# Solid Copy

# Ops Ops

The CW Operators Club Newsletter
December 2024 — Issue 179

How We Were...the early years of operating. Submit your flashback to <u>lan Capon</u>.

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, <u>GWØETF</u> Vice President: John Glover, <u>W2QL</u>

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Newsletter Editor: Dick Strassburger, N9EEE

# **President's Message**

My local club on the Island of Anglesey every now and then comes up with a nice idea. The latest was a 12m Challenge to run the whole of the month of November and which is still run-



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ning as I begin to put together my December column. Designed mainly to get members on HF and away from their "handies" and repeaters it has few rules – any mode, 25 w and 100 w sections and no limits on how many contacts you make with the same station. QSOs can be brief or long as you like and preferably no "5&9 - thanks, QRZ?". The one strict limitation was that antennas used must be home made and not commercially produced; some members spent much effort making attractive looking dipoles and verticals but I just stuck a foot or so of wire on each end of my home brew back-up 10m dipole hanging in the trees.

I stuck to CW, what else? I've worked other CWops members and added some points to my CWops Awards totals. I have the add-on to Logger32 that indicates immediately if a call I've entered is a CWops member but the database it relies on needs keeping up to date especially with the number of new members of late. So when WØZB answered a CQ I didn't realise Steve was a brand new member this month until he mentioned it...nice surprise! We were both extra pleased as he needed GW on 12m and Missouri was a new state on 12m for my CWops awards. "12" is an interesting band at this stage of the solar cycle but is surprisingly underused. Several big Dxpeditions had adopted it during the month and that added to the fun. It's definitely worth a visit.

One place I know I'll be working lots of members is the CQ World Wide CW contest on the final weekend of November each year. I'm getting less keen on 48 hours these days and have been taking advantage of the peaks of high band activity with single band entries on 15 and 10m. This year I chose 15m (Low Power Unassisted) but both bands were in great shape and produced some huge QSO totals. The weather can be a lottery in late November in Wales and this year the benign Friday conditions were abruptly replaced by a major storm which brought high winds and torrential rain overnight and through Saturday. When I first turned the beam early Saturday I knew something wasn't right and discovered the Hexbeam had been spun round 360 degrees with the wrapped round feeder jamming the guy rings and trapping the guys. I realised I would have to lower it, or try to – what could possibly go wrong in a howling gale? Taking it bit by bit and being ultra careful I eventually had the Hex just above head height, spun back round and the guys secured and I could escape inside to dry off and regain my composure.

After this enforced break I returned to the task in hand. I have a backup wire Ground Plane for 15m and anyway I've used the Hexbeam at 10 ft before and it does work to a point, aided no doubt by the sloping ground all round. What I didn't realise though was how well it could perform particularly when conditions are favourable; in that 'magic period" in local late afternoon I was able to run North America on both days and was even called by Zone 31. When I uploaded the log to the CWops Awards Tool I was informed I'd worked 248 members, and that wouldn't have included those that were operating at multi stations. In addition 181 of these earned me points in 1 or more of the different awards so with the approaching year end I have a boost to my closing ACA and ACMA totals. And while on the topic don't forget to get your final log submissions into <a href="https://cwops.telegraphy.de/">https://cwops.telegraphy.de/</a> by New Year's Eve to finalise your 2024 numbers!

Earlier this month I caught a post on our Listserv which I read with a feeling of sympathy and total admiration in equal measure (see <a href="https://cwops.groups.io/g/main/message/67610">https://cwops.groups.io/g/main/message/67610</a>). K1DJ described his mix up with alarms which meant he missed the 1300 CWT of November 13. What impressed me was that this was the first CWT Rich will have missed in the whole of 2024 and bringing his 100% record to an abrupt end so close to the end. WOW is the only word I could think of!



But wait because there's more.....Rich was up till that point a member of an elite group of "CWT 100 Percenters", the others being G3LDI, K4PQC and KO4VW who as far as I know continue toward the clean-sweep finish line. This is seriously impressive and I have to feel for Rich even though missing just one is still a heroic achievement. Lucky they don't have daughters who arrange grandchild care on alternate Wednesdays like I do.  $\bigcirc$ 

All that's left as the end of the year approaches is to wish everyone Season's Greetings. Let's hope you achieved good things in 2024 and are looking forward to what 2025 may bring. For those continuing to face challenges we hope being part of CWops can bring some comfort. Happy New Year, Blwyddyn Newydd Dda, Feliz Año Nuevo, Frohes Neues Jahr, Bonne Année, 良いお年を etc, etc.

**73, Stew GWØETF,** President (CWops #919)



# **Editor's Note: Year in Review**

In the past 11 months, 55 feature stories have been published in *Solid Copy*, "The Newsletter for The CW Operators Club," thanks to the numerous CWops members who have contributed their experiences and expertise. The content has varied greatly, including 12 technical articles, 16 focused on contesting or operating activities, 10 of general interest, 8 offering CW development insights, 3 stories from the field, 4 DXpedition recaps, 1 inside look at the making of a DXpeditioner, 4 personal accounts, one opinion piece (on the hacking of the ARRL), and one on amateur radio governance.

As the Editor, I am closer to the origins of these stories and often notice details the casual reader might miss, such as who is authoring them—high-profile individuals with a pulse on their specific interests in the hobby.

While the content varied greatly, I was particularly surprised by the number of articles devoted to CW development, beyond the monthly column from Bob and Roland. This focus is not merely because I hold our CW Academy in high regard, but because the learning process is so dynamic that it has become its own special interest area, much like the mode itself.

I offer my special thanks to those I have cajoled into writing an article, no matter how uncomfortable the task initially seemed, and to the DXpeditioners who took the time to share their adventures and accomplishments with you.

All this great content comes in addition to the focal areas supported by our monthly columnists, who consistently inform and encourage growth in various aspects of operating our favorite mode—CW.

Finally, a note to you, our readers: your support and feedback sustain our ambition to provide a quality product you look forward to reading and sharing each month.



Comments like Dave's truly make our day: "Solid Copy is outstanding. My favorite ham radio newsletter."

Feel free to share your technical skills, operating experiences, and insights about our CW lifestyle with the readers of Solid Copy. Our publishing guidelines will make it easier for you to do SO.

**73, Dick N9EEE**, (CWops #3113)

**Editor**, *Solid Copy* (SolidCopy@cwops.org)

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# **Election Results**

The Nominating Committee is pleased to present the following election results:

John Glover, W2QL Re-elected *Vice President:* 

Directors: Allen Mason, VK2GR ☑ Elected

Oceania

Bert Banlier, F6HKA Re-elected

Europe

Raoul Coetzee, ZS1C Re-elected

Africa

73, Don Greenbaum, N1DG (CWops #2)

Chair, Nominating Committee



# **Ops News and Notes**

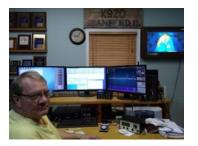
#### **Duncan (Mac) Fisken, G3WZD**

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

Condolence cards have been sent on behalf of CWops.



Dewey (Dew) King, NJ8V #1969 on 2<sup>nd</sup> December, 2024



Ralph (Al) Bellas Jr, K9ZO #1761 on 3<sup>rd</sup> December, 2024

Welcome to another <u>Ops News and Notes</u>, and my usual thanks for the contributions. Please 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 column is 23:59 UTC 1<sup>st</sup> January.

Jean, F5SGI #2532 I spent around ten days in November on the island of La Réunion, in the Indian Ocean, as FR/F5SGI. As you can see, conditions were very basic, with an IC-7300, 100 W and a G5RV tied to a palm tree. The key was a Begali paddle ("Pearl"). Very good, but not my favourite (which is a Scheunemann, unfortunately too fragile for the trip).

In total, 664 QSOs (in CW of course, I must humbly confess that I did 3 in SSB, with friends). I also gave a few points to the hams who managed to hear me during two CWTs. Finally, I had the opportunity and the pleasure of meeting Anne FR8TZ and her husband Phil FR8UA, both great contesters and CW operators and are a rare kindness.

**Gert, PA3AAV #2624** Much to my surprise I found a Trophy and Plaque in the mail today for the CW Open, even before the scores are published!

Thank you CWops and ICOM America!





Roger, G3LDI #1843 I have sent details of the problem with my main tower, supporting my beam and with halyards for my dipoles, earlier this year. It all started with a failing of an EHU on my SteppIR. I took this down and bought a new EHU at enormous cost but decided to sell it as it might have been a liability in that another one might have failed and this tower is not easy to handle. It is a UK tower, made in Louth by Western Electronics and is essentially a 3 section crank up with 40 ft sections and a 22 ft ground post.

I decided to replace the SteppIR with a 4-el Ultrabeam. We had several antenna parties here to do the work with a lot of the local club members coming along to give a hand, with me demoted these days to tea-boy and cook. I assembled the Ultrabeam and we put it on the tower. Cranking that tower is a dreadful task so I bought an electric winch. After putting the beam on the top with the tilt-plate etc we used the electric winch to crank it up. Unfortunately, the top rope got caught out of the pulley and jammed. It snapped and the tower collapsed vertically.



Next was a major job in disassembly and the major help with this was with Peter MØRYB and his range of mechanical help, Chris GØTZZ and Robert G4TUK doing the video job. I won't describe the effort required, suffice it to say it took about four weekend visits to take it apart. My son luckily is a fully qualified welder, and he spent a whole weekend fixing and repairing and welding the tower back to its normal state. I had to buy a new top rope and get Chris GØDWV to come over to re-rope it. I also had to get spares for the beam which ended up like a banana.

We then had another weekend putting the tower back together again involving a huge amount of human and mechanical effort. We luffed it back to vertical after double checking everything. All looked well, we checked the guys were not snagged and we started hoisting it. Two feet off the ground there was a huge bang, and it fell two feet very quickly! We had forgotten there were TWO chains for extra security. I then had to order a new bottom rope and arrange yet another weekend.

The rope arrived, Chris GØDWV came over and re-roped it and we finally cranked it up very, very slowly, checking every six inches or so that all was well. All was well and it is now at last fully cranked up and guyed as you see from the picture!



If you are interested in watching some of this, take a look at the following videos: <u>Video 1</u>, <u>Video 2</u>, <u>Video 3</u> and <u>Video 4</u>.

Marko, N5ZO #1224 Couple of pictures from my recent travels of 6 weeks, just got home last night: In photo N5ZO, VK2IM and VK2IA, we operated CQWW SSB contest as VK1A in Multi/Single category to Oceania win (raw scores).

Another photo from DU0A where we labored for a week to set-up basic antennas on 3 towers and station inside for CQWW CW contest operation from this new contest station in Philippines. We operated in Multi/Single category and our raw score is another Oceania win.



L to R: N5ZO, VK2IM and VK2IA



These 2 contest operations were 38th and 39th CQ Zones I have operated CQWW DX contest from and there is now just one more Zone to go to work all 40. N&N Ed: That's an awesome achievement, Marko; good luck in nailing the remaining zone!

Another year is ending and so my thanks to all the contributors for their 2024 submissions; I look forward to many more in 2025. Until then, and the next News and Notes, may I wish you and your loved ones a Very Happy Festive Season, and the best for the New Year, and of course many more CW Os.

L to R: K1XM (#74), KQ1F, N5ZO (#1224), DUØA/NP4TT (#3463)

**Lee, WA9LEY #1304** The Metro DX Club is primarily a DX and Contest club but our members have varied interests and many are CWops members. One popular activity with some members is Parks On The Air-POTA. In late August, a group of operators decided on a unique POTA activation, a trip to an underwater shipwreck, the JD Marshall State Nature Preserve, US-10256. The preserve is located 600 yards off of Porter Beach in Lake Michigan and is only accessible by boat.

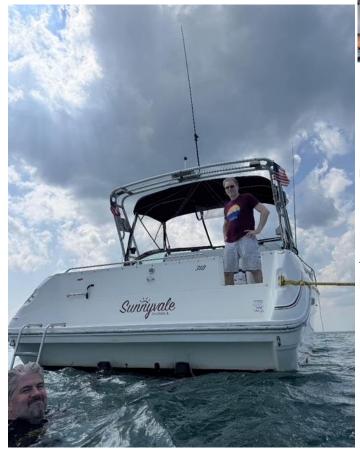


Fortunately, our club president Patrick, W9PDS has a 35 foot boat capable of making the trip from its dock in Chicago to the park off the Indiana Dunes in Indiana. So off they went on a 3 hour tour (not to Gilligan's Island). The crew included the captain Patrick, W9PDS and mates CJ, WT2P, Andrij, W9KM and TJ, K9KJ. Some are CWops members. The crew tied off for several hours to seasonal mooring buoys placed by the INDNR marking the boundaries of the park. It was a beautiful day and a successful activation making plenty contacts, over 100 on CW. The station included an IC7300 and a Buddipole with ground radials dangling in the water. Besides radio, a nice boat ride, a dip in Lake Michigan and some liquid refreshments made for a fun outing.

If interested, more info can be found by searching the shipwreck on Google. Info on our club can be found at metrodxclub.com.







Until the next News and Notes, QAC.

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



#### **How We Were**

#### lan Capon, GWØKRL

DJ5CW, Fabian Kurz, CWops #1566



"Attached is a photo of a young DJ5CW (back then still DJ1YFK and 18 years young), looking somewhat tired but very happy after a night shift of operating CW at 8Q7ZZ in August 2002. 8Q7ZZ was a Youngster DXpedition by Mark, MØDXR (team leader), Robert, MØTTT (now ZB2TT), Tony, EA2AIJ (now EA2PA) and myself. It was one of my formative experiences that resulted in an everlasting love for Morse code."

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 <u>lan Capon</u>.

**73, Ian GWØKRL** (CWops #2896)



# DX Marathon Program, Frequently Asked Questions

Mark Wohlschlegel, WC3W (CWops #3525)

It is a pleasure to be a part of the amazing CWops organization. It has been and always will be my favorite mode of operation in this wonderful hobby.

We are about through my second year of Program Administrator for the DX Marathon Program. We are so blessed to have CWops as a major supporter of this program with the sponsorship of 4 beautiful plaques for CW operators all over the world. For 2024 and 2025, CWops is sponsoring 1) the highest World Score in the program, 2) the highest North American score, 2) the highest European score, and most re-



cently, 4) the highest CWops member score. Thank you for your support CWops!

Please be reminded that participants can make a submission now, even before the Jan 1-Jan 5<sup>th</sup> window. Each successive submission will supersede the previous one. The submission process has been greatly simplified and instructions and a video has been produced on the website, <a href="https://www.dxmarathon.com">www.dxmarathon.com</a>.

My aim is to significantly increase participation in the program among CW operators and many of the participants who love CW, make a single mode (CW) entry. Just do it! Producing the submission is so simple: generate an adif file from your log and upload it. That's it!

We have grown the program by +46% and +50% in the last two years. What 2024 has to offer is still unknown. My greatest challenge is to "spread the word." So many hams in my Zoom meetings are not even aware of the program.

I have conducted approximately 85 Zoom presentation thus far to clubs. I attended Dayton (Hamvention) this year and conducted a well-attended forum. I also will be going to "Hamcation" in February while also giving presentations last year at both W9DXCC, and W4DXCC. I had done a number of podcast interviews including one with Tim Duffy just recently.

Each and every meeting I get a number of questions many of which are common among many audiences. In this brief article, I have summarized the most frequently asked questions. The answers to many of these questions, once understood, gives rise to the fact that the DX Marathon Program is becoming so popular among DXers.

I have listed the most frequently asked questions below:

Q: Why has the program grown so quickly?

A: The reason for the recent rapid growth is the increase in visibility and the inherent simplicity of the program. The simple rules are listed on the website. The program offers multiple ways in



which to participate, i.e. by mode, by band, and four distinct classes defined according to your operating conditions. Stated simply, the big stations are matched with the big stations, and the QRP stations are matched with their peers. Stations with dipoles and verticals running 100 W are grouped together. Also driving growth is the propagation associated with Cycle 25, and the advent of FT8 digital technology. These two factors make it possible for anyone to enjoy the wonderful world of DX.

Q: "I am a very experienced DXer with a superstation and have achieved ARRL Honor Roll status. Why should I participate in the DX Marathon Program?"

A: Many of the experienced DXers have worked nearly all the possible DXCC entities in the world. Veteran DXers have discovered that playing in the DX Marathon is enjoyable as the DX hunt resets every year. The new challenge and associated fun for experienced DXers to see how many DX entities can be worked along with CQ Zones is a refreshing challenge for these operators.

Q: "I love DXing, but I have a rather modest station. I have a dipole antenna, and a transceiver running 100 W. How can I possibly be competitive?"

A: The totality of ham radio operators in the world can be placed under the normal distribution bell-shaped curve in terms of their operating conditions. Over 90% of the ham population do not operate mega stations running full legal limits with extensive antenna arrays. Through a targeted effort, the DX Marathon program increased participation in the Formula Class by 4x. The Formula Class are those stations running 100 W with dipoles or verticals. Folks who live in apartment complexes with antennas in their attics, for example, are working amazing DX these days.

Q: "I really dislike FT8, and my true love is CW. What can the DX Marathon program offer me?"

A: Participants can select a single mode of operation and make their submissions in a single mode. This entry is called Single Mode. Participants submit scores at the end of the year either in SSB, CW, or Digital modes.

Q: "I am new to the ham radio hobby and just turned 15 years old. What might I expect if I decided to participate in the DX Marathon Program?"

A: The DX Marathon Program recently created plaques for the highest scoring youth 25 years and younger. Certificates are issued for the highest score in each of the six continents.

Q: "I am a contester at heart. I love competition, what can the DX Marathon Program offer me, and can I participate at the same time I pursue my love for contests during the year?"

A: Participation in the DX Marathon Program does not preclude participation in contests. In fact, any DX worked during a contest can be claimed for the DX Marathon Program. Many participants increase their DX point score because of operating contests. Incrementally, there is no additional effort needed. If the DX is in your log, it qualifies for the DX Marathon Program.

Q: "I really do not like competition. Life has enough pressures on me. Is the DX Marathon Program competitive? If so, I am not interested."



A: The fact is that far more folks participate in the DX Marathon Program simply to establish a metric of performance against themselves from year to year. With the four classes of stations that are defined in the rules, it gives participants a way to compare their own scores against previous years, and in addition, they can compare their scores against others around the world with similar operating conditions. On the flip side, there are many who are highly competitive and love the thrill of going for the gold each year.

In 2023 the program issued 30 plaques and 130 certificates of merit. In 2025, the DX Marathon staff wishes to increase recognition through the addition of 20 more plaques and 20 more certificates. To do this, plaque sponsors are needed. To sponsor, a club or individual contributes \$100 to cover plaque costs plus transportation. Please contact me at wc3w@dxmarathon if you would like to sponsor.

#### How Do I Sign Up?

Today, everyone who is operating DX is "in the program." There is no sign up required. Simply retain logs of your yearly DX contacts and DX entitie, which includes the 340 ARRL DXCC entities, the 6 Worked All Europe entities, and the 40 CQ Zones. Each new entity or Zone worked scores a single point. There are no complicated multipliers. No confirmations are required. Upload the ADIF file anytime through the submission tool described on the website. Final uploads are accepted between Jan1 - 5, 2025. That's it! The Marathon staff does the rest.

Club participation is encouraged as well and in 2024, the plaque awards have been expanded to include clubs with 75 members or more, 26 - 74 members, and 25 members or less.

If you would like to hear more about the program or desire a zoom meeting, please send inquires to <a href="wc3w@dxmarathon.com">wc3w@dxmarathon.com</a>.



# **CWops Training Courses Take Off in Germany**

Lutz Gutheil, DM6EE (CWops #2654)

Klaus Hanschmann, DL8TG (CWops #2524)

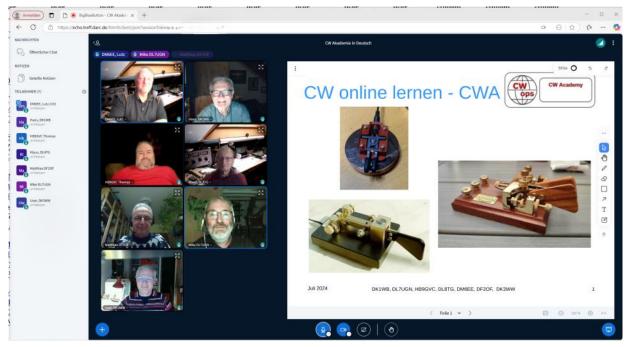
If you look at the average age of radio amateurs operating CW in Germany, you get scared. At mid-50s, you feel like one of the youngsters. If you are as old as Franz, DL2AXM, namely 103 years old, then you will hardly be able to find a QSO partner in a CQ WWDX CW contest in 2064. By the way, it is possible to work DL2AXM in many contests. It is always a special pleasure for us to be called by him!

Since CW is no longer mandatory for shortwave access, there are only a few radio amateurs who want to learn CW. And there is often a lack of opportunities to learn CW. In the past, the local clubs (local associations) organized CW training courses.



This is hardly ever done anymore due to a lack of interested parties. Online CW courses are occasionally offered here and there.

Klaus, DL8TG, and Lutz, DM6EE, have been members of CWops since 2020. They took a look at the CW Academy's offer and material. Klaus, DL8TG, took part in an intermediate course led by Bob, WR7Q, to gain an insight into how the CWA works and how things are run. From all this information it became clear - it is a great and unique offer for CW beginners.



Advisor meeting using the DARC online plattform treff.darc.de based on Big Blue Button

The CWA has been around for quite a long time. A lot of experience and know-how from the CW specialists has been gathered during this time. The only hurdle we recognized was the lack of courses in the native language German. The student would like to learn CW intensively and not also operate in a foreign language where he is not really fit. This gave rise to the idea of offering the CW Academy courses in German.

The next step was advertising. Advertising was carried out in the DARC DL circulars and the various clubs (BCC, RRDXA, AGCW) and online information events were held in July 2023. These were attended by 50 people interested in the Beginner to Intermediate courses. Klaus and Lutz decided to run the course together in order to always have a replacement if an advisor was unavailable. This meant that more students could be supervised at the same time. Unfortunately, there was no other advisor at the time.

With Bob, WR7Q, we agreed on how the registration process for German-speaking participants would be carried out. We translated the course scripts into German using Deepl. We didn't have the time to rework them. In the course of the course, Klaus revised chapter by chapter.

In September 2023, the first Beginner started with 14 participants in German.



We started the session together and then split into 2 teams for the practical exercises.

A large number of participants had already tried to learn CW on their own. It often didn't work out: there was no feedback, doing the exercises alone was too dry, and in the end there was often a lack of motivation.

At the end of the fall semester 2023, almost all course participants successfully completed the Beginner course and were highly motivated to register for the Fundamental in January 2024. The feedback from the participants was consistently positive: very good didactics and scripts as well as very good implementation. The exercise log in particular helps the participants as documentation and as "leverage" for practicing, hi. The group dynamics should not be underestimated; participants can orientate themselves and assess themselves here.

Although there were more students on the waiting list, we were only able to offer one Fundamental course due to a lack of advisors.

It is not possible for two of us to offer courses in parallel. Our time budget does not allow for several courses per week. So we started advertising intensively to recruit more advisors. We approached various clubs in emails and at events. Radio amateurs were asked directly in person. A 3-page article in the CQ-DL (club magazine of the DARC e. V.) attracted many CW enthusiasts.

Unfortunately, the result regarding advertising for Advisor until February 2024 was very sobering. But then there was some movement. Mike, DL7UGN, who like DM6EE was part of the 4W8X DXpedition to Timor Leste, agreed to provide support. Hans, DK1WB, organized in the same local club as DM6EE, also agreed to help. Both have successfully run many CW courses in the past, but never online. A participant from our Fundamental course, Thomas, HB9GVC, joined us with great motivation and the absolute will to participate. He is an accomplished IT specialist and has experience in training.

This made it possible to offer two beginner courses in parallel in May 2024, Klaus and Lutz trained the "newcomers" and after just a few sessions the "newcomers" were fit.

And as is the case once the ball starts rolling, it can no longer be stopped. One participant (thank you Dirk, DL5DGS) was motivated by an experienced radio amateur (Matthias, DF2OF) and vice versa Dirk then motivated Matthias to become an advisor. Mike, DL7UGN also approached many well-known Cwists and after a joint WAE CW contest he won Uwe, DK3WW, as a further advisor.

The current team of advisors consists of DF2OF, DK1WB, DK3WW, DL7UGN, DL8TG, DM6EE and HB9GVC. We are therefore well equipped for future semesters.

Last semester, we held two beginner and one fundamental course. These were again fully booked and were run by two advisors as before. The new advisors got up to speed very quickly and contributed to the success of the courses.

We will be offering at least 3 courses in January. We are also looking for more Advisors to shift the online appointments to more people and to cushion absences due to illness, travel or family



commitments. We are very excited to see how the German Advisor team will grow in the coming period.

We would especially like to thank Bob, WR7Q, for the great support with the registration processes and the organization of the semesters. Without the support and many tools (MCT, lcwo.net, morse code ninja, etc.) and documents we would not be able to offer such high quality CW courses - thanks to all who dedicate their time!

There are improvements and initiatives here and there. Keyer integration into the MCT is tricky and we are looking for a simpler solution. The Morserino is no longer available and currently trades for twice the price of a new one. Thomas, HB9GVC, is working on a solution.

There were other activities: At Hamradio 2024, Thomas, Lutz and Hans gave a presentation on online CW learning. Many course participants were present and reported to the audience from their practical experience.

Two years ago, the topic of CW was addressed in the DARC training contest and many CW QSOs are now being made in this contest. The DARC also organizes several short contests and a CW training contest once a quarter. Many CW newcomers and returnees take part. We also advertise the SSTs, but unfortunately participation from Europe is still very low. Perhaps there will also be an increase here in the future.

We are often asked how much it costs to take part in the CWA courses. Our answer is "your time and your sweat." Our reward is many new CW partners both in normal QSOs and in contest QSOs. Some participants even give something back: Dirk, DL5DGS, has revised the German Fundamental Script, ideas for self-printed keys, additional tools or other solutions have come up. Both the participants and the advisors benefit from this.

We are firmly convinced that our success story will continue and that we will attract many new CW OPs and advisors from German-speaking countries.

Klaus and Lutz would like to thank all the new Advisors. As you can see, it is not too difficult to establish CW online training in another language area. The most important thing is to enjoy CW and to pass this motivation on to all interested parties.



# My Journey Teaching CW for CW Academy

Buzz Tarlow, AC6AC, (CWops #1911)

Hi, I'm AC6AC, Buzz Tarlow, CWops #1911. In recent years, I've been volunteering as an advisor for CW Academy (CWA). Over time, I've taught more than 55 classes. I've been asked to share my experience for *Solid Copy*—a journey that has been as transformative for me as it has been for my students.



#### From a Rough Start to a Teaching Philosophy

When Rob, K6RB, first asked me to teach, I was surprised. I hadn't been his strongest student, to say the least. However, Rob reminded me that teaching wasn't about how good I was with CW but about how effectively I could help others improve.

My first semester didn't go well. I approached the class like a university lecturer, demanding seriousness and excellence. I got neither. One student even gave me a poor review, and I wasn't invited back to teach the next semester. That setback forced me to reflect deeply.

CW, I realized, is not an obligation or a graduate school course. At its core, it's about connection—building friendships and having fun. Armed with that insight, I reapplied, promising to take a different approach.

#### The Heart of My Approach

Over the years, I've developed a teaching formula rooted in empathy, positivity, and personalization. Anxiety, I've found, is the biggest barrier for most students learning CW. My goal is to create a supportive and stress-free environment:

- **Positivity First:** I offer only encouragement, telling my students they're amazing—and I mean it.
- **No Pressure:** I avoid calling on students who don't volunteer and try not to compare students to each other.
- **Quality Over Speed:** I rarely mention numbers, especially words per minute (WPM). Instead, I emphasize quality over quantity.
- **Inclusivity:** I ensure every student has opportunities to shine, not just the strongest ones.
- **Teamwork:** I assign extra homework that encourages students to connect on-air or via Zoom, building friendships.
- **Practical Skills:** I teach real-world CW etiquette and operating techniques.

**Journey Mindset:** I remind my students that learning CW isn't a sprint but a journey, much like an extended vacation. "Enjoy where you are," I tell them, "don't wish to be somewhere else."

I aim to meet each student where they are and value their unique contributions.

#### **Pushing Limits—Together**

While I push my students hard, I also provide robust support. Many students struggle to complete CW Academy courses in one attempt. In my classes, however, nearly all succeed. Why? Because I offer more than the standard curriculum:



- **Extended Classes:** My sessions last two hours instead of one, twice a week.
- **Extra Practice:** I provide four additional practice hours on Sundays, each at a different speed.

**Creative Homework:** I assign "Buzzy's Secret Optional Homework," tailored to each student's skill level. These tasks often involve key teaching points disguised as fun challenges.

This approach means my students essentially complete two courses' worth of material in one semester.

#### **Reducing Anxiety with Pre-Classes**

Anxiety remains the biggest hurdle for most students. To combat this, I start my classes one month early. By offering the first half of the course before the official start, I help students feel more prepared and confident.

#### **Building a Community**

I request large classes because a diverse group fosters connection. To manage these larger groups, I enlist my Advanced graduates who are CWops members as Co-Advisors. These Co-Advisors support students and add value without having to commit to every session. Many stay with me for years; others go on to teach their own classes. These Co-Advisors range from first time teachers to teachers with many years of experience. The mix offers students recent graduates they can identify with and teachers with many years of experience. A great mix. I have come to rely upon and trust my Co-Advisors with more and more responsibility. CW Academy has been supportive, liking the results.

This system creates a community where students feel supported, find study buddies, and form lasting friendships. When students request me as their advisor for the next level, it's clear my methods resonate.

#### What I've Gained

Volunteering as an advisor isn't just about teaching—it's about sharing in the same friendships and fun I encourage in my students. Personally, it helps me shift focus away from my own health challenges. I have discovered that the best way to help yourself is to help others.

#### The Future

I have researched and discovered that teaching CW is best done with multiple approaches. CW Academy teaches using instant character recognition. Hearing the characters and putting the character's name to the sound. Developing a word list, that is memorizing words in their entirety as sounds, is useful as speed increases. These methods are great for contesting, DXing, canned QSO's. Conversational head copying CW, ragchewing at speed, can benefit greatly by saying the sound of each character as it arrives. At the end of a word you have finished saying the word. This is versus the more traditional spelling it out, naming each character in your mind, and



reading it back to yourself to make a word out of it. Many words in English do not sound out well. But by using context with guessing it can work amazingly well and be a key to fast head copy. I am exploring this frontier with my classes with much success. This is a simple phonetics approach. I try to stay away from teaching rules of grammar and stick to what are the primary sounds each character makes. This takes practice and commitment but with correspondingly great results.

I also am adopting from other Advisor's teaching prefixes, suffixes and roots as word sounds. This also helps with higher speed head copy. CW Academy is on the cutting edge of adopting new proven methods of teaching high speed head copy. Bob Carter, WR7Q, and Roland Smith, K7OJL, continue to do a tremendous job running CW Academy. Both making it easy and pleasant to be an Advisor for the academy and staying on the cutting edge of the revolution in teaching CW.

#### **Wrapping Up**

Teaching CW Academy is a tremendous time commitment for me, my co-advisors, and my students. But the reward is clear: a shared journey of growth, accomplishment, and camaraderie. I tell my students that some CW is better than none. If they can't commit fully, that's okay. They can come back, take another step, and enjoy more friends and more fun.

That's my story—my journey. 73, my friends.



# **Apartment HF Antenna Option**

Dale Sewell, N5SGQ, (CWops #3634)

They say necessity is the mother of invention, which is certainly the case when one lives in a 7th-floor apartment and loves HF ham radio. After trying different solutions, it seemed to be a lost cause until a ham suggested stringing up a small gauge wire antenna in the bedroom using a very flexible wire that blends with the color of the wall and a 49:1 balun to create a half-wave end -fed antenna.

I had previously tried a vertical and a magnetic loop with limited success and was skeptical, but I decided to give it a shot. My friend, Jay Gulick K1FJG, turned me onto the balun, a TennTennas FT-240-43 EFHW antenna transformer. Jay also showed me some super flexible wire available on Amazon: <a href="mailto:BNTECHGO">BNTECHGO</a> 22-gauge silicone wire, which comes in many colors. With almost no trouble and only some picture-hanging hardware, I hung the wire antenna up in the bedroom, cutting it for 20 meters, roughly 35 feet to start. I strung the wire around three bedroom walls to fit the small room, forming three sides of a square pattern. I put the antenna analyzer on the antenna and trimmed it until I could get about a 1.1:1 SWR, the best I could do. I should also mention that





I added a 15-foot counterpoise onto the antenna at the connection provided on the balun.

The results are quite satisfying, considering the circumstances of the Faraday cage environment and my previous experiences with other antennas. There is no apparent interference from the antenna with the television, no complaints from neighbors, and surprisingly good results on HF. While it's no beam, I have worked both coasts and the four corners of the CONUS. I doubt I will be working very much DX, but I am on the air daily, which is my goal.

I must qualify that all I have used the antenna for is CW. Results may be different for other modes. For those who live in apartments, HOA-restricted situations, and the like, I highly suggest trying a similar design. It can be done for less than \$100, including 25 feet of coax. The balun and the wire will handle 100 watts. Enjoy!





# When Is 20-meters Open for 24 Hours?

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

In the October 2024 Solid Copy newsletter, the Editor Dick Strassburger, N9EEE, said he was still waiting for the day that 20-meters is open for 24 hours. He noted that this is often cited in propagation literature.

The characteristic of 20 meters being open during the nighttime hours generally occurs in the summer months. It follows that 20 meters will also be open during the daytime. But being open at night is also very critically dependent on where we are in a solar cycle. Using the global ionospheric maps in Proplab-Pro V3, we can look at the maximum useable frequencies in the Continental US during the nighttime (I used 0600 UTC) of each month and at different solar cycle magnitudes.

I used a smoothed sunspot number for a small cycle (like Cycle 24), a smoothed sunspot number of where we are right now (above Cycle 24 but not as high as Cycle 23), a smoothed sunspot number that is somewhat above an average cycle (Cycle 23 is an average cycle) and a smoothed sunspot number for a very big cycle (the maximum of Cycle 19).

I noted the FOT – the Frequency of Optimum Transmission, which is the frequency that is attained on 90% of the days of the month for a 3000 km path. The median MUF from our predictions is for 50% of the days of the month for a 3000 km path, and is somewhat higher (about 15% higher) than the FOT. The FOT is more of a sure thing because it has enough ionization to refract our signal back to Earth on more days of the month than the median. Figure 1 shows the resulting data.

smoothed sunspot number	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
70 (small cycle)												
150 (where we are now)		1.0		, 1				ļ.,				
210 (above an average cycle)												
280 (max of Cycle 19)												

Figure 1 – Months (in green) with the FOT (90% of the days of the month) above 14.0 MHz in the Continental US at 0600 UTC

Because of where we are right now in Cycle 25, we should see 20 meters being open all night in the upcoming months of April through July 2025. This will affect the 0300-0400 UTC and 0700-0800 UTC CWTs in a positive manner (and the IARU contest in July!).

Figure 2 on the next page is the global ionospheric map from Prop-Lab for June at 0600 UTC for where we are right now in Cycle 25.



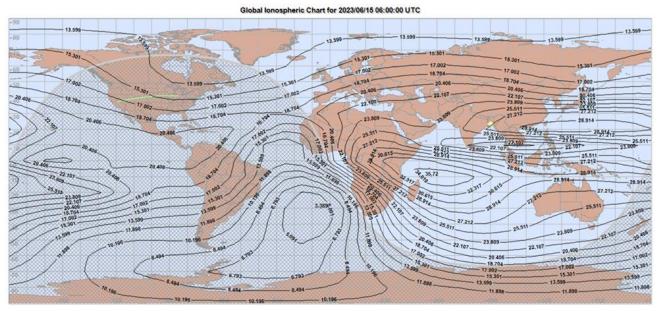


Figure 2 - Worldwide map of FOTs

Unfortunately, the FOT values in Figure 2 may be tough to read.

The green line in the Continental US in Figure 2 is a 3000 km path from K9LA to W6. The midpoint of the K9LA-to-W6 path is pretty much around midnight local time at 0600 UTC. Also note that the contour lines of equal FOTs are for all intents and purposes of an east-west nature in the northern hemisphere.

Scrutinizing the map suggests that 20 meters should not only be open in the Continental US during the night, but there is a high probability that 20 meters will be open to Europe and Japan, too.

A final comment – more sunspots would sure help here. If we do get up to an average cycle or even somewhat above an average cycle, we'd see several more months with nocturnal propagation on 20 meters.

# **DUES REMINDER**

It's time to renew your dues or Upgrade to a Life Membership. PayPal, Stripe, or Check

(You don't need to set up a PayPal or Stripe account, because they both also accept credit cards.)





# 'Twas the Night Before Christmas (CW Version)



'Twas the night before Christmas, and all through the shack, Not a signal was heard, not a beep, not a crack. The radios were silent, the Morse keys at rest, In hopes that a contact would come through the best.

The hams were all nestled, all snug in their beds, While visions of dits and dahs danced in their heads. And I, with my headset, and Morse key in hand, Drifting off to far away places like Clipperton Island.

When heard on 10 meters there arose such a sound, I sprang from my chair to check all around. Away to the window, I darted and bound, And tuned my rig to hear the sweet sound.

The moon atop the mast of the freshly laid snow, Gave a luster of sparkle to the guy wires below. When what to my wondering ears should appear, But a steady stream of Morse, so crisp and so clear.

With a tiny key tapping, so lively and quick, I knew in a moment, it must be St. Nick. More rapid than lightning, his dits they did fly, And he called every station with a "CQ" and a "HI!"

"Now CQ, now CQ, now CQ DX!
On 80, on 40, on 20 — what's next?
To the top of the bands! To the top of them all!
Now send away, send away, send away my call!"





As fast as the QSB and the static would race, The key made its sounds in a rapid embrace. And up to the top of my tower they sped, With the Morse code signals to a tribander they fed.

And then, in a twinkling, I heard on the air, The sweet sound of dits and dahs sent with great flair. As I scanned my receiver and turned with great haste, Down the chimney St. Nicholas came, with no time to waste.

I was shivering and shaking from my head to my toe, Wondering which DXCC entity this eyeball log entry should go. Should I request LoTW, eQSL or a card, Getting this confirmed was proving quite hard.

He nodded with joy, and gave me a wink, Then back to his flying station, he quickly did shrink. He gave a soft whistle, and away he did fly, Sending his finals - "73" - good-bye.

He turned off his rig, his hand left the key, And away he went QRT, leaving me free. But I heard him exclaim, as he vanished from sight, "Happy Christmas to all, and to all a clear light!"

(Inspired by ChatGPT, adapted and edited by N9EEE)





#### **New Members**

#### **Trung Nguyen**, W6TN

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

<b>CWops</b>	Call	<u>Name</u>	<b>CWops</b>	Call	<u>Name</u>	<b>CWops</b>	Call	<b>Name</b>
3643	K2EJT*	Evan	3646	G0FOZ*	Simon	3649	N3DD	Dom
3644	N3FEL	Hal	3647	ZS6WAR	Warren	3650	EA4KA*	Gene
3645	SV8SXF	Kostas	3648	AA3RT*	Roy	3651	W3RJ*	Rich

<sup>\*</sup> Lifetime member

As of December 8 2024:

Need Sponsors: AE7EF, KI4AMD, N3FEL, IT9KCD, KI5GTR

**Invitations Extended:** (none at this time)

For more details about nominees and up-to-date status, check the <u>"Members only"</u> page on the website. For information about joining CWops, check the <u>"Membership"</u> 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 <a href="mailto:membership@cwops.org">membership@cwops.org</a> 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.



# **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 November results (GB hosts are shown in **bold**):

AAØYY	WB4JWD (2) AC5P	K4IBZ WA4IAR	WA7SPY W8KJ	NI4E KY5VAR	KB5YZY W9BZ	K5LG	AF4PX
GW2CWO	RA3DS YL3JD DB2OIF	MØVPH EA3AZO HB9DAX	OH8EA EA3GMH DL4HRM	IK1YEV ER2GF UT2LA	SA2OLM F6KKH UR3QX	R2WB RA6AGR	MØMCL OK2BB
JJ1FXF	JA4IIJ(4)	JL2SQK(4)	JRØCWZ	JG7AJE(4)	JM4AOA	JR6SBI	JH2ACP
JK1QYL	JG1BGT(4) JI7KNV JK1WCW	JJØXEQ JH7HUZ JA4MRL	JP1KLR JA1XIL JQ3EGN	JJØSFV VK3OU	JA4IIJ JL2SQK	JG7AJE JQ3DIM(2)	JA7WTH JS1CII
JM4AOA	DS5RLI JH4LGA JK1QYL	HL1MIM JI3CJP JL3HUW	HL4CDA JI7KNV JL3TII	JA4IIJ JJØSFV JO1DGE	JG3SGO JJ1FXF JP3TWV	JG7AJE JJ5MKY JQ1UCG	JH3MBF JK1PIG
JO1DGE	DS5RLI JH5FVM JRØDIL	HL1MIM JJØSFV JR6SBI	JA6UVQ JK1QYL	JE7RIT JK3LXS	JF1JDG/QRP JL2SQK	JG1BGT(2) JM4AOA	JG7AJE JN1FAO
K6RB	K6AJ (2)	VE7BGJ					
K8UDH	K3CQR	NU01					
KV8Q	W9ARS						
W8OV	N9FZ W4RFT	KE7LOY	N5NLP	KJ5IGQ	K9QAG	WB6NMR	KF9JA
7N2XZB	JL2SQK JR4BFA	JA4IIJ(2) HL1IWD	JJØXEQ HL1MIM	JA4MRL	7K3LXA	DSTXS	HL5JZ



# **Giving Back Operating Schedule - 7 PM Local**

October - April: 40m & 80m | May - September: 40m & 20m Frequencies: 7.035 - 7.039, 3.535 - 3.539, 14.035 - 14.039 MHz | JA - 7.028 +/-

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UTC+11	UTC+9	UTC+7	UTC+3	UTC+2	UTC+1	UTC/BST	UTC-1	EDT UTC-5	CDT UTC-6	MDT UTC-7	PDT UTC-8	Hawaii UTC-10
MON												
VK1CWO	JØ1DGE							W2XS	AAØYY			
TUE												
	JR1WYW	E25JRP		SV2BBK		GW2CWO		WE5P	K8UDH	K7NJ	W7ZDX	
	7N2XZB										K6RB	
WED												
								N8DD				
THURS												
	JJ1VNV			SV2BBK				KV8Q	N5OT	K7NJ	W7ZDX	
FRI												
	JK1QYL			SV2BBK		GW2CWO MØWDD		N2GSL	AAØYY		K6RB	
SAT												
	JJ1FXF							W5DT				
	JM4AOA											
	JG1UQD											
SUN												
	JJ1FXF							W5DT				
	JM4AOA											



# **CW Academy**

# **Bob Carter**, WR7Q and Roland Smith, K7OJL

The 2024 September / October CW Academy semester is complete and preparations for the January / February semester are well underway. A total of 293 students graduated from classes in the September / October semester.

CW Academy congratulates the following students:

#### **Beginner Level Graduates (111 students)**

1.	Ashton, Dr.E.Brian (ASHTON)
2.	Atkins, Stephen (VE6SU)
3.	Bass, Mark (AK6IF)
4.	Bates, Ken (WOBD)
5.	Bean, Michael (KCOJLQ)
6.	Beaudin, Yvon (BEAUDIN)
7.	Below, Lena (DG2BL)
8.	Benesh, Andrew (KM4CAJ)
9.	Biernacki, Mark (KB5YZY)
10.	Boyle, Terrance (VA3TBQ)
11.	Brinkrolf, Markus (HB9TMM)
12.	Campbell, Peter (KC1RTO)
13.	Cane, David (AI6XX)
14.	Clifford, Paul (VK4DPC)
15.	Danner, John (KY4WW)
16.	Davis, Adam (KK7NOM)
17.	Dean, Dale (AF7WH)
18.	Denton, James (K5WNV)
19.	Drawdy, Glenn (KZ4GK)
20.	Drukker, Bridget (MW6BNE)
21.	Dunbar, Logan (N5RLD)
22.	Durst, Theodore (W6PFW)
23.	Eagin, John (KG5BCW)
24.	Egan, Mike (KF0QFQ)
25.	Erhardt, Terry (ERHARDT)
26.	Eskritt, Shane (VA3URA)
27.	Esman, Gary (KU8P)
28.	Ferber, Armin (DO1FAS)
20	El . (0711/E)

31. Fronek, Derek (N9TD)
32. Fuhrmann, Bodo (DB1BF)
33. Fuselier, Christopher (AI5LR)
34. Galvan, Cesar (XE2GRC)
35. Gentry, Dale (N5LIG)
36. Gomez, Chris (KO4KGA)
37. Greco, Cosmo (AK6DL)
38. Hall, Tom (AI4TH)
39. Hanley, Raegan (KF8BXW)
40. Harlan, Jeff (KQ4TUW)
41. Hartman, Arnold (KQ4MPA)
42. Hennessy, John (VK6TEA)
43. Holmes, Lyle (KK4REW)
44. Irao, Ben (KN6NDM)
45. Jacobs, Gregg (VA3XLM)
46. Jeff, Hiott (K9XL)
47. Jerwan, Klaus (DB4KJ)
48. Joshi, Akanksha (VE6AKS)
49. Klein, Robert (NZ5E)
50. Koenig, Kris (KKONIG)
51. Kraus, Greg (AC3KT)
52. Leo, Mike (KC1QKM)
53. Ling, John (GM1KBV)
54. Mueller, Andreas (DL5OBR)
55. Maher, Tom (KC1TMR)
56. Matney, Trevor (KJ7MLK)
57. Mauro, Ronaldo (RDMAUR)
58. McCarley, Mike (N7TNH)
59. McCrary, Corey (W5MMC)
$60. \ McElhannon, \ Matt \ (WM4TT)$

61. Meyen, Claus (DB5CM)
62. Meyers, Paul (W5NWT)
63. Milanovic, Nenad (MILANOVIC)
64. Montgomery, Tom (VA3TM)
65. Morrison, Keith (M1VHT)
66. Mullins, Robert (VA6RBT)
67. Nevins, Byron (NB6D)
68. Papciak, Doug (KI4VDU)
69. Pascal, Greg (W6DHQ)
70. Patel, Dilip (N3YRQ)
$71.\ Patent$ , Norbert R (DG1NPM)
72. Perry, Robert (KD7EQA)
73. Peters, Art (KOACP)
74. Portch-Rathgeber, Vicki (KI5VKP)
75. Ransome, Dorn (M0IAO)
76. Remigiusz, Olejnik (HF1RF)
77. Roach, Sam (KA4AKA)
78. Ruediger, Andreas (DK6EE)
79. Sandow, Matt (VK2TFE)
80. Sauerteig, Martin (DG6MS)
81. Schatte, Ronald (KJ5DVL)
82. Schauff, Ralf (DL1RS)
83. Schien, Frank (DL4DW)
84. Schumacher, Jens (DM1FF)
85. Secrist, Brad (K4OLS)
86. Shaw, David (G4NOW)
87. Shebelut, Conrad (SHEBELUT)
88. Shiyu, Yuan (VA3ODW)
89. Smit, Henk (PHOSMT)

(Continued on next page)



30. Frankenback, David (N6DCF)

29. Flux, Chris (G7IVF)

90. Smith, Mark (2E0IQP)

- 92. Stoltenburg, Jason (KD9ZHF)
- 93. Summers, Stacy (N4UAV)
- 94. Szymański, Marcin (SQ6CYS)
- 95. Tanner, Craig (KI5PMV)
- 96. Taylor, Greg (NE5GT)
- 97. Tennant, Jeff (VE3OWF)

- 98. Thomas, Daniel (HSOZQP)
- 99. Todd, Kevin (KE7OQD)
- 100. Uludag, Fahrettin (TA1HAM)
- 101. Valis, Timothy (KK5TIM)
- 102. Van Slooten, Hans (WQ00)
- 103. Vaznais, Vitaly (MOUPS)
- 104. Vital, Marc (AE1MV)

- 105. Wagner, Franky (DJ1FK)
- 106. Wentzel, Chip (NOCLW)
- 107. Whitehead, Lynda (KI5JJL)
- 108. Woodburn, Chris (VA3CJW)
- 109. Worzel, Skip (K8HWK)
- 110.Wright, Lawrence (KE7UKW)
- 111. Yosua, Dave (AD8LM)

#### **Fundamental Level Graduates (69 students)**

- 1. Auvinen, Alexandra (AC9XK)
- 2. Barton, Ronald (KJ7VRI)
- 3. Bilokon, Alex (M7RDV)
- 4. Boger, Martin (DG2MB)
- 5. Bousquet, Paul (N1PEB)
- 6. Bowser, Rob (KO4HUI)
- 7. Bundschuh, Markus (DM6BU)
- 8. Burkett, Loren (K3RFC)
- 9. Cardenas Diaz, Jesus (VA2JDZ)
- 10. Child, Greg (KE8ZGS)
- 11. Cielencki, Ray (AC1BC)
- 12. Cline, Lee (KC4IGO)
- 13. Corte, Luca (IU2RPQ)
- 14. Daniel, Bryan (KG2BAD)
- 15. Dean, John (KOJDD)
- 16. Deolaguibel, Juan Pablo (VA3JPI)
- 17. Ellis, Matthew (WA8SE)
- 18. Finnis, Richard (GW0HDY)
- 19. Francis, Devon (KC1SDD)
- 20. Francis, Russ (W7ZY)
- 21. Fredette, Tim (N9WOF)
- 22. Frericks, Ray (K6NOV)
- 23. Fulda, Martin (FULDA)

- 24. Graf, Tom (WV8TG)
- 25. Hayward, Wayne (KM4OPN)
- 26. Heuser, Gerd (DL1NM)
- 27. Hill, Gregg (WX4K)
- 28. Johnson, Reese (KN4NTU)
- 29. Jones, Neil (2W0IQY)
- 30. Kerr, Gary (G5TCP)
- 31. Killian, Charles (WB6YOK)
- 32. King, Roger (MOLKR)
- 33. Klohs, Michael (DM7HF)
- 34. Koenz, Flurin (LB8TJ)
- 35. Korgel, Alfred (DD1BM)
- 36. Krahn, Juergen (DL2JHK)
- 37. Kroker, Kalvin (VE6KRO)
- 38. Land, Larry (KI5OEZ)
- 39. LaPorte, Dan (KG5WYV)
- 40. Leonard, Peter (AA9UU)
- 41. Lohr, Andreas (DB7AL)
- 42. MacDonald, Reggie (K3RGM)
- 43. Mayberry, William (VE4WJM)
- 44. Mehdian, Heva (N6PVM)
- 45. Mennema, Jan (PA3MM)
- 46. Minakov, George (KM6QYV)

- 47. Mis, Piotr (SP9MUF)
- 48. Moore, Clayton (VE1MJF)
- 49. Moore, Kevin (W4KLM)
- 50. Palmer, Wayne (KO4MUO)
- 51. Pfeiffer, Martin (DL1MP)
- 52. Pikkaart, Michel (PE1PTS)
- 53. Rea, Rick (N7REA)
- 54. Reams, David (KJ4DE)
- 55. Redfern, Bruce (VE7KMG)
- 56. Rice, Ericson (KO4DIT)
- 57. Rumyantsev, Max (N6UM)
- 58. Santos, Bill (KN6UDK)
- 59. Sawyer, Rich (KQ4LEA)
- 60. Schubert, Dirk (DL5DGS)
- 61. Staley, Leon (N1QL)
- 62. Stegers, Bill (PD5BS)
- 63. Suroshi, Devesh (VU2JEF)
- 64. Swearingen, Bryan (N4FBO)
- 65. Talkington, David (KE7EOG)
- 66. Taylor, Axel (2E0DIG)
- 67. Tosh, Matt (AE0XR)
- 68. Walker, Anthony (M7TAW)
- 69. Youcef, Benchalel (F4IEH)

#### Intermediate Level Graduates (63 students)

- 1. Beardshaw, Bill (AA4NO)
- 2. Berzinskas, Bill (WW1H)
- Brooks, Brian (2E0IER)
   Bunn, Robert (VK2COS)
- 5. Cockerton, Marie-Louise (M7YRU)
- 6. Cockerton, Steve (MOYRU)
- Corgan, Jared (W7AQB)
   Cowan, Jeffrey (WJ7V)
- 9. Crowther, Simon (ZL1YSC)
- 10. Dunlap, Ronald (KOLRQ)
- 11. Eyschen, Pol (HB9IKL)
- 12. Forcada, Mikel (EA5IYL)



- 13. Garrett, Lewis (KF7HP)
- 14. Hallybone, Huw (G8IBL)
- 15. Harry Jr, Paul (KQ4BOU)
- 16. Hawthorne, Timothy (KK7TH)
- 17. Haywood, Peter (MOVPH)
- 18. Heijnens, Paul (DM7TW)
- 19. Hinds, James (W5ATJ)
- 20. Jensen, Adam (K7AMJ)
- 21. Kelley, Danny (KI4KXO)
- 22. Kelley, Mike (K6AJ)
- 23. Kraaijenhagen, Storm (PG5FRL)
- 24. Lonberg, Hank (KR7X)
- 25. Lynn, Keith (KC3NDU)
- 26. Maciej, Chmielewski (SP5IDC)
- 27. May, Robert 'Bob' (G7KFZ)
- 28. Maynard, Brian (K1NW)
- 29. McCrea, Brien (KE7WB)

- 30. Moore, Jeffrey (K5ZAR)
- 31. Naughton, Jim (K4SSN)
- 32. Niikura, Yuuichiro (JK1SFP)
- 33. Norris, Mike (KD5ET)
- 34. O'Briain, Diarmuid (EI4LF)
- 35. Palugniok, Ryszard (MORPA)
- 36. Panattoni, Dale (KJ7CJG)
- 37. Park, Andy (MOITM)
- 38. Rader, Craig (KE4CR)
- 39. Riechers, Daniel (KFONRV)
- 40. Rietveld, Hugo (PD9D)
- 41. Robertson, George (KG5KUQ)
- 42. Robertson, Laura (MM7BFL)
- 43. Rollins, Jonathan (KC8HCF)
- 44. Ruhl, Richard (W5GLD)
- 45. Sabo, Robert (AD9S)
- 46. Salisbury, Richard (KO4BVP)

- 47. Schutz, Nick (WOYEM)
- 48. Seiler, Ron (VA7VW)
- 49. Shelton, David (N4IN)
- 50. Siebens, Robert (KG7GDS)
- 51. Smith, Dana (K7QH)
- 52. Snodgrass, Gary (KK4KS)
- 53. Stevinson, Ben (KF0KDI)
- 54. Szulski, Irek (SP5MX)
- 55. Thompson, Don (NV7KU)
- 56. Turner, Butch (KA0WWT)
- 57. Vasile, Julian (DO4IV)
- 58. Vincent, Michel (HB9IIS)
- 59. Walters, Dafydd (M0WDV)
- 60. Wilson, Doug (N1KB)
- 61. Wooten, Scott (KW4NJA)
- 62. Wysocki, Adam (SP5GOF)
- 63. Young, Alan (AG6ZE)

#### **Advanced Level Graduates (50 Students)**

- 1. Alexandratos, Kostas (SV8SWF)
- 2. Ayers, Jeremy (NM5D)
- 3. Barnard, David (AE7EF)
- 4. Burton, Noah (W1NGO)
- 5. Cantin, Norm (WA1NLG)
- 6. Charles, Seth (AC5M)
- 7. Commins, Joe (W4YDL)
- 8. Dahl, James (WI6X)
- 9. DeBusk, Michael (KI4AMD)
- 10. Diers, Casey (KV3T)
- 11. Domenici, Eugene (KD4Y)
- 12. Dunaway, Kyle (N4EWD)
- 13. Engley, Michael (KQ4DFV)
- 14. Fernando, F. (CE3FJK)
- 15. Filewod, Garrick (VE3ONU)
- 16. Ganim, Rose (W1RBG)
- 17. Guarino, Ross (WB2WJF)

- 18. Gulick, Jay (K1FJG)
- 19. Habegger, Terry (W8UY)
- 20. Howling, Gavin (G5HOW)
- 21. Keithahn, Steve (WOZB)
- 22. Kern, Peter (DK3RN)
- 23. Kosmenko, Gordon (VE6SV)
- 24. Krutsky, Josef (OK1FAN)
- 25. Kuehni , Martin (OE3KME)
- 26. Lappen, David (KO4OWS)
- 27. Ledford, Dennis (KE4I)
- 28. Lewis, Tom (N4TTU)
- 29. Manolis, Konstantinos (SV8SXF)
- 30. Metty, Tom (AJ8X)
- 31. Mickiewicz, Russ (N7QR)
- 32. Mitchell, Stu (W7IY)
- 33. Morgan, Benjamin (KF7UFF)
- 34. Perrin, Bill (JP3REM)

- 35. Pleace, Eric (KO4ZSD)
- 36. Policarpo, Paul (N3PP)
- 37. Rubin, Howard (N3FEL)
- 38. Said, Christopher (AE6Z)
- 39. Sansom, Michael (GOPOT)
- 40. Saravate, Prasad (KB3MDD)
- 41. Seghatoleslami, Saied (AD2CC)
- 42. Sewell, Dale (N5SGQ)
- 43. Shephard, Gordon (KI7MWA)
- 44. Simon, Smith (G0FOZ)
- 45. Stafford, Terry (W6TLS)
- 46. Sustic, Matej (HB9HKN)
- 47. Teklinski, Peter (WW2I)
- 48. Toronto, John (K2MEU)
- 49. van Dijk, Dennis (G5NLD)
- 50. Zhang, Jian (JK1MVC)

CW

CW Academy also thanks the following advisors for their service to their students and to CW Academy. The advisors in **BOLD** were first-time advisors:

1. Avery, Scott (AD4SA)	$18.\ Hanschmann$ , Klaus (DL8TG)	35. Plantz, Bruce (K9OZ)
2. Bergstrom, Peter (K6PB)	19. Harton, Marcus (N3VO)	36. Poplaski, Jason (KB3SAR)
3. Blain, Bruce (K1BG)	20. Hedgepeth, Kevin (NB70)	37. Rauhut, Matthias (DF2OF)
4. Bradley, William (MIOWWB)	21. Herter, Christian (KF7WX)	38. Robbs, Steven (WJOC)
5. Brownstein, Rob (K6RB)	22. Hiller, Uwe (DK3WW)	39. Robinson, Gregg (KA7MDM)
6. Carter, Bob (WR7Q)	23. Hoffman, Richard (K1DJ)	40. Rubenstein, Bill (VE3MRX)
7. Caton, Chris (GOJPS)	24. Horn, Randy (N1SP)	41. Schechter, Philip (NEOS)
8. Cunnington, Nick (MMONJC)	25. Koch, David (W8OV)	42. Severance, Carlton (W4IF)
9. Foster, John (N6FVY)	$26.\ LaRosee$ , Christopher (AC1RV)	43. Smith, Roland (K7OJL)
10. Fox Sr., Jasper (NK2Y)	27. Li, Nianfeng (WU6P)	44. Spencer, Joe (KK5NA)
11. French, Lisa (AC3JX)	28. Lim, Mary (VE3INE)	45. Tarlow, Buz (AC6AC)
12. Fristad, A. Chris (KT9N)	29. McArthur, David (M0WDD)	46. Tyler, Mark (K5GQ)
13. Godden, Roy (KK6M)	30. McArthur, Gregg E (W7GEM)	47. Ward, Dallas (K1DW)
14. Gutheil, Lutz (DM6EE)	31. Merkel, John (AJ1DM)	48. Welch, John (KE6K)
15. Guthrie, David (KD7ZVQ)	32. Mitchell, Ken (KD2KW)	49. Yergin, Mark (W8EWH)
16. Hahn, Michael (DL7UGN)	33. Nicosia, Enzo (MOKTZ)	50. Zatopek, David (KT5V)
17. Hain, Thomas (KV8O)	34. Pattinson, Tony (VE2KM)	51. Ziegler, Thomas (HB9GVC)

With about six weeks before the next semester starts just over 425 students have verified their availability to take a class starting in January. 153 of those students are from outside North America and new students are signing up each day. Sixty-seven classes are in the catalog.

If you have any questions, suggestions, or comments please contact either Bob Carter WR7Q (kcgator@gmail.com) or Roland Smith K7OJL (rolandksmith@gmail.com)

#### 73, Roland K7OJL CWA Admin

17. Hain, Thomas (KV8Q)





# **CWops Tests (CWTs)**

#### Rich Ferch, VE3KI

As of December 1, we had completed 192 of this year's 204 CWT sessions. With one month left to go, there are still three members who have reported scores in all 192 CWTs so far: G3LDI, K4PQC and KO4VW. Thanks to missing the local time change in November, K1DJ is now one CWT behind the leaders.

There are 109 CWops members who have already reached the gold medal participation level, another 137 who have achieved the silver medal level, and 139 who have qualified for bronze. Some members in the silver and bronze categories will no doubt move into the next higher category during the final weeks of the year, and there is still time for more to reach the bronze level.

The certificates and medallions will be managed in much the same way this year as in the previous two years. Certificates will be free for downloading at <a href="https://cwops.telegraphy.de/certificate/">https://cwops.telegraphy.de/certificate/</a> once the final lists have been compiled early in the new year. Medallions will be on an opt-in basis only, and there will be a nominal fee to help defray shipping costs.

One important point to note if you plan to order a medallion: The addresses used for mailing are the addresses on file with the CWOps Membership Secretary, Trung W6TN (<a href="mailto:membership@cwops.org">membership@cwops.org</a>). If you have changed addresses since you first joined CWOps, please make sure that the Membership Secretary has your up-to-date address. If you change addresses during the year, note that the medallions are mailed out later on in the year (in May or June), so you may wish to ensure that the address on file at CWOps is the one that will be correct then.

Enjoy the CWTs and keep those reported scores coming!

**73, Rich VE3KI** (CWops #783) CWT Manager

# 2024 CWops Test (CWT) Schedule

Wednesdays at 1300 – 1400z and 1900 – 2000z. Thursdays at 0300 – 0400z and 0700 – 0800z.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Week 1	3-4	1	6-7	3-4	1-2	5-6	3-4	1	4-5	2-3	6-7	4-5
Week 2	10-11	7-8	13-14	10-11	8-9	12-13	10-11	7-8	11-12	9-10	13-14	11-12
Week 3	17-18	14-15	20-21	17-18	15-16	19-20	17-18	14-15	18-19	16-17	20-21	18-19
Week 4	24-25	21-22	27-28	24-25	22-23	26-27	24-25	21-22	25-26	23-24	27-28	25-26
Week 5	31	28-29			29-30		31	28-29		30-31		



# **CWops Member Awards**

#### **Bill Gilliland, WØTG**



#### **Monthly Update**

During November, eight additional members submitted logs and the number of active participants in the awards program is currently 270.

The ACA QSO totals and rankings for the end of November 2024 have KR2Q in first place and leading second place AA3B by 139 QSOs. The top ten ACA totals this month are: (1) KR2Q, (2) AA3B, (3) KY4GS, (4) N5RZ, (5) DL6KVA, (6) KO4VW, (7)K3WW, (8) N5ZO, (9) KC7V and NA8V tied, and (10) K7QA. The separation between first place and tenth place is 520 QSOs.

The **ACMA** QSO totals and rankings for the end of November 2024 have **AA3B** in first place and leading second place **KR2Q** by 1144 QSOs. The top ten ACMA totals this month are: **(1) AA3B**, **(2) KR2Q**, **(3) N5RZ**, **(4) DL6KVA**, **(5) KY4GS**, **(6) N5ZO**, **(7) NA8V**, **(8) K7QA**, **(9) OM2VL** and **(10) KC7V**. The separation between first place and tenth place is 2644 QSOs.

The **CMA** QSO totals and rankings for the end of November 2024 have **AA3B** in first place and leading second place **K3WW** by 3552 QSOs. The top ten CMA totals this month are: **(1) AA3B**, **(2) K3WW**, **(3) N5RZ**, **(4) N5ZO**, **(5) KR2Q**, **(6) DL6KVA**, **(7) NA8V**, **(8) W1RM**, **(9) F6HKA** and **(10) VE3KI**. The separation between first place and tenth place is 6450 QSOs.

During November, the number of participants who have contacted CWops members in 100 or more DXCC entities grew to **91** with the addition of **KC7V**, **M0RYB** and **VK2GR**.

The number of participants who have accomplished CWops WAS grew to **255** this month with the addition of **EA2KV**, **G4IVV**, **KQ4E**, **LA8OM**, **W1EQ** and **W9TD**.

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 December 5, 2024, we have 270 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.

(Continued on next 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.

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 <a href="https://cwops.org/cwops-tests/">https://cwops.org/cwops-tests/</a>.

#### **CWops Member Awards Program Overview**

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.

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 <u>online tools</u>. For more details on the tools provided, see the <u>August 2021</u> *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 <u>CWops Awards Program</u>. Send your feedback, questions or comments to <u>cwopscam@w0tg.com</u>.



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

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## **ACMA**

#### **CMA**

Rank	Call	ACA
1	KR2Q	1916
2	AA3B	1777
3	KY4GS	1648
4	N5RZ	1563
5	DL6KVA	1501
6	KO4VW	1439
7	K3WW	1433
8	N5ZO	1407
9	KC7V	1403
9	NA8V	1403
10	K7QA	1396
11	KG9X	1360
12	AA2IL	1348
13	F6HKA	1302
14	OM2VL	1295
15	N5TJ	1269
16	K3QP	1264
17	N7US	1262
18	N5AW	1233
19	K1VUT	1195
20	W4CMG	1189
21	WT9U	1182
22	VE3TM	1172
23	NJ3K	1167
24	WT3K	1161
25	K9WX	1155
26	VK2GR	1145
27	EA6EJ	1117
28	NE5A	1114
29	WN7S	1113
30	KOWA	1111
31	EA1X	1108
32	K1EBY	1098
33	F5SGI	1082
34	K1DJ	1071
35	W8FN	1064
36	9A1AA	1053
37	K6NR	1052
38	KM4FO	1050
39	K3JT	1048
40	N5KD	1036
41	EA6BF	1035
42	VE3KI	1027

Rank	Call	ACMA
1	AA3B	6458
2	KR2Q	5314
3	N5RZ	4983
4	DL6KVA	4520
5	KY4GS	4480
6	N5ZO	4171
7	NA8V	4104
8	K7QA	4060
9	OM2VL	3878
10	KC7V	3814
11	K3WW	3681
12	KO4VW	3540
13	KG9X	3387
14	AA2IL	3282
15	N5TJ	3097
16	N5AW	3052
17	N7US	3007
18	F6HKA	2932
19	K1VUT	2915
20	EA1X	2775
21	WT9U	2708
22	WN7S	2660
23	K9WX	2628
24	K6NR	2575
25	NJ3K	2565
26	VE3TM	2537
27	EA6EJ	2524
28	WT3K	2509
29	W4CMG	2508
30	K3QP	2477
31	WS7L	2463
32	W8FN	2414
33	K0WA	2344
34	EA6BF	2310
35	W0U0	2296
36	N5XE	2290
37	KM4FO	2271
38	VE3KI	2261
39	K3WJV	2240
40	KW7Q	2236
41	VK2GR	2219
42	9A1AA	2207
43	K1EBY	2194

Rank	Call	СМА
1	AA3B	14551
2	K3WW	10999
3	N5RZ	10257
4	N5ZO	10109
5	KR2Q	9890
6	DL6KVA	9426
7	NA8V	9342
8	W1RM	9338
9	F6HKA	8708
10	VE3KI	8101
11	K3WJV	8086
12	OM2VL	7612
13	K7QA	7611
14	KG9X	7548
15	N5AW	7415
16	N7US	7388
17	KC7V	7366
18	W9ILY	7008
19	WT9U	6814
20	W0VX	6706
21	K1VUT	6641
22	K3JT	6584
23	K9WX	6389
24	N4DW	6255
25	K6NR	5982
26	SM6CUK	5925
27	K1DJ	5906
28	K3PP	5902
29	N2UU	5898
30	N1DC	5847
31	N5TJ	5825
32	K4IU	5811
33	KY4GS	5806
34	WT3K	5783
35	W4WF	5741
36	9A1AA	5611
37	WN7S	5584
38	G4BUE	5367
39 40	K1EBY AA5JF	5297
40 41	W8FN	5289 5200
41	AC6ZM	5166
44	ACULIVI	2100

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W0U0



KW7Q         1017         45         K1AJ         2156           WS7L         1015         46         NA4J         2128           K1AJ         1014         47         F5SGI         2124           WOUO         1011         48         K1DJ         2107           AC6ZM         993         49         OZ3SM         2064           K3WJV         988         50         K4IU         2050           AA5JF         987         51         NE5A         2040           KK0U         974         52         SP1D         2038           KKOU         974         52         SP1D         2039           W1RM         971         53         M0RYB         2034           K1SM         961         54         SM6CUK         2019           N1DC         954         55         AC6ZM         2016           N9UNX         937         56         KK0U         2012           K4IU         926         58         W4WF         1947           N5XE         923         59         N5KD         1934           OZ3SM         916         61         N2UU         1884		ACA	
44         KW7Q         1017         45         K1AJ         2156           45         WS7L         1015         46         NA4J         2128           46         K1AJ         1014         47         F5SGI         2124           47         WOUO         1011         48         K1DJ         2107           48         AC6ZM         993         49         OZ3SM         2064           49         K3WJV         988         50         K4IU         2050           50         AA5JF         987         51         NESA         2040           51         KK0U         974         52         SP1D         2039           52         W1RM         971         53         M0RYB         2034           53         K1SM         961         54         SM6CUK         2019           54         N1DC         954         55         AC6ZM         2016           55         N9UNX         937         56         KK0U         2012           55         N9UNX         931         57         W1RM         1962           58         N5XE         923         59         N5KD         1936<	43	ΝΔ4Ι	1021
45 WS7L 1015 46 NA4J 2128 46 K1AJ 1014 47 F5SGI 2124 47 W0UO 1011 48 K1DJ 2107 48 AC6ZM 993 49 OZ3SM 2064 49 K3WJV 988 50 K4IU 2050 50 AA5JF 987 51 NE5A 2040 51 KK0U 974 52 SP1D 2039 52 W1RM 971 53 MORYB 2034 53 K1SM 961 54 SM6CUK 2019 54 N1DC 954 55 AC6ZM 2016 55 N9UNX 937 56 KK0U 2012 56 KW1X 931 57 W1RM 1962 57 K4IU 926 58 W4WF 1947 58 N5XE 923 59 N5KD 1936 60 OZ3SM 916 61 N2UU 1884 61 W9ILY 912 62 W0VX 1883 63 W4WF 904 64 N1DC 1835 64 AF5J 903 65 N9UNX 1804 65 KT5V 894 66 W9ILY 1802 66 MORYB 892 67 OK1RR 1758 66 MORYB 892 67 OK1RR 1758 67 KV8Q 883 68 WU6P 1748 68 N2UU 877 69 K1SM 1742 69 DM6EE 876 70 KW1X 1735 70 K4TZ 873 71 DM6EE 1732 71 SP1D 865 72 KY0Q 1707 72 WU6P 841 73 KV8Q 1679 74 K3ZA 835 75 VE3MV 1665 75 KY0Q 831 76 K4GM 1645 76 W0VX 830 77 VE9KK 1630 77 VA4ADM 829 78 W9CF 1619 77 VE9KK 829 79 SMOHEV 1618 78 K4GM 824 80 K4TZ 1604 79 WA4JUK 810 81 W1C7 1596 84 W2CDO 782 86 WS1L 1524 85 KR3E 781 87 W3WHK 1505			
46         K1AJ         1014         47         F5SGI         2124           47         W0UO         1011         48         K1DJ         2107           48         AC6ZM         993         49         OZ3SM         2064           49         K3WJV         988         50         K4IU         2050           50         AASJF         987         51         NE5A         2040           51         KKOU         974         52         SP1D         2039           52         W1RM         971         53         M0RYB         2034           53         K1SM         961         54         SM6CUK         2019           54         N1DC         954         55         AC6ZM         2016           55         N9UNX         937         56         KK0U         2012           56         KW1X         931         57         W1RM         1962           57         K4IU         926         58         W4WF         1947           58         N5XE         923         59         N5KD         1936           60         OZ3SM         916         61         N2UU         184 <td></td> <td></td> <td></td>			
47         WOUO         1011         48         K1DJ         2107           48         AC6ZM         993         49         OZ3SM         2064           49         K3WJV         988         50         K4IU         2050           50         AA5JF         987         51         NE5A         2040           51         KKOU         974         52         SP1D         2039           52         W1RM         971         53         MORYB         2034           52         W1RM         971         53         MORYB         2034           52         W1RM         961         54         SM6CUK         2012           54         N1DC         954         55         AC6ZM         2016           55         N9UNX         937         56         KK0U         2012           56         KW1X         931         57         W1RM         1962           57         K4IU         926         58         W4WF         1947           58         N5XE         923         59         N5KD         1936           59         SM6CUK         918         60         AF5J         1934 <td></td> <td></td> <td></td>			
48       AC6ZM       993       49       OZ3SM       2064         49       K3WJV       988       50       K4IU       2050         50       AA5JF       987       51       NE5A       2040         51       KKOU       974       52       SP1D       2039         52       W1RM       971       53       MORYB       2034         53       K1SM       961       54       SM6CUK       2019         54       N1DC       954       55       AC6ZM       2016         55       N9UNX       937       56       KKOU       2012         56       KW1X       931       57       W1RM       1962         57       K4IU       926       58       W4WF       1947         58       N5XE       923       59       N5KD       1936         59       SM6CUK       918       60       AF5J       1934         60       OZ3SM       916       61       N2UU       1884         61       W9ILY       912       62       W0VX       1883         62       N9FZ       908       63       AA5JF       1873			
49       K3WJV       988       50       K4IU       2050         50       AA5JF       987       51       NE5A       2040         51       KKOU       974       52       SP1D       2039         52       W1RM       971       53       MORYB       2034         53       K1SM       961       54       SM6CUK       2019         54       N1DC       954       55       AC6ZM       2016         55       N9UNX       937       56       KK0U       2012         56       KW1X       931       57       W1RM       1962         57       K4IU       926       58       W4WF       1947         58       N5XE       923       59       N5KD       1936         59       SM6CUK       918       60       AF5J       1934         60       OZ3SM       916       61       N2UU       1884         61       W9ILY       912       62       W0VX       1883         62       N9FZ       908       63       AA5JF       1873         63       W4WF       904       64       N1DC       1835			
50       AA5JF       987       51       NESA       2040         51       KKOU       974       52       SP1D       2039         52       W1RM       971       53       MORYB       2034         53       K1SM       961       54       SM6CUK       2019         54       N1DC       954       55       AC6ZM       2016         55       N9UNX       937       56       KKOU       2012         56       KW1X       931       57       W1RM       1962         57       K4IU       926       58       W4WF       1947         58       N5XE       923       59       N5KD       1936         59       SM6CUK       918       60       AF5J       1934         60       OZ3SM       916       61       N2UU       1884         61       W9ILY       912       62       W0VX       1883         62       N9FZ       908       63       AA5JF       1873         63       W4WF       904       64       N1DC       1835         64       AF5J       903       65       N9UNX       1804			
51       KKOU       974       52       SP1D       2039         52       W1RM       971       53       MORYB       2034         53       K1SM       961       54       SM6CUK       2019         54       N1DC       954       55       AC6ZM       2016         55       N9UNX       937       56       KKOU       2012         56       KW1X       931       57       W1RM       1962         57       K4IU       926       58       W4WF       1947         58       N5XE       923       59       N5KD       1936         59       SM6CUK       918       60       AF5J       1934         60       OZ3SM       916       61       N2UU       1884         61       W9ILY       912       62       W0VX       1883         62       N9FZ       908       63       AA5JF       1873         63       W4WF       904       64       N1DC       1835         64       AF5J       903       65       N9UNX       1804         65       KT5V       894       66       W9ILY       1802			
52       W1RM       971       53       M0RYB       2034         53       K1SM       961       54       SM6CUK       2019         54       N1DC       954       55       AC6ZM       2016         55       N9UNX       937       56       KK0U       2012         56       KW1X       931       57       W1RM       1962         57       K4IU       926       58       W4WF       1947         58       N5XE       923       59       N5KD       1936         59       SM6CUK       918       60       AF5J       1934         60       OZ3SM       916       61       N2UU       1884         61       W9ILY       912       62       W0VX       1883         62       N9FZ       908       63       AA5JF       1873         63       W4WF       904       64       N1DC       1835         64       AF5J       903       65       N9UNX       1804         65       KT5V       894       66       W9ILY       1802         66       M0RYB       892       67       OK1RR       1758			
53         K1SM         961         54         SM6CUK         2019           54         N1DC         954         55         AC6ZM         2016           55         N9UNX         937         56         KK0U         2012           56         KW1X         931         57         W1RM         1962           57         K4IU         926         58         W4WF         1947           58         N5XE         923         59         N5KD         1936           59         SM6CUK         918         60         AF5J         1934           60         OZ3SM         916         61         N2UU         1884           61         W9ILY         912         62         W0VX         1883           62         N9FZ         908         63         AA5JF         1873           63         W4WF         904         64         N1DC         1835           64         AF5J         903         65         N9UNX         1804           65         KT5V         894         66         W9ILY         1802           67         KV8Q         883         68         WU6P         1748			
54       N1DC       954       55       AC6ZM       2016         55       N9UNX       937       56       KKOU       2012         56       KW1X       931       57       W1RM       1962         57       K4IU       926       58       W4WF       1947         58       N5XE       923       59       N5KD       1936         59       SM6CUK       918       60       AF5J       1934         60       OZ3SM       916       61       N2UU       1884         61       W9ILY       912       62       W0VX       1883         62       N9FZ       908       63       AA5JF       1873         63       W4WF       904       64       N1DC       1835         64       AF5J       903       65       N9UNX       1804         65       KT5V       894       66       W9ILY       1802         66       M0RYB       892       67       OK1RR       1758         67       KV8Q       883       68       WU6P       1748         68       N2UU       877       69       K1SM       1742			
55         N9UNX         937         56         KKOU         2012           56         KW1X         931         57         W1RM         1962           57         K4IU         926         58         W4WF         1947           58         N5XE         923         59         N5KD         1936           59         SM6CUK         918         60         AF5J         1934           60         OZ3SM         916         61         N2UU         1884           61         W9ILY         912         62         W0VX         1883           62         N9FZ         908         63         AA5JF         1873           63         W4WF         904         64         N1DC         1835           64         AF5J         903         65         N9UNX         1804           65         KT5V         894         66         W9ILY         1802           66         MORYB         892         67         OK1RR         1758           67         KV8Q         883         68         WU6P         1748           68         N2UU         877         69         K1SM         1742			
56       KW1X       931       57       W1RM       1962         57       K4IU       926       58       W4WF       1947         58       N5XE       923       59       N5KD       1936         59       SM6CUK       918       60       AF5J       1934         60       OZ3SM       916       61       N2UU       1884         61       W9ILY       912       62       W0VX       1883         62       N9FZ       908       63       AA5JF       1873         63       W4WF       904       64       N1DC       1835         64       AF5J       903       65       N9UNX       1804         65       KT5V       894       66       W9ILY       1802         66       M0RYB       892       67       OK1RR       1758         67       KV8Q       883       68       WU6P       1748         68       N2UU       877       69       K1SM       1742         69       DM6EE       876       70       KW1X       1735         70       K4TZ       873       71       DM6EE       1732			
57       K4IU       926       58       W4WF       1947         58       N5XE       923       59       N5KD       1936         59       SM6CUK       918       60       AF5J       1934         60       OZ3SM       916       61       N2UU       1884         61       W9ILY       912       62       W0VX       1883         62       N9FZ       908       63       AA5JF       1873         63       W4WF       904       64       N1DC       1835         64       AF5J       903       65       N9UNX       1804         65       KT5V       894       66       W9ILY       1802         66       MORYB       892       67       OK1RR       1758         67       KV8Q       883       68       WU6P       1748         68       N2UU       877       69       K1SM       1742         69       DM6EE       876       70       KW1X       1735         70       K4TZ       873       71       DM6EE       1732         71       SP1D       865       72       KY0Q       1707			
58         NSXE         923         59         NSKD         1936           59         SM6CUK         918         60         AF5J         1934           60         OZ3SM         916         61         N2UU         1884           61         W9ILY         912         62         W0VX         1883           62         N9FZ         908         63         AA5JF         1873           63         W4WF         904         64         N1DC         1835           64         AF5J         903         65         N9UNX         1804           65         KTSV         894         66         W9ILY         1802           66         MORYB         892         67         OK1RR         1758           67         KV8Q         883         68         WU6P         1748           68         N2UU         877         69         K1SM         1742           69         DM6EE         876         70         KW1X         1735           70         K4TZ         873         71         DM6EE         1732           71         SP1D         865         72         KY0Q         1707			
59       SM6CUK       918       60       AF5J       1934         60       OZ3SM       916       61       N2UU       1884         61       W9ILY       912       62       W0VX       1883         62       N9FZ       908       63       AA5JF       1873         63       W4WF       904       64       N1DC       1835         64       AF5J       903       65       N9UNX       1804         65       KTSV       894       66       W9ILY       1802         66       MORYB       892       67       OK1RR       1758         67       KV8Q       883       68       WU6P       1748         68       N2UU       877       69       K1SM       1742         69       DM6EE       876       70       KW1X       1735         70       K4TZ       873       71       DM6EE       1732         71       SP1D       865       72       KY0Q       1707         72       WU6P       841       73       KV8Q       1679         73       N2EIM       840       74       G4PVM       1673			
60       OZ3SM       916       61       N2UU       1884         61       W9ILY       912       62       W0VX       1883         62       N9FZ       908       63       AA5JF       1873         63       W4WF       904       64       N1DC       1835         64       AF5J       903       65       N9UNX       1804         65       KT5V       894       66       W9ILY       1802         66       MORYB       892       67       OK1RR       1758         67       KV8Q       883       68       WU6P       1748         68       N2UU       877       69       K1SM       1742         69       DM6EE       876       70       KW1X       1735         70       K4TZ       873       71       DM6EE       1732         71       SP1D       865       72       KY0Q       1707         72       WU6P       841       73       KV8Q       1679         73       N2EIM       840       74       G4PVM       1673         74       K3ZA       835       75       VE3MV       1665		N5XE	923
61       W9ILY       912       62       WOVX       1883         62       N9FZ       908       63       AA5JF       1873         63       W4WF       904       64       N1DC       1835         64       AF5J       903       65       N9UNX       1804         65       KT5V       894       66       W9ILY       1802         66       MORYB       892       67       OK1RR       1758         67       KV8Q       883       68       WU6P       1748         68       N2UU       877       69       K1SM       1742         69       DM6EE       876       70       KW1X       1735         70       K4TZ       873       71       DM6EE       1732         71       SP1D       865       72       KY0Q       1707         72       WU6P       841       73       KV8Q       1679         73       N2EIM       840       74       G4PVM       1673         74       K3AA       835       75       VE3MV       1665         75       KY0Q       831       76       K4GM       1645	59	SM6CUK	918
62       N9FZ       908       63       AA5JF       1873         63       W4WF       904       64       N1DC       1835         64       AF5J       903       65       N9UNX       1804         65       KT5V       894       66       W9ILY       1802         66       MORYB       892       67       OK1RR       1758         67       KV8Q       883       68       WU6P       1748         68       N2UU       877       69       K1SM       1742         69       DM6EE       876       70       KW1X       1735         70       K4TZ       873       71       DM6EE       1732         71       SP1D       865       72       KY0Q       1707         72       WU6P       841       73       KV8Q       1679         73       N2EIM       840       74       G4PVM       1673         74       K3ZA       835       75       VE3MV       1665         75       KY0Q       831       76       K4GM       1645         76       W0XX       830       77       VE9KK       1619	60	OZ3SM	916
63       W4WF       904       64       N1DC       1835         64       AF5J       903       65       N9UNX       1804         65       KT5V       894       66       W9ILY       1802         66       MORYB       892       67       OK1RR       1758         67       KV8Q       883       68       WU6P       1748         68       N2UU       877       69       K1SM       1742         69       DM6EE       876       70       KW1X       1735         70       K4TZ       873       71       DM6EE       1732         71       SP1D       865       72       KY0Q       1707         72       WU6P       841       73       KV8Q       1679         73       N2EIM       840       74       G4PVM       1673         74       K3ZA       835       75       VE3MV       1665         75       KY0Q       831       76       K4GM       1645         76       W0VX       830       77       VE9KK       1630         77       VE9KK       829       79       SM0HEV       1618	61	W9ILY	912
64       AF5J       903       65       N9UNX       1804         65       KT5V       894       66       W9ILY       1802         66       MORYB       892       67       OK1RR       1758         67       KV8Q       883       68       WU6P       1748         68       N2UU       877       69       K1SM       1742         69       DM6EE       876       70       KW1X       1735         70       K4TZ       873       71       DM6EE       1732         71       SP1D       865       72       KY0Q       1707         72       WU6P       841       73       KV8Q       1679         73       N2EIM       840       74       G4PVM       1673         74       K3ZA       835       75       VE3MV       1665         75       KY0Q       831       76       K4GM       1645         76       W0VX       830       77       VE9KK       1630         77       VE9KK       829       79       SM0HEV       1618         78       K4GM       824       80       K4TZ       1604	62	N9FZ	908
64       AF5J       903       65       N9UNX       1804         65       KT5V       894       66       W9ILY       1802         66       MORYB       892       67       OK1RR       1758         67       KV8Q       883       68       WU6P       1748         68       N2UU       877       69       K1SM       1742         69       DM6EE       876       70       KW1X       1735         70       K4TZ       873       71       DM6EE       1732         71       SP1D       865       72       KY0Q       1707         72       WU6P       841       73       KV8Q       1679         73       N2EIM       840       74       G4PVM       1673         74       K3ZA       835       75       VE3MV       1665         75       KY0Q       831       76       K4GM       1645         76       W0VX       830       77       VE9KK       1630         77       VE9KK       829       79       SM0HEV       1618         78       K4GM       824       80       K4TZ       1604	63	W4WF	904
65       KT5V       894       66       W9ILY       1802         66       MORYB       892       67       OK1RR       1758         67       KV8Q       883       68       WU6P       1748         68       N2UU       877       69       K1SM       1742         69       DM6EE       876       70       KW1X       1735         70       K4TZ       873       71       DM6EE       1732         71       SP1D       865       72       KY0Q       1707         72       WU6P       841       73       KV8Q       1679         73       N2EIM       840       74       G4PVM       1673         74       K3ZA       835       75       VE3MV       1665         75       KY0Q       831       76       K4GM       1645         76       W0VX       830       77       VE9KK       1630         77       VE9KK       829       78       W9CF       1619         77       VE9KK       829       79       SM0HEV       1618         78       K4GM       824       80       K4TZ       1604		AF5J	
66       MORYB       892       67       OK1RR       1758         67       KV8Q       883       68       WU6P       1748         68       N2UU       877       69       K1SM       1742         69       DM6EE       876       70       KW1X       1735         70       K4TZ       873       71       DM6EE       1732         71       SP1D       865       72       KY0Q       1707         72       WU6P       841       73       KV8Q       1679         73       N2EIM       840       74       G4PVM       1673         74       K3ZA       835       75       VE3MV       1665         75       KY0Q       831       76       K4GM       1645         76       W0VX       830       77       VE9KK       1630         77       VE9KK       829       79       SM0HEV       1618         78       K4GM       824       80       K4TZ       1604         79       WA4JUK       810       81       W0TG       1596         80       EA2KV       803       82       LA8OM       1549			
67       KV8Q       883       68       WU6P       1748         68       N2UU       877       69       K1SM       1742         69       DM6EE       876       70       KW1X       1735         70       K4TZ       873       71       DM6EE       1732         71       SP1D       865       72       KY0Q       1707         72       WU6P       841       73       KV8Q       1679         73       N2EIM       840       74       G4PVM       1673         74       K3ZA       835       75       VE3MV       1665         75       KY0Q       831       76       K4GM       1645         76       W0VX       830       77       VE9KK       1630         77       VE9KK       829       79       SM0HEV       1618         78       K4GM       829       79       SM0HEV       1618         79       WA4JUK       810       81       W0TG       1596         80       EA2KV       803       82       LA8OM       1549         81       W1EQ       797       83       N9FZ       1544			
68       N2UU       877       69       K1SM       1742         69       DM6EE       876       70       KW1X       1735         70       K4TZ       873       71       DM6EE       1732         71       SP1D       865       72       KY0Q       1707         72       WU6P       841       73       KV8Q       1679         73       N2EIM       840       74       G4PVM       1673         74       K3ZA       835       75       VE3MV       1665         75       KY0Q       831       76       K4GM       1645         76       W0VX       830       77       VE9KK       1630         77       VE9KK       829       78       W9CF       1619         77       VE9KK       829       79       SM0HEV       1618         78       K4GM       824       80       K4TZ       1604         79       WA4JUK       810       81       W0TG       1596         80       EA2KV       803       82       LA8OM       1549         81       W1EQ       797       83       N9FZ       1544			
69       DM6EE       876       70       KW1X       1735         70       K4TZ       873       71       DM6EE       1732         71       SP1D       865       72       KY0Q       1707         72       WU6P       841       73       KV8Q       1679         73       N2EIM       840       74       G4PVM       1673         74       K3ZA       835       75       VE3MV       1665         75       KY0Q       831       76       K4GM       1645         76       W0VX       830       77       VE9KK       1630         77       VE9KK       829       78       W9CF       1619         77       VE9KK       829       79       SM0HEV       1618         78       K4GM       824       80       K4TZ       1604         79       WA4JUK       810       81       W0TG       1596         80       EA2KV       803       82       LA8OM       1549         81       W1EQ       797       83       N9FZ       1544         82       N3CKI       795       84       DJ5CW       1542			
70       K4TZ       873       71       DM6EE       1732         71       SP1D       865       72       KY0Q       1707         72       WU6P       841       73       KV8Q       1679         73       N2EIM       840       74       G4PVM       1673         74       K3ZA       835       75       VE3MV       1665         75       KY0Q       831       76       K4GM       1645         76       W0VX       830       77       VE9KK       1630         77       VA4ADM       829       78       W9CF       1619         77       VE9KK       829       79       SM0HEV       1618         78       K4GM       824       80       K4TZ       1604         79       WA4JUK       810       81       W0TG       1596         80       EA2KV       803       82       LA8OM       1549         81       W1EQ       797       83       N9FZ       1544         82       N3CKI       795       84       DJ5CW       1542         83       LA8OM       790       85       K3ZA       1526 <tr< td=""><td></td><td></td><td></td></tr<>			
71       SP1D       865       72       KY0Q       1707         72       WU6P       841       73       KV8Q       1679         73       N2EIM       840       74       G4PVM       1673         74       K3ZA       835       75       VE3MV       1665         75       KY0Q       831       76       K4GM       1645         76       W0VX       830       77       VE9KK       1630         77       VE9KK       829       79       SM0HEV       1618         78       K4GM       824       80       K4TZ       1604         79       WA4JUK       810       81       W0TG       1596         80       EA2KV       803       82       LA8OM       1549         81       W1EQ       797       83       N9FZ       1544         82       N3CKI       795       84       DJ5CW       1542         83       LA8OM       790       85       K3ZA       1526         84       W2CDO       782       86       WS1L       1524         85       KR3E       781       87       W3WHK       1505 <td></td> <td></td> <td></td>			
72       WU6P       841       73       KV8Q       1679         73       N2EIM       840       74       G4PVM       1673         74       K3ZA       835       75       VE3MV       1665         75       KY0Q       831       76       K4GM       1645         76       W0VX       830       77       VE9KK       1630         77       VA4ADM       829       78       W9CF       1619         77       VE9KK       829       79       SM0HEV       1618         78       K4GM       824       80       K4TZ       1604         79       WA4JUK       810       81       W0TG       1596         80       EA2KV       803       82       LA8OM       1549         81       W1EQ       797       83       N9FZ       1544         82       N3CKI       795       84       DJ5CW       1542         83       LA8OM       790       85       K3ZA       1526         84       W2CDO       782       86       WS1L       1524         85       KR3E       781       87       W3WHK       1505 <td></td> <td></td> <td></td>			
73       N2EIM       840       74       G4PVM       1673         74       K3ZA       835       75       VE3MV       1665         75       KY0Q       831       76       K4GM       1645         76       W0VX       830       77       VE9KK       1630         77       VA4ADM       829       78       W9CF       1619         77       VE9KK       829       79       SM0HEV       1618         78       K4GM       824       80       K4TZ       1604         79       WA4JUK       810       81       W0TG       1596         80       EA2KV       803       82       LA8OM       1549         81       W1EQ       797       83       N9FZ       1544         82       N3CKI       795       84       DJ5CW       1542         83       LA8OM       790       85       K3ZA       1526         84       W2CDO       782       86       WS1L       1524         85       KR3E       781       87       W3WHK       1505			
74       K3ZA       835       75       VE3MV       1665         75       KY0Q       831       76       K4GM       1645         76       W0VX       830       77       VE9KK       1630         77       VA4ADM       829       78       W9CF       1619         77       VE9KK       829       79       SM0HEV       1618         78       K4GM       824       80       K4TZ       1604         79       WA4JUK       810       81       W0TG       1596         80       EA2KV       803       82       LA8OM       1549         81       W1EQ       797       83       N9FZ       1544         82       N3CKI       795       84       DJ5CW       1542         83       LA8OM       790       85       K3ZA       1526         84       W2CDO       782       86       WS1L       1524         85       KR3E       781       87       W3WHK       1505			
75       KYOQ       831       76       K4GM       1645         76       WOVX       830       77       VE9KK       1630         77       VA4ADM       829       78       W9CF       1619         77       VE9KK       829       79       SM0HEV       1618         78       K4GM       824       80       K4TZ       1604         79       WA4JUK       810       81       W0TG       1596         80       EA2KV       803       82       LA8OM       1549         81       W1EQ       797       83       N9FZ       1544         82       N3CKI       795       84       DJ5CW       1542         83       LA8OM       790       85       K3ZA       1526         84       W2CDO       782       86       WS1L       1524         85       KR3E       781       87       W3WHK       1505			
76       WOVX       830       77       VE9KK       1630         77       VA4ADM       829       78       W9CF       1619         77       VE9KK       829       79       SM0HEV       1618         78       K4GM       824       80       K4TZ       1604         79       WA4JUK       810       81       W0TG       1596         80       EA2KV       803       82       LA8OM       1549         81       W1EQ       797       83       N9FZ       1544         82       N3CKI       795       84       DJ5CW       1542         83       LA8OM       790       85       K3ZA       1526         84       W2CDO       782       86       WS1L       1524         85       KR3E       781       87       W3WHK       1505			
77       VA4ADM       829       78       W9CF       1619         77       VE9KK       829       79       SM0HEV       1618         78       K4GM       824       80       K4TZ       1604         79       WA4JUK       810       81       W0TG       1596         80       EA2KV       803       82       LA8OM       1549         81       W1EQ       797       83       N9FZ       1544         82       N3CKI       795       84       DJ5CW       1542         83       LA8OM       790       85       K3ZA       1526         84       W2CDO       782       86       WS1L       1524         85       KR3E       781       87       W3WHK       1505			
77       VE9KK       829       79       SM0HEV       1618         78       K4GM       824       80       K4TZ       1604         79       WA4JUK       810       81       W0TG       1596         80       EA2KV       803       82       LA8OM       1549         81       W1EQ       797       83       N9FZ       1544         82       N3CKI       795       84       DJ5CW       1542         83       LA8OM       790       85       K3ZA       1526         84       W2CDO       782       86       WS1L       1524         85       KR3E       781       87       W3WHK       1505			
78       K4GM       824       80       K4TZ       1604         79       WA4JUK       810       81       W0TG       1596         80       EA2KV       803       82       LA8OM       1549         81       W1EQ       797       83       N9FZ       1544         82       N3CKI       795       84       DJ5CW       1542         83       LA8OM       790       85       K3ZA       1526         84       W2CDO       782       86       WS1L       1524         85       KR3E       781       87       W3WHK       1505			
79       WA4JUK       810       81       W0TG       1596         80       EA2KV       803       82       LA8OM       1549         81       W1EQ       797       83       N9FZ       1544         82       N3CKI       795       84       DJ5CW       1542         83       LA8OM       790       85       K3ZA       1526         84       W2CDO       782       86       WS1L       1524         85       KR3E       781       87       W3WHK       1505			
80       EA2KV       803       82       LA8OM       1549         81       W1EQ       797       83       N9FZ       1544         82       N3CKI       795       84       DJ5CW       1542         83       LA8OM       790       85       K3ZA       1526         84       W2CDO       782       86       WS1L       1524         85       KR3E       781       87       W3WHK       1505	78	K4GM	824
81       W1EQ       797       83       N9FZ       1544         82       N3CKI       795       84       DJ5CW       1542         83       LA8OM       790       85       K3ZA       1526         84       W2CDO       782       86       WS1L       1524         85       KR3E       781       87       W3WHK       1505	79	WA4JUK	810
82       N3CKI       795       84       DJ5CW       1542         83       LA8OM       790       85       K3ZA       1526         84       W2CDO       782       86       WS1L       1524         85       KR3E       781       87       W3WHK       1505	80	EA2KV	803
82       N3CKI       795       84       DJ5CW       1542         83       LA8OM       790       85       K3ZA       1526         84       W2CDO       782       86       WS1L       1524         85       KR3E       781       87       W3WHK       1505	81	W1EQ	797
83       LA8OM       790       85       K3ZA       1526         84       W2CDO       782       86       WS1L       1524         85       KR3E       781       87       W3WHK       1505			
84       W2CDO       782       86       WS1L       1524         85       KR3E       781       87       W3WHK       1505			
85 KR3E 781 87 W3WHK 1505			
55 SKINK 775 50 WZCDO 1400			
87 W3WHK 768 89 HB9ARF 1435			
88 KC4WQ 763 90 WA4JUK 1434			
89 W9CF 757 91 EA2KV 1427			
90 W8EWH 754 92 N3CKI 1419	90	W8EWH	754



	ACA			
91	DJ5CW	753		
92	WS1L	741		
93	VE3MV	728		
94	VE3INE	727		
95	KOTC	716		
96	<b>SMOHEV</b>	714		
97	VE3KIU	703		
98	G4PVM	700		
99	K1RF	697		
100	WA9I FY	679		

93	PAOINA	1399
94	K1RF	1389
95	KT5V	1343
96	K0TC	1323
97	VA4ADM	1320
98	KR3E	1319
98	K4PQC	1319
99	W1EQ	1307
100	WA9LEY	1304

#### CMA

93	W2CDO	3640
94	MORYB	3628
95	W4CMG	3577
96	DM6EE	3569
97	AF4T	3532
98	SM0HEV	3498
99	WU6P	3473
100	K4TZ	3467



73, Bill WØTG (CWops #1873)

**CWops Operating Awards** 



# QTX Report: Enjoying the Art of Conversational CW

Enzo, MØKTZ

"Scores! Glorious scores!". This month the QTX column is all about that: scores. Scores, scores, scores, and scores. HI. This is because a good fraction of the soapbox comments I received seems to revolve mainly around scores. Some fellows lament lower scores in the past month. Others hope or promise to get better scores next month. I also got an email from one member who was asking if they could perhaps, send their scores for the last few months, and have them, pretty please, counted, as they had forgotten to send them in. Of course the answer was a resounding "Obviously yes, please!" In a way or another, scores get into our minds, and it is really hard to resist. Which, to be fair, is probably a good thing. Scores provide a sense of progress, a feeling of achievement, and a motivation to do more and do better. For me personally, as a QTX/MQTX "facilitator," it is really great to see how much time our QTX fellowship spends ragchewing on the bands. Those scores, hundreds and hundreds of QSOs every month, give a sense of the variety of interests inside CWops and across the CW family at large, and speak loud about one simple fact: conversational CW is indeed alive, and kicking. As long as there are people interested in having a good chat on the bands, using the only mode that speaks your heart and soul at every step (guess which one is that!), then we are reassured that our beloved CW is doing OK.



Scores, scores, and more scores. I have also received several emails this year from QTX/MQTX fellows, asking why we can't just use the CWOps web tool to report QTX/MQTX scores every month. Well, I actually was the one asking Fabian DJ5CW to implement that feature (and he did it, brilliantly and quickly, and we are indebted to him!), and now the CWOps web tool shows your QTX/MQTX monthly and yearly totals, provided that you upload your logs in there. But I was reluctant in asking Fabian to make score reporting automatic, i.e., having the system sending me an email on the 4<sup>th</sup> of each month with all the QTX/MQTX scores in the CWOps web tool. That would have been a no-brainer for Fabian (he already does that for several other activities in CWOps and in FOC), and it would have somehow simplified my monthly work: I just had to parse the email with a script, get the stuff in the spreadsheet, and move on.

But then I realised that a completely automatic reporting process would have been mostly in contrast with the philosophy behind the QTX/MQTX activity, and the motivations that push us to have longer CW QSOs on the bands. I might be wrong here, but I believe that an automatic procedure to report our monthly scores would totally eliminate most of the human side of the QTX/MQTX activity, making it yet-another-contest-like-activity, whereby we push a button, send the logs, check how we ranked, and move on.

I don't think any ragchewer spends time on the bands, chatting with other fellows, just to check their clock and score another QTX when they hit the 20 minutes mark. In this respect, it was fun to hear from a correspondend that we had just added another QTX to our own logs. This happened in a recent, long, relaxing, 2 x sideswiper chat with our own Jo PG4I, to whom I replied "great mate! I have no idea of how long a QSO is lasting. I only look at the clock when it starts, and then close my eyes and plough along HI The time spend in the shack is time out of time".

Actually, this column exists in its present form mainly because you care to send in *soapbox comments* every month. A variety of interesting, mesmerising, intriguing reports on the myriads of strange things we can bump into, if we only dare exchanging a few more words with a fellow CW op thousands of miles away. Each soapbox comment is a window into a new world, and adds some meaningful context to those numbers we see at the bottom of this colum. Each and every of the columns I have put together so far, good or bad, has invariably originated from one or more of your soapbox comments (inlcuding this one!). Without your comments, this column would most probably be just a list of callsigns and numbers, with little more around.

Nevertheless, I cannot impose my own view on the whole QTX/MQTX family. Hence, I will send around an email asking what is your personal preference regarding automatic score reporting, and I will report on that in the next column.

Speaking of scores, we congratulate Larry KF6NCX in achieving his QTX 100 Ragchewing award, which is indeed a great milestone to celebrate! Well done Larry, now onwards and upwards! And we welcome back Dave W8OV who has returned to the QTX family after a break.

My best QSO in November was with Flor ON3FLD. Flor is a CW-only operator who has been working his own way into CW. He started from scratch last year, with a simple single-band QRP rig and a straight key, and has made truly excellent progress. We talked about different keys and antennas, and at a certain point he keyed "sorry now I must QRT as my head is burning".



This is exactly the same feeling I had during my first few QSOs: my head started burning, letters ran into each other, and I had to stop and QRT. But I knew that was only a pause, as I could not stay away from another CW QSO. And I know I will bump into Flor again, soon, and he would have done even more progress by then. There is nothing that tells you about Flor in my QTX/MQTX totals for November...

Please do read through the soapbox comments, and please keep sending them. They are the scaffolding on which QTX/MQTX stands.

**72/73 de Enzo, MØKTZ** (CWops #3206)

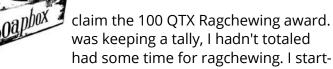
Total hours ragchewing this year so far: not less than 2700

#### 2024 Total Number of Hours Worked: 2700

(based on avg 20 min QTX, 10 min mQTX)

Call	Hrs	<u>Call</u>	Hrs	Call	<u>Hrs</u>	Call	Hrs	Call	Hrs
WA4IAR	462.3	F5IYJ	71	MM0UMH	24.3	MI0WWB	10.8	KB4DE	1.8
VE3WH	228.7	KG5IEE	70.8	DG5CW	24.3	N5LB	9.3	K7VM	1.5
KY4GS	205.2	KC0VKN	68.7	DF7TV	22.7	IU3QEZ	9.3	WT9Q	1.3
MOKTZ	177	M0MZB	67.2	KF6NCX	20.7	W3WHK	8.3	N7BAS	1.3
ND4K	165.5	N7HCN	65.3	KG5SSB	16.7	VK3QB	8.3	AD4SA	1
N8AI	149	AF4PX	46.8	K8UDH	16.5	G4IVV	5	N9FZ	8.0
KR2Q	117.3	PG4I	36.2	K6DGW	14.8	AB0WW	5	JS2AHG	8.0
AA0YY	111.3	YL3JD	29.8	<b>GW0ETF</b>	14.2	G0DJA	2.7	GW0KRL	0.7
KB6NU	102.2	N2DA	28.3	KE4I	13.8	W6QX	2.5		
K9OZ	91.7	M0SDB	25.5	N1ZX	11.7	W9EBE	2.3		
WB4IT	88.8	AJ1DM	25.3	N9EEE	11.5	W8OV	2.3		

**KF6NCX**: Wow! I'm finally able to Actually , I hit 100 in July but while I the QTX QSOs up till now. Yesterday, I



ed by calling CQ on 20 meters and had a 22-minute QSO with Dick, N4HAY, in NC. After that, I tried 15m but got no calls. So, I decided to try 10m. I heard very strong signals there. Called CQ and almost at once got a call from Nori, JA1IAZ. Immediately after we finished chatting and exchanged final "dit-dits" I was called by JH3EUJ (I didn't even have to call CQ). Like Nori, he had a very strong signal. We chatted, and after sending each other 73, I was immediately called by Masa, JG2KJU. I don't think I've ever had this happen before, DX stations calling ME, one after the other like this. Two of these QSOs lasted eight minutes and the third was 17 minutes long -- significantly more than the typical "599, TU, 73" DX QSO. Hurrah for the solar peak!!!

**K90Z**: Cooler weather and better bands led to more ragchews this month. Had a couple that lasted over an hour, which is always fun.



**KG5IEE**: November was a good month for some nice ragchews. Heard many nice fists plus some nice chirps from vintage gear. Worked Jack KKOI who was using a 1919 Vibroplex bug.

**KR2Q**: November was a slow QTX/MQTX month for me. Not sure why. Hopefully, many more in December (I have the last 2.2 weeks of Dec off from work).

**MØMZB**: Slightly slower month for QTX this month, although managed QTX and MQTX on a wide range of bands, including several ragchews across to USA. Was out camping on a SOTA summit for a couple of nights, which was good fun, and also made lots of contacts with a couple of longer QSOs. My antenna (a fan dipole with 3 separate wires) suffered in the recent storms, but spent the last day of November untangling it, so hoping for good results in December.

**N2DA**: Nice CW sked QSOs, with one that started out as sideband sked but switched to CW (which was much easier to copy that evening!)

**VE3WH**: This month was full of interesting conversations. I was using a 1951 Vibroplex Lightning, a 1938 McElroy, or my Vibroplex lambic paddles. I'm impressed by how many talented CW operators prefer to ragchew. During November QTX/MQTX QSOs, I had conversations with pilots, a geography professor who had a good iambic and bug fist. I thought my 1938 McElroy was a rare semi-automatic key, but I had a wonderful two-way 1938 MAC-to-MAC QTX with Tord, SM3EVR. It started with a quick exchange on our iambic keys. The conversation went into what our hometowns were famous for, and then we ended the QSO both using our McElroy 1938 semi-automatics. Just plain CW fun!

**DG5CW**: Longest and nicest (!) QSO this month was with Andy (VK3OU) talking in FB condx on 20m about my next trip to Melbourne. BCNU SN.

**MØSDB**: Not a huge number this month but some really nice QSOs in there which I have thoroughly enjoyed. Looking forward to wrapping the year up and on to 2025.

**N7HCN**: Longest QTX was one with Don W6JL which lasted two hours. Thank heavens for wireless keys and phones so you can get a snack & keep talking.

**W80V**: When W4RFT answered my CQ, my logger gave me the date of a previous QSO and his name. When I greeted him with this info he was amazed at my memory. I told him my photographic memory ran out of film 20 years ago and credited the logger. After a "hi hi" we had a nice chat about antennas, and a plan to QSO again.

**AAØYY**: KY4GS Amanda, her family had 7 inches of rain that caused a tree to fall on their house. You really do get to feeling blessed when you talk with folks that have been devastated by disasters. Amanda has a great fist and always a nice QSO.

**N8AI**: NØFIH Peter has a 1929 Steinway grand piano and plays it most days just like I play my Baldwin grand.

**PG4I**: Spent more time on 80-meters which really helped improving my score!



# QTX - November 2024

<u>Call</u>	<b>QTX</b>	<u>Call</u>	<u>QTX</u>	<u>Call</u>	<u>QTX</u>	<u>Call</u>	<b>QTX</b>	<u>Call</u>	QTX
WA4IAR	114	M0KTZ	25	WB4IT	10	KR2Q	5	W6QX	2
VE3WH	64	AA0YY	22	KE4I	10	KF6NCX	5	DG5CW	2
N8AI	39	KB6NU	21	M0SDB	7	N5LB	4	K8UDH	2
K9OZ	37	KG5IEE	14	W8OV	6	KB4DE	4	<b>GW0ETF</b>	1
KC0VKN	35	KY4GS	12	PG4I	6	MM0UMH	3		
N7HCN	33	N2DA	11	M0M7B	5	AF4PX	3		

# **MQTX - November 2024**

<u>Call</u>	<b>MQTX</b>	<u>Call</u>	<b>MQTX</b>	<u>Call</u>	<b>MQTX</b>	Call	<b>MQTX</b>	<u>Call</u>	<b>MQTX</b>
KY4GS	43	KG5IEE	22	GW0ETF	9	N7HCN	4	W3WHK	1
M0KTZ	40	KB6NU	21	DG5CW	8	KF6NCX	4	K8UDH	1
N8AI	33	M0MZB	15	AF4PX	8	KB4DE	3		
VE3WH	31	KR2Q	15	MOSDB	6	W8OV	2		
WA4IAR	27	PG4I	13	WB4IT	4	N5LB	2		
AA0YY	25	KE4I	13	W6QX	4	MM0UMH	H 2		

# QTX - Totals 2024

<u>Call</u>	QTX	<u>Call</u>	QTX	<u>Call</u>	QTX	<u>Call</u>	<b>QTX</b>	<u>Call</u>	QTX
WA4IAR	1208	KR2Q	225	MM0UMH	43	W3WHK	18	W9EBE	5
VE3WH	565	F5IYJ	213	K8UDH	41	K6DGW	18	WT9Q	4
ND4K	405	KC0VKN	206	KF6NCX	39	N1ZX	17	VK3QB	4
N8AI	329	N7HCN	182	DG5CW	28	DF7TV	13	KB4DE	4
KY4GS	299	M0MZB	118	MI0WWB	27	IU3QEZ	12	N7BAS	3
KB6NU	284	KG5IEE	103	N5LB	26	GW0ETF	9	K7VM	3
M0KTZ	277	AF4PX	97	KG5SSB	26	YL3JD	8	W6QX	2
K9OZ	275	N2DA	85	KE4I	26	G4IVV	7	G0DJA	2
AA0YY	227	PG4I	68	M0SDB	25	W8OV	6	AD4SA	1
WB4IT	225	AJ1DM	65	N9EEE	24	AB0WW	6		

# MQTX - Totals 2024

<u>Call</u>	MQTX	<u>Call M</u>	QTX	<u>Call</u>	<b>MQTX</b>	<u>Call</u>	<b>MQTX</b>	<u>Call</u>	<b>MQTX</b>
KY4GS	633	YL3JD	163	KG5SSB	48	AB0WW	18	N5LB	4
M0KTZ	508	DF7TV	110	KF6NCX	46	K8UDH	17	GW0KRL	4
WA4IAR	358	MOSDB	103	KB6NU	45	G4IVV	16	AD4SA	4
KR2Q	254	DG5CW	90	VK3QB	42	W3WHK	14	KB4DE	3
VE3WH	242	AF4PX	87	N1ZX	36	G0DJA	12	K7VM	3
N8AI	236	WB4IT	83	IU3QEZ	32	W6QX	11	VO8W	2
KG5IEE	219	PG4I	81	KE4I	31	MIOWWE	3 11	N7BAS	2
AA0YY	214	<b>GW0ETF</b>	67	N7HCN	28	N9FZ	5		
ND4K	183	MM0UMH	60	AJ1DM	22	JS2AHG	5		
M0MZB	167	K6DGW	53	N9EEE	21	W9EBE	4		



# My Story: New Member Introductions

Compiled by <u>Tim Gennett</u>, **K9WX** (CWops #1462)

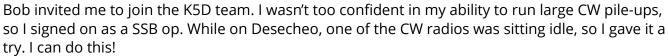
#### **Gregg Marco W6IZT CWops #3616**

First off, I would like to thank Craig K9CT, John W2GD, Axel DL6KVA, Keith NM5G, and John W4NU for their sponsorship.

I was first licensed as WN6IZT in 1968. I upgraded to Technician class in 1970, Conditional/General class while in the USAF in 1973, then Advanced class in the early 80s, and finally obtained my Extra class license in the mid-80s. I caught the DXing bug in the mid-80s, after working FR5AI/g on 20 CW. Little did I know at the time, what that one contact would lead to.

In 2000, my YL Wendy and I decided to go to St Martin for a vacation. I took along an Icom 706. This trip turned out to be the first of many trips that we took to FS. In 2000, I operated mostly SSB, but quickly transitioned to CW only operation.

In 2007, I met Bob K4UUE, and he asked me to join a team going to TI5KDs QTH for CQWW SSB. In late 2008,



Over the years I took many trips with Bob. In 2016 I was on the team that activated Navassa, K1N. George AA7JV was on the team, and a few years later while planning a trip to the Chesterfield Reef, George and I crossed paths again, which led to my participation in his RiB project. In late 2022, George and I discussed a building a smaller RiB that would be tailored to address an expanded set of use cases.

After returning from Ducie in July of 2023, I began work on what has been dubbed the NexGen-RiB. Small enough to fit in an aircraft overhead compartment, and light enough to be carried by one person, this design is intended to be complimentary to a typical DXpedition operation enabling rapid deployment as well as access by remote operators.

While in Dayton this year, I had a chance meeting with Neil Rapp WB9VPG, Neil is an advisor with Youth on the Air, YOTA. A couple of days later we announced a partnership with YOTA, this partnership paved the way to our upcoming trip to Rotuma in November. Our six person on-island team consists of three young ops. We have an off-island team of 43 young ops, joined by a similar number of Elmers. Many of our young members are accomplished CW ops, and 6 are YLs. We are hopeful to pull off two DXpeditions next year that will include a number of YOTA ops.





Over the past year or so much of my time has been spent on RiB related projects, as such, I have not spent too much time on the air. Top of my list of New Years resolutions is to make more Qs!

## David Lappen, KO4OWS CWops #3627

I got started in amateur radio later in life. For many years I'd have exposures to the hobby. I'd see clubs supporting marathons, triathlons, and bicycling event that I was participating in. I'd chat with friends that were involved in the hobby from time to time. It always sounded interesting, but I did not take it up for one reason or another; cost of gear, time available to earn the license, other hobbies, work. I finally decided to pursue licensing just a few years ago. The realization that I could actually get a start with an inexpensive HT, interest in the engineering and science, and possibly being one of those guys supporting at an event drew me in.



I earned Technician in March of 2021, General in March of 2022, and Amateur Extra in May of 2022. My focus over that year or so was on studying for and passing exams rather than operating. Once I really started operating, I was kind of overwhelmed wading through different modes of operation and options for what to do with the hobby.

I did a little POTA hunting, and watching YouTube videos about POTA. I came across a number of CW activators, most notably Thomas (K4SWL). That's when my interest in CW peaked. I first learned the numbers and letters in a LICW beginner's class, but struggled to move forward from there. I found myself considering both the CWA and LICW's classes, but not really moving forward. In November of 2023 I went to a local Hamfest, the Stone Mountain Hamfest. I met a few SOTA and POTA people, and spent a good bit of time talking to them. At one of the booths, they were handing out fliers for CWA and CWops. They convinced me to give CWA a try. Over the course 2024 I worked through Fundamentals, Intermediate, and Advanced classes under Buzz, AC6AC's guidance. He and the several co-advisors and other students in the class were absolutely outstanding. They brought me from knowing the alphabet and numbers, to being a capable CW operator.

One thing Buzz focused on in the CWA classes is that we are building friendships, getting to know one another. In that spirit, here is a bit more about me. I grew up in Wisconsin, divided mainly between the Fox Valley area and far northeastern WI. My tiny high school graduating class had only 26 people. I went from there into the US Navy where I served for 6 years as a "Machinist Mate, Nuclear" operating and maintaining the power plant, engine room, and auxiliary spaces on the USS Enterprise, CVN 65 for most of that time. I enjoy travel, and got to do a fair bit of that in the Navy and in my post-military career. I am a mechanical engineer, with a BSME from the U of



Minnesota, Twin Cities. I currently work as a project manager and project procurement lead. I'm married and live in GA with my wife Karen, our dog Jake, miniature horse Jericho, and our barn cat Fiona. We have two adult children, Hannah and Hope. I have too many hobbies. In addition to amateur radio, I do a bit of woodworking and guitar playing (for my own entertainment, not in public) among several other interests. In parallel with radio, I also took up sailing. My wife and I earned our American Sailing Association Certification (ASA 101) together, and I also earned the ASA 103 later.

Thank you for having me as a member (#3627), and a special thank you to Buzz, the co-advisors, my fellow students, sponsors, and the "behind the scenes" volunteers that have helped me and so many others get to this point.

# Jose S., EA1CBX/CR6P CWops #3613

Hello, thank you very much for letting me be part of this group of telegraphy enthusiasts like me.

My beginnings in the world of amateur radio were in 1979. Like many people, I started in the Citizen Band. In 1995, I got my first Novice license. And later, I obtained the class A license.

My passion is the contests, I have been participating for more than 30 years in the CQ WW CW-SSB, CQ WPX SSB-CW, ARRL DX CW-SSB, SO-TA, IOTA activations...

CR6P Contest Team

In the year 2003 I had the opportunity to participate in the VERBUM museum, an activity with E.S.A. personnel, which consisted of contacting the Spanish astronaut Pedro Duque, in the Cervantes Mission and children from schools in Spain and Portugal who had won a Contest organized by the E.S.A., asked the astronaut questions, in this activity, I had the opportunity to meet the Italian astronaut Umberto Guidoni, who was present at the communication, the QRZ was ED1ISS.

For three years I have been fighting cancer, which was detected by chance. I am married and have a daughter, I like photography, sports, cycling and activities in nature. I hope to participate in some group activity.

## Forrest Stephenson, KI7QCF CWops #3636

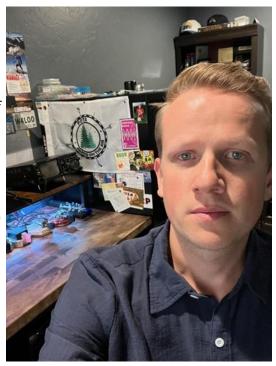
I began learning CW at the beginning of 2024 and made my first ever CW QSO to CWops member K5OHY in March, 2024.



Almost all of my initial CW involvement was via the POTA program. Within 6 months, I had hundreds of activations and 8,000+ QSOs. Still to this day, I activate daily. I've begun to venture into the world of CW beyond POTA which has involved ragchewing, DXing and now contesting. I'm not much of a reader, but when I picked up *The CW Way of Life* by Chris Rutkowski I finished it in two days. I really love that book!

I think growing up I had a belief system that ham radio was older tech and not very useful today. I couldn't have been more wrong. We are seeing the impact of ham radio at the most critical times. I am obsessed with QRP field operations and have an unwavering addiction to paddle collecting. Including a recently found love for Bugs!

I particularly enjoy building homebrew equipment. I've built multiple antennas and 5 QRP radios. I still feel some disbelief when I use a throw-line to get a wire up in a tree and make DX QSOs from a small 5 watt QRP rig I built.



The fact that it's just us and the ionosphere makes this form of communication unlike anything else.

As cliche as it may sound, the single best part of this hobby really has been the friendships I've made in such a short time. I am so excited to begin to participate in CWops contests as an official member!

#### Jon Utley, K7CO CWops # 3637

I have been licensed since 1988. When I was 16 my Dad, AF7Y told me if I got a 3.0 GPA, Eagle Scout and my ham radio license he would buy me a car. I did not have much interest in ham radio, but I wanted that car! After receiving my Novice license, I tried 10m SSB and was hooked!

The DX Bug had a hold of me. As the solar cycle started to die, I was forced to upgrade, which meant doing a mode I hated. The 13 and 20 wpm CW tests were huge hurdles to cross when I did not like CW. Not long after upgrading to Extra I started to enjoy CW.





After many years of DXing, Contesting, and DXpeditions I can now proudly say CW is my preferred mode of operation. Milliwatts to Kilowatts I simply love it. My new vanity license plate says it all, M0RSE.

I am honored to be accepted into CWops. These CWTs have been so much fun. They make 25 wpm seem slow! I hope to continue to convert others to this great mode.

My other hobbies include golf and flight simulation. I love to spend time with my wife and four children. It is also very cool that my nephew Forrest, KI7QCF has also been accepted into membership. His CW progression has been amazing to watch. He will be a CW force for the next 50 years. Shout out to Max, NG7M who also has been an inspiration, mentor and Elmer for my CW career.

#### Dennis van Dijk, G5NLD CWops #3618

So, here I find myself as a member of CWops, which has been a great journey on which I will keep going to improve my CW skills. I would like to thank the advisors and co-advisors from CW Academy for the time and effort to teaching me CW. To Buzz (AC6AC) for being supportive and informative in teaching the skills to become a confident ragchew operator (still learning) and all co-advisors during the intermediate and advanced course – Shirley, Andy, Marv, Jeff and Craig.

I also would like to thank Buzz (AC6AC) for putting me forward to become a member and to my sponsors Shirley (MØWXG), Peter (PA3DBS), Jonathan (G4IVV) and John (P4PFZ). Very much appreciated and some of you I managed to contact already on CWT with my shiny new membership number.

My journey into ham radio has only begun in 2021 when my good friend Gavin (G5HOW) showed me his radio and planted a seed to get myself licensed. I quickly moved from my foundation licence to my full

ROU

license in 2022. At this point the journey into CW started and I am very much enjoying that mode of communication the most now.

It is funny as when I still lived in the Netherlands (I am Dutch) I had to do National Service, and I ended up in the Signals in the army. I wish I would have been able to bring one of those portable masts home!! So, it has all come full circle with me enjoying radio once more.



Some more background on myself: I live with my wife and two daughters in a small village to the East of Oxford in the UK. I live in an old pub built in the 17th century and my shack is basic as I am restricted in the garden with overhead powerlines feeding the local houses. Another big hobby of mine is cycling and I try to get out most weeks.

I managed to put up a EFHW and a fan-dipole to give me access to most bands. I don't use an amplifier and run a maximum of 100 watts from a Yaesu FTDX10, but I usually run 20 W on CW. My key is a Kent Engineering paddle but I might treat myself to a Begali now I am more accomplished at CW. For mobile operations I use a Xiegu X6100 with a BaMaKey TP-III.

Looking forward to making more friends in CWops and staying in touch with my course buddies from the advance course.

#### Matej Sustic, HB9HKN CWops #3620

My interest in radio amateurism started when I was just over 10 years old in the late 1970s and early 1980 when my Dad showed me the CB (yes, I started on the "dark" side). From there I quickly got licensed in 1982. The requirements at that time included 20 wpm CW for the HF band license which I managed to learn in a couple of months through a course on the local repeater (there was no internet at the time). And after I got my license I promptly forgot the CW as it was not my interest at the time. I was also not allowed to have my own call sign and I had to work under my Dad's.

During the 1980s I was quite active on the 2m band -- these were the pre-internet times when



the packet radio came out and, of course, I played with it. My dream was always to get on the HF, however due to our financial situation I was not able to get a station and building one was also not an option due to time requirement and difficulty in getting parts. The only option I had was using the club HF station. Attending school and using the club station was a combination that worked only occasionally.

In the 1990s I moved between countries and the licenses were not transferable at the time. Family also took time so I was not able to spend time on the radio. I got sick and tired of repeating the licensing process and I abandoned the hobby for around 30 years.

Roll forward to 2020. I reconnected with an old friend from the university who remained active in the hobby. I realized that the ham world still exists. It took me almost a year to revive my license and I have two call signs now: I was able to pick a Slovenian call sign S50TT (it sounds nice in CW)



and a Swiss one HB9HKN. Funny enough, as a contrarian by nature I was not and I am not interested anymore at all in digital communications now. I went to the mode that I completely ignored in the 1980s -- the CW. I started to learn it again on my own and then I discovered the CW Academy. I immediately signed up for the intermediate class and got into more serious training. I was lucky to get Buzz AC6AC as the advisor. His patience and focus on quality of the CW rather than speed immediately resonated with my quality standards. CW must be music in the ears -- it must be rhythmic and easy to copy and not a "machine gun" streamed sound without proper spacing. Great work, thanks, Buzz, please keep doing it.

I am absolutely not a contester and you will not hear me in the CWT (sorry, CWops). My focus is communication and the "matej 3620" is not really communication - it is too predictable. Communication means that useful pieces of information or messages are exchanged. Send me your QTH, send me your name, your rig, talk about your hobbies or weather or projects in CW. And I much prefer your code is of high quality CW at slower speeds rather than crappy (or even worse computer generated) code at 40 wpm.

I have a rather marginal setup at home due to antenna restrictions, but I'm getting involved in SOTA and portable (rapid setup) antenna development. Another part of my interest are the modern RFI problems which I also have to deal with at home.

I hope I hear you on the air

#### John Toronto, K2MEU CWops #3635

I didn't know ham radio from a ham sandwich until I bought a pair of Baofengs from Amazon in the summer of 2022 for general prep purposes. Doing so sent me straight down the rabbit hole and I got licensed in October 2022, testing through to Extra the following spring. From the very beginning, I was annoyed that I couldn't understand FM repeaters ID-ing in CW so I joined SKCC and got hooked hard on our favorite mode. It's really all I want to do on the radio going forward. My mother taught numerous languages and my father taught music but growing up I learned little of either. CW to me is a blend of both and I love the feel of communicating with an instrument, whether straight key or paddle.

I am a former Marine Corps infantry officer and noticed how many veterans we have in our hobby. The people I've met in general in radio have just been fantastic and those who practice CW have been particularly nice and encouraging to this new operator.



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When I'm not on the air, I'll ideally be out on the ocean fishing or surfcasting, shooting handguns or working in NYC. I moved to Highlands, NJ in 2019 because of the world-class saltwater fishing here, particularly for striped bass and bluefin tuna. What I had no idea of at the time was that my town also has a rich radio history—the first practical demonstration of radio in America happened here in 1899 by Marconi, who had an office at the Twin Lights in Highlands. Although I live in an HOA with the typical restrictions on permanent antenna installations, I'll sometimes set up a vertical antenna on the boat shown in the photo with two raised radials over the saltwater for 20m, or right on the seawall nearby with raised radials parallel to the water for 40m, running the coax back to the shack. The "saltwater amplifier" is a real thing.

I first got interested in CWops when I happened to hear a long QSO between Amanda (KY4GS) this past May and another op whose call I didn't catch. It was a long, flowing, natural-language conversation, simply a beautiful thing. True and easy fluency for ragchews at 25-30 wpm is my long-term goal in CW; when I can do that, more formulaic exchanges at higher speeds should be easy as well.

I want to thank Phil (NEOS), my CWA instructor, for his 8 weeks of superhuman patience, great fun and nominating me for membership, as well as my sponsors, Tom (K4TZ), Jay (N4GO) and Jim (N7US). Tom was nice enough to notice that we had a couple of QSOs logged and sponsored me without even being asked. Jay is a fellow gun guy and always took the time during CWTs to send me a "73" during our exchanges—he also has a YouTube channel where I got to hear firsthand how terrible my mag loop sounded compared to my vertical. Finally, Jim was also my very first CW contact on 11/20/23 and I really appreciate his enthusiastic support from the beginning.

I'm honored to be here and thank you all for the most warm welcome to this wonderful organization.

## Fernando Figueroa, CE3FJK/KJ5CHV CWops #3629

I was first introduced to radios by a friend of mine at the age of 12. I was amazed by the power of radio communications without the need for additional infrastructure more than your radio and antenna.

I like doing radio in remote places which usually require hikes of 5 hours or more, the challenge of lugging the 50 pound ruck going uphill, no services, no signal, just myself and the radio.

Last year I managed to get my US general license and decided 2024 would be focused on taming CW beast. I started training daily on my own doing several drills which include Morse Runner and HST characters sending.



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Later this year I enrolled in the advanced CWops class with K6RB and my copying skills improved even more. I want to thank all those who have helped me along the way: K6RB, K5GQ, AC6AC and my sponsors PP5WX, RM2D, WA2OAX.

#### Prasad Saravate, KB3MDD CWOps #3630

I am a Software Engineer by profession. I have been licensed since 2005; however, I was inactive until 2023. I was born and brough-up in Mumbai (India). During my teenage years, I came across comic strips in local newspapers, which ran a story of aliens contacting humans over ham radio. Ever since then I have become fascinated by ham radio. During my college years I attempted to build FM transmitter and foxhole radio. I believe CW is the soul of amateur radio and every ham owes it debt to learning CW. My hobby of traveling and visiting new places goes well with my newfound love for PO-TA and SOTA activations.



My wife and 11 yrs old son show great curiosity in my "on-air adventures" and always encourage me to push my limits.

I thank Kevin (NB7O) and Jeremy (NJ6Q) for giving ongoing support and encouragement on weekly basis. Finally, I thank my sponsors Dallas (K1DW), Roger (AE5EZ), Willie (WJ9B) and Rob (K6RB) for giving me the opportunity to join the club.

# Gabe Donley, WN7JT CWops #3642

My initial interest in CW began in the 4th grade, when I was assigned to write a report on Samuel Morse and the telegraph as part of our study on American inventors. While I never actually learned the code proficiently at the time, I was enthralled with the idea of Morse as a second language.

In early 2023, while renewing my fascination with the Battle of the Atlantic and the Enigma code, I was once again bit by the CW bug. After a couple weeks of humming the rhythms of the characters on my afternoon walks, I was amazed to be able hear words (at painfully slow speeds) and actual messages. My desire to expand on CW led me to amateur radio, and I became KK7NJT a couple months later.

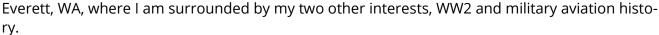
In December of the same year, after many hours of listening to recordings and banging away on



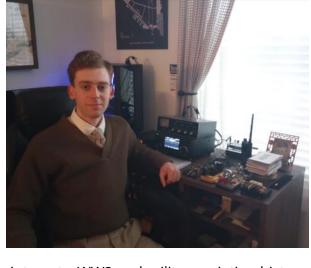
my trusty J-38, I finally had a dipole strung up and made my first contact. In early 2024 I upgraded to General and Extra and requested a much better CW callsign, WN7JT.

About a year after beginning my CW studies, and many long ragchews later, I received my 25 wpm certificate from the ARRL. While my overwhelming interest is still late night ragchewing on my favorite band, 40 meters, I have since ventured into POTA and field operations, and have been enjoying outdoor radio immensely.

Outside of amateur radio, I volunteer as a docent at the Flying Heritage and Combat Armor Museum in



My thanks to Hank W6SX for the nomination and Doug KR2Q, Rob K6RB, Carl WS7L, and John WJ7S for the sponsorships.



#### Dale Sewell, N5SGQ CWops #3634

I'm a recent graduate of the CW Academy Advanced class. I have been an amateur for 56 years, operating CW traffic nets along the way. The experience I gained in Buzz Tarlow's CWA class significantly improved and refined my CW style and efficiency, as well as exposing me to a new world of friends. I cannot adequately express the pleasure and intensity of Buzz's class, which was always positive and fun.

I enjoy operating the CWT activities and have made some new friends. Before I got into the CW Academy, I heard the CWTs on the air and was curious about CWops. So, I looked up CWops on the web and found the Academy there.

As I mentioned, I've been a ham for over five decades. I've operated many emergency communications oper-



ations, including deployments to the Caribbean and Florida for Hurricane Andrew in the early 90s. During those operations, we handled most of the traffic on CW before Winlink became practical. I also worked as a liaison with NTS nets between the Northern Florida Section and 4RN and RN5.



When not doing ham radio, I enjoy amateur astronomy, non-fiction reading, and Arkansas's out-doors. I am privileged and proud to be in CWops and look forward to meeting you on the air or in person.

#### Kostas Manolis, SV8SXF CWops #3645

My name is Kostas, and I'm thrilled to introduce myself as a new member of the CWops community. I go by the callsign SV8SXF and have been licensed since 2021.

As a Hellenic Air Force Officer for the past 25 years, I've always been fascinated by the intricacies of communication systems. However, it was the elegance and challenge of Morse code that truly captured my heart. The ability to communicate directly with others, unhindered by technological limitations, is a truly magical experience.

Living on the beautiful island of Limnos, I often find solace in the quiet moments, where the rhythmic tapping of Morse code provides a peaceful escape from the hustle and bustle of daily life. I'm fortunate to have the unwavering support of my wife and two wonderful children, who have been incredibly understanding of my passion for amateur radio.

One of the highlights of my amateur radio journey was the opportunity to meet my mentor, Manos (SV1DAY), in person on the island of Limnos. Together, we participated in a memorable lighthouse activation event with the callsign J48PLH

last August. This experience solidified our friendship and deepened my appreciation for the camaraderie within the amateur radio community.

I'm eager to meet my other mentor, Enzo (MØKTZ), and hope to have the opportunity to do so in the future. I would also like to extend an invitation to all CWops members to visit the beautiful island of Limnos. It would be a wonderful opportunity to meet in person, share experiences, and strengthen our bonds as a community.

Beyond my passion for amateur radio, I also enjoy photography and playing the guitar. These creative outlets complement my technical interests and provide a well-rounded balance in my life.

I owe a debt of gratitude to Manos (SV1DAY) and Enzo (MØKTZ). Their guidance and expertise were instrumental in my progression through the fundamental, intermediate, and advanced courses. Their patience and encouragement inspired me to persevere and achieve my goals.





As a new member of CWops, I am excited to immerse myself in the vibrant community and participate in the various activities. I'm particularly drawn to contests, as they provide an opportunity to test my skills and compete against others in a friendly and challenging environment. I also look forward to joining nets and digital modes, which offer a diverse range of communication possibilities.

I am eager to contribute to the CWops community by sharing my knowledge and experience with others. I believe that by working together, we can continue to promote the beauty and utility of Morse code.

Thank you for welcoming me into this wonderful community. I look forward to many years of enjoyable and rewarding CW experiences.

## Evan Thorson, K2EJT, CWops #3643

First and foremost, thank you for welcoming me to the club.

I live in Endicott, NY with my wife Sarah and my daughter Megan. I've taught Automotive Technology in Binghamton, NY for the past 24 years. Prior to that, I was a professional automotive technician.

I am a fairly-new ham. I've only been licensed since September of 2022. When I first got into radio, I had no interest at all in Morse code until I stumbled upon one of Thomas Witherspoon's (K4SWL) YouTube videos, and the rest is history.



I started learning CW at the Long Island CW club in November of 2022. I became an instructor there in April of 2023. I started as a Beginners Carousel 1 instructor, and then moved to Intermediate 1. I teach Intermediate 2 at LICW now.

I'm an avid POTA and SOTA activator as well. I have a fairly-successful ham radio YouTube channel where I post all sorts of things from CW POTA and SOTA activations, to gear reviews, to how-to videos etc. I'm also an avid outdoorsman. I enjoy hiking, kayaking, mountain biking, camping, and bushcraft.

#### Simon Smith, GØFOZ CWops #3646

Many thanks for accepting me as a member with particular thanks to Cie GØTRT for nominating me and Ian GWØKRL, Will MIØWWB, Chris G5VZ & Eamo EI7LC for supporting that nomination.



I was originally licensed in 1984 as G1RCG before being told by a G2, when I dropped in for the first time at a local club, "you only have half a call" and so did not return there until I had passed the 12 wpm CW test and had been allocated GØFOZ.

I have had, regretfully, 30+ years away from radio whilst initially sofa surfing/renting with no space for equipment and then time-poor building a business and raising a family. A health scare in 2022 made me re-evaluate my life and I decided to revisit one of my teenage loves, radio. I used to listen on an old WW2 valve set covering 1-15 MHz and my first touch point with amateur radio was finding the local club's top band AM net chaired by the very G2 mentioned earlier. It was this love of radio and



electronics that set me on a path to chartered electronics engineer too.

On return to radio, I initially dabbled with VHF/UHF as I had great fun in the 80s chasing WAB and enjoying autumn tropospheric ducts with a 9 element Yagi but the bands are virtually dead. I played with DMR (too many competing digital standards), SSB and even FT8 (yuk) but finally ended up dusting off the old Kent straight key; the very same one that in the 80s I used to spend evenings pounding away keying a TS-530SP.

Discovering that my CW was rusty (understatement), I blagged my way onto a CWops intermediate course, Jan/Feb 23, which got me back into daily CW QSOs. Once I had a logbook full of QSOs, I followed that with the advanced course recently. I am indebted to Bob WR7Q and Enzo MØKTZ respectively for putting up with me on those courses and their excellent guidance. Those courses also opened up new friendships with fellow students for which I am also grateful.

When I am not abusing the CW paddle you can find me in the dojo teaching Shotokan Karate. My QTH is now on the edge of the New Forest some miles north of the historic town of Christchurch (not NZ) where I live with my long suffering XYL, Yolanda and numerous cats and chickens; my two offspring having long left the nest. I still work but have been trying and failing to retire for the past 5 years.

I look forward to working many other members, particularly in QTX.

## Jack Preston, KC3M CWops #3099

First, I'd like to thank Hank (W6SX) for nominating me and my sponsors for their support. I'm honored to join CWops, and I apologize for the delay in sharing my bio.

Ham radio is a remarkable hobby—not just for the technology but for the connections it fosters. Though many of us may never meet face-to-face or even "talk" traditionally, we build lifelong



friendships and make positive impacts on one another. Amateur radio has deeply enriched my life, and I'm grateful for it.

My journey into ham radio began with my uncle Chester Zay (K3HHA) in Wilkes-Barre, PA. He introduced me to the hobby with a 6-meter "goony box" and a coathanger antenna, and we soon visited a surplus store to pick up an ARC-5 transmitter and a tank receiver. Back home in Scotia, NY, I joined a school radio club in 1961, taught by social studies teacher Bill Schwarting (WA2AHC). After earning my Novice license, I started transmitting using a wire-wrapped cardboard box antenna and a homemade key made from putty knives "borrowed" from my dad.



In high school, I upgraded my gear, moving through a DX-20, DX-40, Eico 720, and my dream set-up—a Harvey Wells TBS-50C paired with a Hallicrafters SX-101A. By then, I had my Technician license, built 6- and 2-meter beams, and continued experimenting with electronics. My dad brought home old TVs from a repair shop, which I repaired and sold for pocket money. At 15, I landed a job at an electronics repair shop in Albany, a skill I carried through college.

I passed my General, Advanced, and 1st Class Commercial licenses (with CW endorsement) before graduating high school but failed the Extra exam after six exhausting hours in front of an FCC examiner in Schenectady, NY.

During college, I stayed active in ham radio, earned a degree in electrical engineering, and started a career with a Pennsylvania utility. Between raising two daughters and working in operations, I remained passionate about the hobby, particularly contesting and DXing. Encouraged by my coworker Bud Thomas, I earned my Extra Class license in the 1980s.

After nearly 40 years in the energy industry, I retired in 2019 from senior management. Along the way, I pursued other interests, including coaching tennis and soccer, mentoring youth in Odyssey of the Mind, wildlife photography, and traveling the world with my wife. We're proud grandparents to seven wonderful grandchildren, who bring us endless joy.

In retirement, ham radio remains a favorite pastime, along with reading. Although I've downsized to a stealthy 132-foot end-fed wire in my HOA-restricted neighborhood, my Ten-Tec Orion II keeps me active on the air. I'm grateful to CWops for helping me sharpen my CW skills and for the camaraderie of its members.

Thank you all for welcoming me to this outstanding community.



# Warren King, ZS6WAR CWops #3647

I obtained my amateur radio license for one reason and one reason only: CW. Morse code has always intrigued me, feeling like a form of secret communication that few are capable of decoding. Determined to join this mythical group of operators—sending and receiving messages across oceans that only a handful of people can copy—I began learning CW as soon as I scheduled my licensing exam.

Three months after getting my license in May of 2023 (and endless practice), I made my first CW QSO at 20 wpm. 35 QSO's later on the 23rd of August 2023 I caught OM JIM (N3JT) on 12 m, where he encouraged me to work towards joining CWops. Fast forward just over a



year, daily practice, and 1439 CW QSO's later, I was comfortably having ragchews at 27 wpm. After having another lovely QSO with OM Joel (F5VV), he was kind enough to nominate me for the honorable membership OM Jim (N3JT) urged me to chase just over a year ago.

Born in 1985, I've had several occupations, most memorable having my commercial pilot's license and being an instructor pilot. I have however come to my senses and thus received my degree in Theology, currently serving as an Afrikaans Reformed Baptist minister in the small town of Secunda, South Africa.

Many thanks to OM Jim (N3JT) for the encouragement to pursue membership, OM Joel (F5VV) for his nomination, my sponsors, as well as all the members for having me join this prestigious club.

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