR	462
95	W7ZDX	462
96	HB9ARF	459
97	OK1RR	455
98	G3LDI	454
99	N3RTW	453
100	W0BM	450

ACMA

90	AA5JF	894
90	W7ZDX	894
91	GW4MM	877
92	W4WF	857
93	G3LDI	856
94	KC8J	844
95	HB9ARF	835
96	W7LG	810
97	G4BUE	803
98	SM6CUK	802
99	W0BM	790
99	G4PVM	790
100	G4IZZ	788

CMA

93	W4CMG	3135
94	WU6P	3129
95	NN4K	3128
96	4X6GP	3105
97	K3ZA	3084
98	K2YR	3017
99	N3CKI	2991
100	SP1D	2964

73, Bill W0TG (CWops #1873)
CWops Operating Awards



QTX Report: Enjoying the Art of Conversational CW

[Enzo, M0KTZ](#)

Is on hiatus this month. We'll be back next month with more QTX and mQTX updates and ragchewer comments.



My Story: New Member Introductions

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

Andre Gerdes, DJ4DX #3529

In 2006 I took the test for the Novice license, which I upgraded a year later to the full license. Right from the start my main interest were the HF bands. Learning CW was always a goal, which I tried to realize in several attempts. Finally I was successful with using "lcwo.net" so I am very thankful to Fabian, DJ5CW for creating this great website. I was amazed what a great advantage the mode CW has compared to SSB. It really upgraded the abilities of my modest station.

After a longer break for professional education and university, I finally had some time again for the ham radio hobby. I took the Intermediate and Advanced class of the CW Academy, which really helped and improved my CW. Therefore I want to thank my advisors Bob WR7Q, Kit GØJPS and Keith GØHKC. In addition, I want to thank my sponsors and especially Les, MMØUMH for being a great CW training buddy. I already met many nice people through CWops.

With my modest setup, I like to hunt for DX and take part in contests ("just for fun") but I am also looking forward to any QSO to improve my ragchew skills.

Hope to work you on the bands!



Hideo "Hide" Shimizu, 7L2VPL #3538

My name is Hide and callsign is 7L2VPL. I live in my birth place, Chiba, Japan about 60 km (38 miles) east of Tokyo.

I got a ham radio license in 1969 for the first time when I was a high school student. It was the age of change from AM to SSB and I got the code license in 1974. I enjoyed HF with beam antennas and 200 watts for 11 years. It was nice time in my radio history.

After that I moved to an apartment house so I had to QRT for some years and lost my original callsign dur-



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ing the QRT. I restarted ham in 1992 with this new callsign 7L2VPL.

I was on the air mainly on CW with small size antenna and 50 watts.

QRP, experiment of electric circuits and homebrew of radio equipment were all my interests. And I had been enjoying the contact with many people of the world not only on the air but also on VOIP programs such as EchoLink and CWCom.

I am looking forward to making contact with a lot of radio amateurs and SWLs of the world.

I move to my birth place (country side) in 2021 and I have been on digital mode since then and I built 80/40m DP, 20/17/15m VDP, 40/30/20/15/10m Vertical, 12/6m DP, long wire for 160m band and 2m 5-ele beam and TRX is IC7300 100 watts.

I have been enjoying HF CW and Digital mode right now. and my goal is getting the award of WAS and DXCC100 and good skill of CW.

Char Lewis, K8XCO #3543

I am relatively new to ham radio. I had absolutely no interest in anything electronic. In the winter of 2012/2013, my husband Brian N8XCO was studying for his General license. I was bored and since I like to study, I started studying for my Technician license which I passed in May. The following year I passed General and in January 2022, I passed Extra. At that point, I got my own radio, an IC-7300 and actually got on the air. I was having so much fun that I soon upgraded to an IC-7610.

It was last year that I discovered CW. In January 2023 I enrolled in the CWops Beginner class with Dave Rice AD8WR and through his great teaching and encouragement, was not only able to learn CW, but I discovered that I love it. I made my first POTA contact in March and was activating by July. This past January I took Fundamentals with Dallas K1DW, Frank K1EBY and Mike KG5RXG who all helped me grow in my CW Journey. I am currently in the Intermediate class with a great advisor, Buzz AC6AC and his great crew of co-advisors Jeff K9VEG, Marv W5DT and Craig AE7I. Every advisor and co-advisor that I have had the privilege of working with has given me different perspectives and tools for learning.

My home station consists of an IC-7610, a Butternut vertical antenna and a Begali Classic Magnetic Key. I love POTA, both hunting and activating. My mobile station is an IC-705 paired with an Alex Loop. Right now my portable key is a small Chinese key which works very well but is soon to



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be replaced by a Begali Traveler. You just can't beat Begali for a combination of beauty and function.

I live with my husband, three dogs and 2 birds in beautiful Northern Michigan where we enjoy 4 wheeling, Jeeping and fishing. I also enjoy drawing, reading and knitting, but my biggest passion besides CW is creating stained glass art. I specialize in stained glass call signs but sell my non-ham related pieces at a local gallery. See my QRZ page for more info.



I want to thank Dallas K1DW for nominating me and my sponsors Frank K1EBY, Amanda KY4GS, Jeff K9VEG and Bud AA3B. And also the CWops for accepting me into this great organization.

I look forward to all the great things CWops has to offer and hope to be able to give back for everything that has already been given to me, I plan to be a CW Academy co-advisor and then an advisor to pass on my love of CW and to help create and inspire great CW ops.

Robert "Bob" Huntsman, N6CHU #3535

First off, I would like to thank my sponsors (N7AUE, AA2IL) for nominating me for membership. It's been a long haul, with quite a few gaps in activity to get to this point, and I certainly appreciate the warm welcome I've received from CWops.

It all started when I was about eight years old. My father (who was a television engineer at the time) saw that I had an interest in things electrical/electronic, so he taught me the basics of how not to get electrocuted, and how to solder.



At age 10, I was first licensed as a Novice (WN6SQD) after completing a beginners' course at a local electronics store. I didn't really do anything with it at the time, and it expired in a year.

Fast forward about 20 years, and a friend (Dave Olson, KE7WE) I was working with in a land mobile dealer's shop in Chico, CA re-lit the fire for ham radio, and I got a Technician ticket as N6CHU in late 1978, the same week my youngest daughter was born. I upgraded to Advanced and Extra by October 1983.

During the aforementioned 20 year gap, I did a 4 year hitch in the USN, got a considerable amount of technical education, got married (we just celebrated our 52nd anniversary), had two

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daughters, and began a career as a broadcast engineer, from which I retired in 2014. I've worked at television stations in small, medium and large markets, done hundreds of remote broadcasts as either engineer-in-charge or senior video operator. I worked at a few radio stations and DirecTV along the way also.

As a part of traveling to faraway places to bring television pictures to the masses, I was fortunate enough to be able to operate as DX from the Olympic village in Seoul, South Korea (6K24SO) in 1988, and from South Water Caye in Belize (V31IK) in 1993.

Many gaps in ham activity from 1994 to 2020 can be attributed to adventures with SV SPARX, my 37 foot O'day sloop. Eventually (2014) she took us to Baja California and the Sea of Cortéz. We sold her in 2020 as the pandemic was just starting, and moved from Southern California to the Pacific Northwest (grid square CN87ub) to be close to our daughters and grandchildren.

Due to age-related (and loud music-related) hearing loss, I have a hard time understanding SSB due to the inherent distortion in that mode. All the more reason to become a CW-only operator. (Take the hearing aids off and put on the "cans" [headphones] and let's QSO!!)

As a result, I now have the station I've always wanted, on 1+ acres, surrounded by fir trees with plenty of room to experiment with antennas, etc.

- Tower: 60 ft. freestanding (Universal) aluminum.
- Antenna: Cushcraft A3S + A40kit
- Transceiver: Elecraft K3/100
- Affiliations: Mike & Key Club
 - Radio Club of Tacoma
 - Western Washington DX Club
 - CW Operators Club #3535

Martin Gehrs, PP5WX (PY3YMG,PU5BIZ) #3541

I would like to share a little bit of information about myself and the involvement with ham radio and CW.

Started with the radio at young age, my father (PY3HA now SK), was an active amateur radio himself, with a nice FT-101E and a 7 element Yagi on roof top. Being a electronics tinkerer and actively studying the subjects on a technician high school at that time, it didn't took long for me to get hooked up and I got my first call sign and license at the age of 14, PY3YMG.

I was only interested in CW really, it was a lot of fun and that 15m band Yagi was just pure magic for me.

Fast-forward to 2021 when I got back to radio activities after being QRT for over 30 years. It all restarted on my electronics hobby shop at my backyard, while fixing and old transistor SW radio,

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I realized I could listen to clean CW tones and SSB, by using a 455 kHz signal generator as BFO at the IF stage of the radio.

It is a great pleasure to be back and progressively recovering the skills of CW and the modern ham radio, that is quite mind blowing comparing to what was available at that time, I am much thankful for my nomination by OM Mats SM6LRR and the fine gentlemen, who took their time in sponsoring me into CWops !

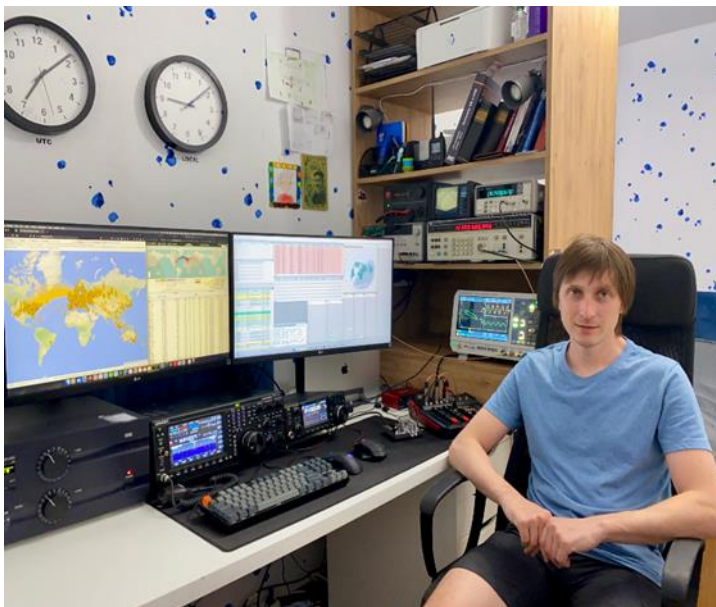
I've been an airline transport pilot for living, worked all over the world, I enjoy outdoors activities like biking and surfing, and above all, my days off with my beloved family in beautiful Santa Catarina Island, SA-026.



Konstantin "Kot" Lisitsyn, SP5LST # 3539

I was born and grew up in a family of radio amateurs and got my first amateur radio license (UA0LST) in 1999. In the same year I got interested in studying CW and started to make my first contacts. I took part in several expeditions (RØL 2002, RIØL 2002) to the islands of Primorsky Krai in Russia, organized by my father - RUØLL.

Then there was a break in my amateur radio activity. In 2021 I emigrated with my wife and children to Poland, where I got a Polish license and successfully worked with the call sign SP5LST. After a big break in CW I had to remember Morse code practice CW and make connections at 15 wpm. I am very glad that the amateur radio community allowed me to practice and it is very patient with beginners. I try to improve myself, work for results and I enjoy marathons where it's required to work on air every day.



In addition, I am very interested in the field of frequency testing, I take part in FMT ARRL competitions and do my development work in this area.

It's great to be on the air and I would like to thank everyone for the best moments amateur radio gives us. See you on the air!

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