

CW Open Results



Trophies, plaques, team rankings. Find out where you placed starting on page 24.

President's Message

It has been a busy month for the Board of CWops. It began with a proposed minor edit to the Bylaw relating to membership and led to a full review of our complete Bylaws. These were written down by the core group responsible for



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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, [GW0ETF](#)
Vice President: Peter Butler, [W1UU](#)
Secretary: Jim Talens, [N3JT](#)
Treasurer: Craig Thompson, [K9CT](#)
Director: Theo Mastakas, [SV2BBK](#)
Director: Raoul Coetzee, [ZS1C](#)
Director: Matt Frey, [CE2LR](#)
Director: Bert Banlier, [F6HKA](#)
Director: Barry Simpson, [VK2BJ](#)
Director: Riki Kline, [K7NJ](#)
Director: Ken Tanuma, [JN1THL](#)
WebGeek: Dan Romanchik [KB6NU](#)
Newsletter Editor: Dick Strassburger, [N9EEE](#)

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setting up CWops at the back end of 2009, easily identified by their single digit membership numbers! Since then CWops has grown and developed but the Bylaws *in toto* have never been closely scrutinised to ensure they are all still relevant and accurately describe and support what we do now. Our Secretary N3JT spent some considerable time going through each one and bouncing emails around the Board with suggested changes for discussion until a consensus was reached. The results are being put out to the whole membership for approval.

The board also considered some budgetary issues. The sole source of finance for the club is membership dues if we ignore occasional small donations. These can be paid in three ways – annually (\$12), every 5 years (\$50) or one lifetime payment of \$100. Paying just once for life clearly eases the load on those volunteers overseeing the dues payment process but these monies and the \$50 five yearly payments end up in various investment funds and provide the financial bed-rock for the club into the future. Annual payers provide a convenient source of ‘cash in hand’ for immediate needs but inevitably keeping the club’s finances in a good state is something of a balancing act hinging on annual income from new members, performance of investments and our spending strategy. K9CT our treasurer was clear when he expressed concerns about whether we are fiscally sound going into the future and recommended among other things a modest increase in the dues to \$15 per year, \$60 for 5 years and \$125 for Life Membership. The Board understood and agreed.

It’s an unfortunate fact of life that our long term finances are to a large extent at the mercy of interest rates and stock market variations and now seems a sensible time to be prudent. In addition new memberships have been slowing recently but could of course pick up in the future. There are certainly many competent CW ops out there who would be delighted to join our ranks if we could only find and invite them. Rest assured however financial interests will never be the main driving force behind expanding our membership! Relating value or worth to the dues we all pay has already been an early topic for our new Membership Committee. A couple of minutes on Google (and with apologies to the teetotallers in our ranks!) suggests \$12 will barely buy 3 beers in a pub or bar in the richer parts of the world where most of us live, and you’ll be scouring the cheap drink stores for a \$3 beer which is the equivalent of the proposed annual increase. Collectively sacrificing a cheap beer a year seems to me to be an easy way to keep CWops healthy and in a fit state to continue at the forefront of nurturing and expanding CW. And it will do wonders for your liver.

This leads rather neatly into a brief rundown of some of the activities making the headlines this month. Firstly the results of the CW Open appear later in this edition of Solid Copy. Congratulations to all the winners and a big ‘shout-out’ to all those many ops who made their elevation to top positions possible simply by being there and on the air. Adjudicating such a unique contest must be quite a task so well done to Bruce N1LN and his helpers for a great job again. Secondly another CW Academy semester is behind us and another group of enthusiastic graduates is ready to take the next steps in their CW journey. A big thank you as ever to the small army of dedicated Advisors who have spent the previous 8 weeks putting into practice one of the core aims of CWops – to nurture and expand the use of CW on our bands. Don’t think it is now a 2 month holiday for the team either; this is the time for tackling issues, improving systems and organising sign-ups for January. The fact that the Academy is so successful has much to do with the

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continuing hard work and dedication of a relatively small organising team preparing the ground for the many advisors to kick off a new semester. Everyone involved in the CW Academy does a great job!

I'll leave you now to enjoy another great edition of Solid Copy. Time for that beer...

73, Stew GWØETF, President (CWops #919)

Announcement of Dues Increase

CWops dues will increase beginning January 1, 2023. Our Treasurer, K9CT, has advised us that the financial integrity of our club requires that we make this change. The CWops Board (4 officers and 7 directors) has discussed it and approved the increase (10 in favor, 1 unavailable to vote), as required under Section 1A.8 of our Bylaws. Note that there have been no dues increases in 13 years, since the club was formed in 2009. The new dues will be **\$15/year, \$60 for 5 years; and \$125 for life membership**.

Many clubs' dues are in the \$35/year range, so this is still quite a bargain. Considering what we do for CW through the CW Academy, supporting CW in contests and QSO parties, producing a fabulous publication (Solid Copy), the increase is quite modest. These changes will be effective on our DUES page beginning January 1, 2023.

If you are not already a life member (or even a 5-year member), this might be a good time to think about upgrading.

The CWops Board

From the Editor

Monkey Shines



ZB2GI's 10m beam attacked by Rock Apes (Rock of Gibraltar)

Jim, N3JT forwarded this picture to me from Ernest, ZB2FK, and said "whaddya think?"

Oh, there are so many captions one could come up with:

Is this what they mean by a taitwister?

Quit your monkeying around and plug that coax back in.

Ok, when he hits the red button, scream.

He'll never know we turned the antenna.

The guys climbing WSM get paid 10x more than we do. Let's start a union.

Jobo and Coco were having more fun than a barrel of monkeys.

73, Dick N9EEE

Editor, (CWops #3113)

SolidCopy@CWops.org

SC

Ellen White, W1YL (SK)

Ellen White, W1YL, of Brandon, Florida, passed away on Sunday, November 6, 2022. She was 95. White became a radio amateur in 1946 and devoted over 75 years of her life to ham radio, including more than 25 years on the headquarters staff for ARRL The National Association for Amateur Radio®. She retired in 1978 as Deputy Communications Manager and became the editor of the column "How's DX?" for ARRL's membership journal, *QST*. Ellen joined the FOC (First Class Operators Club) in 1966 and was a co-founder of the Florida Contest Group. For more about Ellen White, read this [ARRL news story](#) and tribute from [Florida Contest Group](#).

Board of Directors Elections

Report of the nominating committee:

Since the nominating committee received no other nominations than the incumbents who are seeking re-election the following are considered elected for 2023:

President : Stew, GW0ETF

Directors: Riki, K7NJ and Theo, SV2BBK

Secretary: Jim Talens, N3JT

Submitted by Don Greenbaum, N1DG Chairman of the Nominating Committee

SC

News and Notes

[Duncan \(Mac\) Fiskén, G3WZD](#)

Bob, K4RB #236 It was reported that Bob had hip surgery on 15th October. (*N&N Editor's Comment; wishing you a speedy recovery, Bob!*)

Tito, ZB2FK #3244 Some pictures from then and now.



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Radio in the 70s & 80s



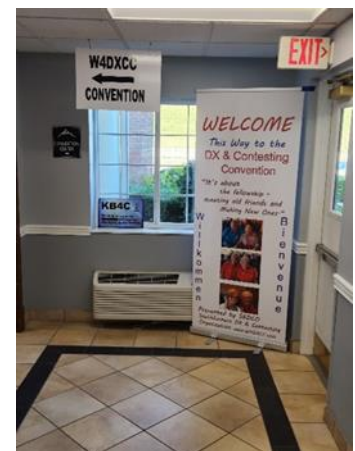
My Honda DR300 in the 60s

Stew, GW0ETF (GW4J in CQ WW) #919 The last weekend of October I crossed the line and played around on 10m phone in CQWW DX. I had my 'Extra Information' window in DXlog loaded up with the CWops member list and quickly saw I was not alone! No, I don't need a visit to the psychiatrist, but it was a lot of fun and very cool hearing voices from all those CWops members.... :-)

Bill, AJ8B #1567 The W4DXCC convention sponsored by the South East DX and Contesting club (SEDCO) was held in Sevierville, TN on September 23rd and 24th.

CWOPS was well represented with several members presenting including Glenn Johnson, W0GJ, Jay Slough, K4ZLE, and Bill Salyers, AJ8B.

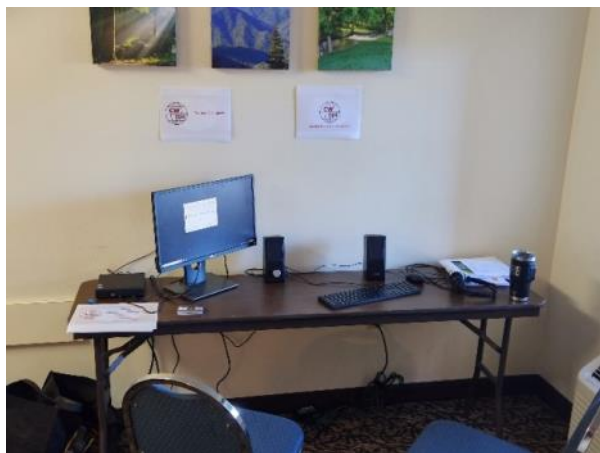
There was a CWOPS information booth as well as the customary RufzXP contest. I thought I was doing well at 41 WPM until late in the day on Saturday when Randy, W8FN, dropped 46 WPM on me! Oh well, I will have to practice and participate in the CWTs more!



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We also answered many questions and handed out about a dozen informational flyers.



CWops Booth & RufzXP station



Top contestant, Randy W8FN

Rich, K1DJ #1556 In the midst of a 10-day visit with my daughter (inactive N1GNE) and her Very Active just-turned-5-year-old twin daughters in Herne Bay, Kent, England (JO01ni), I enjoyed a few hours of CW on the CWTs!

My station, shown in the attached photos, consisted of my KX3 with its attached key paddles, running 15W into an end-fed “multi-band” wire antenna (which currently provides a nice low SWR on 20M, acceptable SWR on 10M, and awful SWR on 40M). Fortunately, the KX3’s tuner will tune just about anything. The wire can be seen in the attached photo, if you look closely, running from the little black box at the lower left corner of my window out to a little shed at the back of the garden of the home where I was staying with a close family friend.

I tried the set-up first in the 1300 MST on Monday, October 24. I was able to work two of the few stations I could hear on 20M, including one of my favorite CWT regulars, Ivo 9A1AA. On Wednesday, October 26, I managed to get back to the radio in time for 1300 CWT (then at 1400 British Summer Time). In addition to 10 Q’s with EU stations on 20M, I was happily surprised to work 5 US stations on 10M, and another 6 in NA and EU on 15M. The 1900 (2000 BST) session was less successful (although from reports on the CWops reflector it was a great session in the USA). I managed a total of 6 QSOs in an hour of trying to make myself heard.

But Thursday October 27’s 0700 session more than made up for that! For one thing, in the UK it was at a very civilized 0800 BST, in contrast with the usual-for-me 0300 EST where I have to rely on my little cat to wake me up in time to do it. Over the hour, I worked 6 stations on 40M (thanks to the KX3’s tuner) including two of my British “neighbours” Phil G4LPP and Mac G3WZD, who actually responded to my CQs, and then 12 stations on 20M, 11 in EU plus Allan VK2GR, about 10,000 miles away! The 0700 session was also my 120th creditable CWT in 2022, enough for the gold medal!

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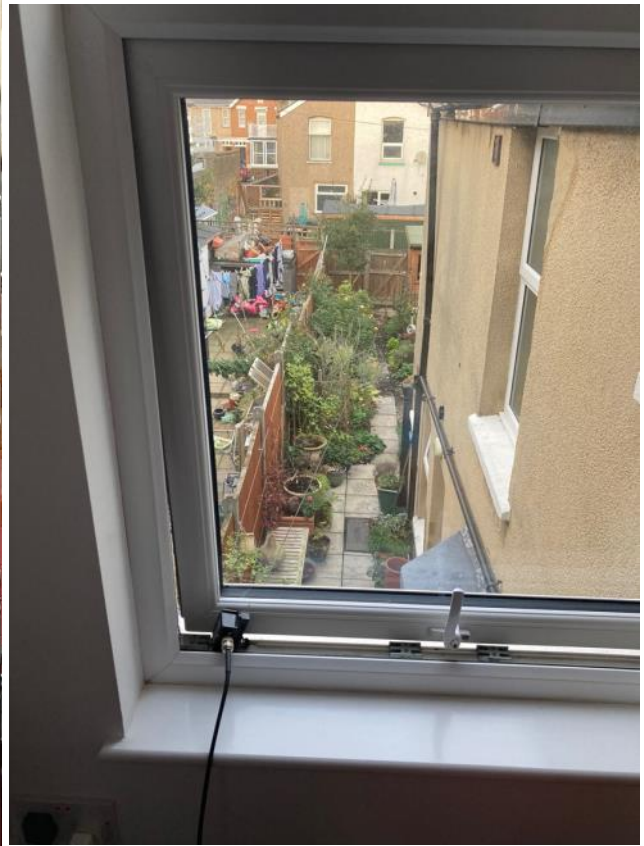
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Lessons learned: Don't wait until the last minute to start trimming and tuning your portable antenna. Practice in advance logging a CWT in real time on an iPad balanced on your lap. CWTs are harder keyed manually with non-standard paddles and without any call history file. But doing everything in a different way with different equipment adds to the challenge!

Thanks all for the QSOs, and thanks to the UK and EU for allowing me to drop in!



KX3 at M/K1DJ



Antenna at M/K1DJ

Theo, SV2BBK #1976 Most of you may be aware of The International CW Council, of which CWops is a contributing club, and the club's activities including the weekly Medium Speed Test (MST) each Monday at 1300-1400z and 1900-2000z plus 0300-0400z on Tuesdays. What you may not know is that there is a new on-going monthly activity supported by ICWC called Top9 for those not active in contesting.



Any 5-minute minimum QSO at the Top 9 kHz of the CW-only bands, at any time counts as 1 point. For every additional 5 minutes 1 point more. Participants declare their monthly scores on the ICWC website.

For more information you can visit ICWC [Top9 Activity](#)

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webpage. Results can be seen [here](#) and you can submit your Top9 QSOs [here](#) (note that you must submit your score by the 9th of each month.)

The activity encourages you to make CW QSOs of minimum 5 minutes duration and in the upper 9khz of the CW bands. By using the Top 9 KHZ of each CW band, we will have a better chance to preserve them by showing activity there. What counts is your presence, the many CWops QTX and MQTX program participants may consider working more on the upper 9Khz of the CW bands and submit their scores to ICWC website. With your active participation, you are showing your love of CW and that you support the efforts of ICWC and its member clubs to keep CW alive.

Jim, N3JT #1 Jim has returned to Boynton Beach, Florida, for the winter but plans on using his Virginia station remotely. He also has an R9 vertical and K4D with KPA500 at the ready in Florida, just in case.

Jenna, N4JEH #3203 For my 18th birthday this October, I received a Vibroplex bug from my dad. The bug is a Vibroplex Original Standard from 1969, and I am quite pleased to add it to my CW toy box. It has kept my mind and fist busy this last month, reaching to master this very interesting type of key! I have enjoyed this gift very much and hope to master it soon! All the things that you can learn and play with in CW has never failed to interest and amaze me! There is hope for the future of CW!



Tom, DF7TV #2613 Recently I became aware of an outstanding app for Android phones to train head-copy of Morse Code:

The author of [Ditto CW Player, WB1LLY, Billy Francisco](#) is still further developing this app and open-minded for additional features or modifications. Due to the use of a raised cosine shape for code elements with settable rise and fall times, the app provides a very pleasing sound. The app includes the ability to have repeats with settable pauses and a speech output of the word(s) just sent. A rich repository of exercise files is built into the app and additional user-supplied text-files for training may be added via its menu.

Armin, DK9PY #2062 I will be QRV in the CQWW from Jamaica and will sign as 6Y6N (not BY6N ha ha). I will be there from 23rd to 30th November and again from 7th to 14th December. From 30th November to 7th December I'll be W4/DK9PY.

I will use the FT857 with 100 Watts and an end fed wire. Hopefully I can get it to a decent height.

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Peter, W1UU #91 I found a great opportunity to buy a house in Portugal. It is in a small town called Casaia Martanes about a 1 hour drive (fast!) north of Lisbon. The area is in the beginning region of the mountains called the Ribetejo.

I prepared for this trip by bringing my G90 QRP station along with an EFHW antenna 80-10 meters and slung the antenna over olive trees on the property (they were being harvested) so I had to be careful. It must have been the olive oil that made the antenna effective!

I love the CWTs and "compete" in the QRP category, and have not missed many opportunities to do so! So this was a great opportunity to hear the CWT activity both in Portugal, and to hear the results of propagation! What fun! I also had the opportunity to hear USA stations and work them, how tough!

While every CWops QSO made from Portugal, the best one to date, among many, was EA2AJB, a CWops and FOC member who looked up my call on the database and found that my home was in Cape Cod. He also told me that he was involved the Chatham, MA WCC station from his ship-board experience with the Portuguese NAVY! Better yet, I told him I was wearing a hat with the LOGO of the Chatham Station!

While my wife and I have been busy with the house we are buying, it has a useful land area of 62x65 meters, enough for the EFHW antenna! But there is also another set of good news! I now have a fiber connection from MEO, one of two Internet providers here in Portugal, and I am pleased with a 650/600 Mbps circuit! I have been adding video cameras so I can monitor both the inside/outside of the house as we make home changes to meet our needs! Building and modifying houses require a time of patience! Oh yes! I am retired now!

I also sent information to ANACOM, the FCC equivalent of Amateur Radio licensing, and I was assigned the call of CT7/W1UU, just like others who have come to Portugal. I wish to thank CT1EEB who has helped me with the process. Eventually, I will have a unique CT-call when the time comes. Best of all, my wife and I are enjoying being with her family connections here in her father's home town, and I am timidly gaining more conversational Portuguese that I learned at UMASS-Southern Massachusetts, a relatively large area of Portuguese population.

Life is good! Obrigado para todas!

Duncan, G3WZD #1979 CWops had a stand (this time with power!) in the Special Interest Group (SIG) area of the [RSGB 2022 Convention](#), held from 7th to 9th October at Kents Hill Park, Milton Keynes. I had been repeatedly emailing the organisers asking for space so I guess they just got fed up with my badgering and agreed to request.

Stew GW0ETF/GW4J #919 and I were the primary stand managers, but we were very grateful for the assistance of Dave G3WGN/M6O #482, John G4IRN #268 and Angel M0HDF/M8A #2862.

CWops was well represented at the event and the following members also signed our visitor's register: Ray G3XLG #1365, Roger G3LDI #1843, Don G3XTT #1874, Jim G3YLA #2015, Mike G4DYC #2116, Paul G4PVM #2413, Chris GM3WOJ #2436, Ed M0TZX #2462, Mike G4IZZ/M4N #2511, Mui M0MUI #2855 and Dean G4WQI/M5D #3078 (Dean was Chairman of [Essex CW Club](#)

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in 2020 when the Club was a recipient of the CWops Award for Advancing the Art of CW).

The stand attracted a good amount of interest from non-members, including several potential CW Academy students, and we handed out a number of CWops information flyers. Stew had a laptop to run RufzXP, but even with headphones, the ambient noise in the crowded SIG room ruled out any serious use.

Stew and I were interviewed by the RSGB on Sunday morning which was live streamed over the [RSGB YouTube channel](#)

My role as CWops CW Ambassador for NW Europe resulted in the offer of a speaking slot in one of the four concurrent lecture streams (many thanks to RadCom technical editor Ed M0TZX #2462 for facilitating that). Although it was the final slot on Sunday afternoon, and there were two other lectures competing for attendees, especially the ever-popular talk on propagation by former BBC weather forecaster and senior meteorologist Jim G3YLA #2015, my talk was well attended with around thirty in the audience.

I presented on CWops in general but focussed especially on CW Academy; the presentation was well received and followed by a good Q&A. Recalling the phrase "The proof of the pudding is in the eating", two attendees came up to me afterwards and said they had signed up on-line for CWA classes during my talk; job done!



L to R: Angel M0HDF #2862 & Don G3XTT #1874



L to R Paul G4PVM #2413, John G4IRN #268 & Stew GW0ETF #919

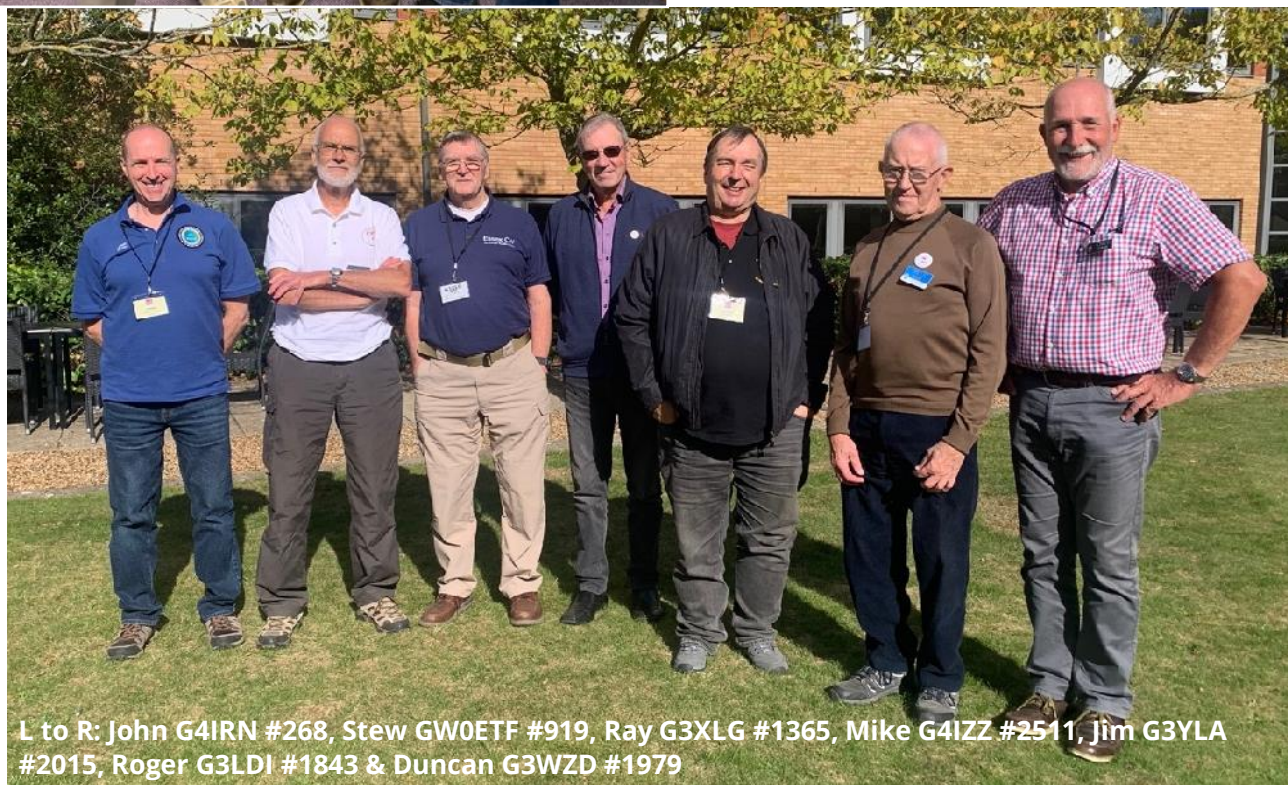
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**A Trio of G3Ws - L to R: Dave G3WGN #482,
Duncan G3WZD #1979 & John G3WGV**

Mui M0MUI #2855



**L to R: John G4IRN #268, Stew GW0ETF #919, Ray G3XLG #1365, Mike G4IZZ #2511, Jim G3YLA
#2015, Roger G3LDI #1843 & Duncan G3WZD #1979**

73, Duncan, G3WZD (CWops #1979)

How We Were

[Hank Garretson, W6SX](#)

N2GG, Gil Gray, CWops # 2705



"Going through some old photos I found this photo of my first radio station. I built it from a kit. I lived with my parents in South Gate, California. The receiver was a 6SN7 twin triode. One side was a super regen receiver and the other an audio amplifier for my head phones. I drove that into a modified AM table radio to get speaker audio. Crude, but effective. The transmitter was a 6L6 final with a 6AG7 oscillator. Its estimated output was a screaming 25 Watts. After I got my General class upgrade, I built a home brew Heising modulator, with another 6L6 and 12AX7 audio amplifier. This got me on AM, crystal controlled, of course.

My first antenna was a 65' Windom (off center fed) using a single wire feed. The transmitter tank circuit tuned it pretty well, using a neon light bulb taped to the feed wire. I tuned it for maximum brightness."

I too used an NE-51 neon light bulb to tune my first transmitter. Maximum pinkness ruled.

I know there are lots of good pictures and stories out there. Then-and-now pictures particularly welcome. Please folks, send your How We Were picture(s) and story to w6sx@arrl.net. Note—We doesn't have to be ancient history. If you were first licensed five years ago, send me your Were picture.

CW Exuberantly,

73, Hank W6SX (CWops #61)

Bylaws Amendment

CWops Members –

It has been some 11 years since we first drafted our club Bylaws. During that time we have made some minor adjustments, such as changing the number of Directors from 5 to 7. But it is now time to bring all the Bylaws up to date. Among other things, your Board agrees that changing the membership proficiency requirement from an English conversation standard to a more subjective standard that relies on the judgments of the nominator and sponsors makes more sense. Other changes in the Bylaws appear below. For each proposal you will see the original rule, the proposed changes and the reasons for the changes. Following a number of discussions, your Board has voted in favor of all of these changes. By Section VII of our Articles of Incorporation, we need to bring these proposals before the membership for a vote. The outcome will be decided by the majority of those voting. Distribution of this message is by email to all members (as well as publication in *Solid Copy*). **Here is the link for voting (and please do vote, by November 30):**

[EmailMe Form - Bylaw vote](#)

Thank you.

Jim Talens, N3JT

Secretary, CWops

Proposals:

Section 1.A.1 currently reads as follows, with language at issue emphasized:

A candidate for membership must be nominated by at least four current members within a period of five months of initial publication of nomination. The candidate is called a nominee. Members who support the nominee are called sponsors. **A nominee must be a licensed Amateur Radio operator, capable of sending and receiving International Morse Code (CW) at no less than 25 words per minute and should be capable of carrying on a conversation in English using CW.**

Proposed new language, changes in bold print:

A candidate for membership must be nominated by at least four current members within a period of five months of initial publication of nomination. The candidate is called a nominee. Members who support the nominee are called sponsors. **A nominee must be a licensed Amateur Radio operator, capable in the assessment of the nominator and sponsors of sending and receiving International Morse Code (CW) at a rate of at least 25 words per minute.**

Reason: The original language followed another club's standards as we hastened to establish rules for a new club. But English is not and should not be a requirement for demonstrating CW proficiency. Also, because such proficiency can be demonstrated in contests, QSO parties, DXing,

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etc., in addition to ragchewing – and because CWops supports all those activities – the notion of “carrying on a conversation” is simply inappropriate as a criterion for membership. If a member judges a candidate to be capable of 25 wpm there should be no further test. That is what the new language assures. If a sponsor thinks demonstration in a conversation is necessary, fine. If a sponsor thinks a guy running 25+ wpm in a contest for hours on end demonstrates proficiency, fine. Our club was created to be inclusive. If you are good at 25 wpm in the judgment of 4 members, you’re in! The “in the assessment of” language may seem unnecessary but its inclusion emphasizes the responsibility of sponsors to make the judgment regarding proficiency at 25 wpm.

Recommendation: Adopt the proposed change.

Section 1.A.2 currently reads as follows:

All sponsoring members must submit their support using the online forms on the Members Only page of the CWops website. The first sponsor, i.e., the member who first nominates a person for membership, must complete the Nomination Form. Subsequent sponsors, i.e., those who support the nomination, must complete the Sponsor Form. All sponsors must indicate that they have had CW radio contact with the nominee on at least two occasions within the previous 12 months.

Proposed new language, changes in bold print:

All sponsoring members must submit their support using the online forms on the Members Only page of the CWops website. The first sponsor, i.e., the member who first nominates a person for membership, **the nominator**, must complete the Nomination Form. Subsequent sponsors, i.e., those who support the nomination, must complete the Sponsor Form. All sponsors, **including the nominator**, must have had CW radio contact with the nominee on at least two occasions within the previous 12 months. **The nominator must secure the consent of the candidate before submitting the nomination form.**

Reason: There is no need to “indicate” in the nomination form that the required 2 contacts have been made. This is the rule and members are trusted to comply with it. Requiring it to be stated in the form is unnecessary and few if any do it. Next, the nomination form contains the question regarding whether the nominator has gotten the consent of the candidate. That requirement should appear in the Bylaws, too. Finally, addition of “the nominator” is a clerical clarification, with deletion of “indicate that they.”

Recommendation: Adopt the proposed changes.

Section 1.A.4 currently reads as follows:

Provided the Secretary has received no objections after a member has sufficient sponsors on the published nomination list, the nominee shall be invited by the Secretary to join the Club.

Proposed new language, changes in bold print:

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Provided the Secretary has received no objections after a **nominee has appeared on the Status Page of the club's website and has received a total of at least 4 sponsors (including the nominator)**, the nominee shall be invited by the Secretary to join the Club.

Reason: "Member" is incorrect in the first line. It should be "nominee." Also, in order to act on any objection, that objection must be submitted after the nominee's call sign appears on the Status Page but before the 4th sponsor (nominator plus 3 sponsors) is received. This usually affords considerable and adequate time, but not always. Question: If 4 sponsors appear immediately how does anyone have a chance to object? First, we have had no formal objections in 11 years. Some years ago, there was some kerfuffle over a nominee but that resolved itself. To create a process that involves a QRX list like FOC is too burdensome given the low likelihood of any objection. If somebody is a problem during the invitation process, he is likely going to be a problem later and can be expelled. Besides, even if there were some QRX period it is very unlikely many members even look at the Status Page to know to file a complaint!

Recommendation: Adopt the proposed changes.

Section 1.A.5 currently reads as follows:

Membership is effective following receipt of payment of dues and completed application. Payment of dues and submission of application serve as acknowledgement of agreement to abide by the Club's Bylaws. The Secretary shall assign members sequential membership numbers. These numbers shall not be reused for anyone other than a member who has left and rejoined the Club.

Proposed new language, changes in bold print:

Membership is effective following receipt of payment of dues and completed **registration form**. Payment of dues and submission of **the registration form** serve as acknowledgement of agreement to abide by the Club's Bylaws. The Secretary shall assign members sequential membership numbers. These numbers shall not be reused other than **by a member who rejoins the Club and wishes to use his/her earlier membership number**.

Reason: We have been using "registration form" for years now and so we should have consistency between the Bylaw and practice. The other language clarifies reissuance of a membership number.

Recommendation: Adopt the proposed changes.

Section 1.A.10 currently reads as follows:

The Board may limit the number of members in the Club.

Proposal: Delete this section. There is no reason for it. It is an artifact from another club's rules that were used to write our Bylaws in 2010.

Recommendation: Delete the section.

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Section 1.E currently reads as follows:

Internet-based Message Systems. The Club reflector or other message system will be accessible to members only. Its use will remain operative unless the moderator/owner decides, following discussion with the Internet Committee and approved by the Board, that it should be closed generally, temporarily or to some members. The moderator/owner may act immediately to protect against abuse but must then seek approval of the Internet Committee and Board.

Proposed new language:

E. Internet-based Message Systems. The Club **Listserv** (reflector) is intended to be accessible to members, CW Academy students and others deemed acceptable by the Secretary or moderator/owner. Its use will remain operative unless the Secretary or **moderator/owner**, after advising the Board, **decides** that it should be closed generally, temporarily or to some member(s). The Secretary or moderator/owner may act immediately to protect against abuse.

Reason: The correct name for it is Listserv though “reflector” is commonly used in ham radio. Also, we have an informal Internet Committee consisting of N1DG and N3JT, but there is no need for it to appear in the Bylaws. Emergency action (like to stop hot political commentary) can be taken by the Secretary or owner/moderator, advising the Board later. The Board can always overrule the decision. Finally, the Listserv has been made available to CWA students and, in some cases, to others who are interested but not members. Example: A CWA student who then does not become a member but who subscribed in the meantime to the Listserv. Nobody (least of all the current Secretary or Membership Secretary, W6TN) is capable or willing to track who is no longer a member but still is subscribed! But at the end of the day do we really care? In some sense, being open in this way brings more interest to the club. Very few non-members are subscribers. We can always unsubscribe someone for cause. We will not openly invite non-members or non-CWA students to subscribe, but if they do we really are not too concerned unless a problem develops.

Recommendation: Adopt the changes.

Section 1.F currently reads as follows:

Non-payment of Dues. A member shall be deemed no longer a member in the event dues are not paid within 30 days of the due date, which shall be January 15 of each calendar year. Such determination shall be made by the Treasurer and announced as the Secretary so decides. Reminder notices will be sent as reasonably possible after January 1. Reinstatement by July 15 may be permitted upon convincing explanation to the Treasurer, such as illness, unavailability or other compelling circumstances.

Proposed changes indicated in bold:

Non-payment of Dues. A member shall be deemed no longer a member in the event dues are not paid within 30 days of the due date. **The due date is** January 15 of each calendar year. Such determination shall be made by the **Treasurer, Membership Secretary, or Secretary** and an-

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nounced by the Membership Secretary updating the membership roster. Reminder notices will be sent as reasonably possible after January 1. Reinstatement by July 15 may be permitted upon convincing explanation to the Treasurer, such as illness, unavailability, or other compelling circumstances, **or by judgment of the Secretary.**

Reason: These changes reflect practice over the years. The Membership Secretary, W6TN, handles database issues, roster, etc.

Recommendation: Adopt the changes.

Section II currently reads as follows:

The Board from time to time may donate funds to Amateur Radio organizations that direct such funds to education purposes generally related to Amateur Radio. Such donations will be described in the Club's website. It may also develop and disseminate materials to promote interest and activity in CW for radio communications.

Proposed changes indicated in bold:

The Board from time to time may donate funds to Amateur Radio organizations that direct such funds to education **and awards related to CW or, if judged appropriate by the Board,** generally related to Amateur Radio. Such donations will be described on the Club's website. It may also develop and disseminate materials to promote interest and activity in CW for radio communications, **such as at hamfests or other gatherings.**

Reason: The focus of donations has always been primarily for CW purposes. We give money to clubs to support CW achievement awards, so that is now specified. The language identifies more accurately what we should do and what we in fact do. There may be a time when we want to donate to an Amateur Radio activity that is not specifically CW related. That is unlikely but the Board should be allowed to do that. It would require majority vote so the justification would have to be compelling.

Recommendation: Adopt the changes.

Section III.A currently reads as follows:

The President, Vice President and Secretary shall each serve for a term of two years. The Board shall appoint the Treasurer, who shall serve as the Board determines.

Proposed changes added in bold:

The President and Vice President shall each serve for a term of **three** years. The Board shall appoint the Treasurer **and Secretary**, who shall serve as the Board determines.

Reason: Two years is just too short! Both the current President and Vice president are okay with 3 years. The Secretary needn't be elected any more than the Treasurer needs to be elected.

Recommendation: Adopt the changes.

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Section III.F currently reads as follows:

The Secretary shall take and preserve official minutes of Board meetings, conduct correspondence on behalf of the Club, including that related to nominations for membership, and maintain the historical records of the Club, as well as other tasks assigned by the President.

Proposed changes indicated in bold:

The Secretary **may** take and preserve official minutes of Board meetings **if such minutes are recorded, or delegate recordation to others as appropriate**, conduct correspondence on behalf of the Club, including **messages** related to nominations for membership, **and maintain historical records of the Club**, as well as other tasks assigned by the President.

Reason: Over the years, we have not had minutes of meetings because we have always relied on email exchanges. Meeting requirements are in another section. The new wording reflects how things have been done for ten years now.

Recommendation: Adopt these changes.

Section III.G currently reads as follows:

The Treasurer shall be responsible for Club accounting, including receiving dues, issuing payments and preparing the annual budget. The Treasurer shall deposit, in the name and to the credit of, the corporation, in a bank or banking institution, all funds and monies and other valuable effects of the corporation. Such deposits shall be made without delay and shall be made so that they cannot be removed except on order signed by the Treasurer or the designated bookkeeper, if authorized by the Board. The Treasurer shall present an annual budget and accounting to the Board for approval by December 31.

Proposed changes indicated in bold:

The Treasurer shall be responsible for Club accounting, including receiving dues, issuing payments and preparing the annual budget. The Treasurer shall deposit, in the name and to the credit of the **Club**, in a bank or banking institution, all funds and monies and other valuable effects of the **Club**. Such deposits shall be made without delay and shall be made so that they cannot be removed except on order signed by the Treasurer or the designated bookkeeper, if authorized by the Board. The Treasurer shall present an annual budget and accounting to the Board for approval by December 31. **The Treasurer, Secretary and others under the Treasurer's delegated authority may use PayPal or other electronic payment systems to pay Club expenses.**

Reason: It is a corporation for purposes of state and federal regulation, but for all other purposes it's a club. So capitalizing Club everywhere says that we are incorporated as a club. References throughout the Bylaws is to the Club. Also, we have been using PayPal for years now so it should be reflected in this rule. For example, K6RB pays for medallions and others pay for other expenses using the club's PayPal account. The recommended language changes legitimize these sorts of transactions. "Or other electronic payments systems" is added to allow other payment meth-

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ods in the future, but the specific reference to PayPal remains because it is so prominent in the dues payment instructions on our website.

Recommendation: Adopt the changes.

Section III.K currently reads as follows:

The Nominating Committee shall be appointed in September by the President in consultation with the Board and it shall offer the slate of officers and other Board candidates with sufficient advance notice to permit participation by members. Candidates may be proposed by members. The Nominating Committee shall include any candidate proposed by ten or more members.

Proposed changes indicated in bold:

The Nominating Committee shall be appointed in September by the President in consultation with the Board. **It shall prepare a slate of candidates for officers and directors up for election under Section III.N of the Bylaws. The Nominating Committee shall send an announcement containing the slate of candidates via the club Listserv and/or an email to all members. Candidates may be nominated by informal or formal means at any time preceding the announcement. If a candidate wishing to run for such office does not appear on the slate of candidates, he or she may submit his or her candidacy by email to the Nominating Committee Chair showing support of 5 current club members. Such submission must be received within 14 days of the Nominating Committee's slate of candidates announcement. In the event an incumbent wish to run again and there is no challenger, or if there is a candidate with no challenger, the Nominating Committee may declare the election results without ballots. Otherwise, electronic voting will be conducted by the Nominating Committee Chair with sufficient notice for members to vote, in any event no later than November 30. Such voting may include other issues requiring membership approval, such as but not limited to Bylaw changes. The Board reserves the right to reject a candidate for good cause shown.**

Reason: This section is long overdue for updating. The proposed language should reflect the current needs and procedures. However, included is a change from 10 to 5 supporters should a member wish to petition for inclusion on the slate. 10 is quite burdensome.

Recommendation: Adopt the changes.

Section III.L reads as follows:

Insofar as practical, Directors and Officers are to be chosen from different continents as follows: There shall be one Director from North America, one from Europe, and one from South America, Africa, Asia, or Oceania. Officers shall be chosen from at least two continents.

Proposed language changes in bold:

Insofar as practical, Directors and Offices are to be chosen from different continents as follows: There **should** be one Director from North America, one from Europe, **one** from South America,

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one from Africa, **one** from Asia, and **one** from Oceania. Officers **should** be chosen from at least two continents.

Reason: The rule says “insofar as practical.” That means we can deviate as necessary, and of course 2 from anywhere is allowed though not preferred. There are 6 continents (and 7 directors) and we did not want to say 2 directors from any specific continent. If nobody from Oceania comes forward, we can have another from Asia, with the 7th from anywhere. Hence, there are 2 from Europe now. The six listed are the minimum “insofar as practical.” Accordingly, we can correctly make the minor adjustment of using “should” instead of “shall be.” The cadence of the sentence has also been changed to make things clearer when read.

Recommendation: Adopt the changes.

Section IV.A reads as follows:

The Board shall convene an annual general meeting in May. It may utilize electronic or other means to convene that meeting, and it may conduct other such meetings as it deems necessary and appropriate.

Proposed language changes in bold:

The Board **may** convene periodic **meetings at least annually**. It may utilize electronic or other means, **such as email**, to convene **such meetings, and it may convene meetings informally, such as at a hamfest or weekend event. A summary of important decisions decided at any such meeting shall be issued on the Club reflector or Listserv, or published in Solid Copy.**

Reason: We do not have formal meetings. Anything we do is accomplished by email exchanges, but we are required to hold annual meetings. So, we can call the gathering at Dayton Hamvention a meeting, at the DC event, etc. This is a way to assure compliance. **Changed “general annual meeting” to “informal meetings.” We may be obligated by IRS or Virginia rules to hold meetings annually or otherwise, and this change covers us. I have included Solid Copy as a means of publication, in addition to the reflector/Listserv.**

Recommendation: Adopt the changes.

Section IV.B reads as follows:

The Board shall meet quarterly, electronically or by other means, on or about January 10, April 10, July 10 and October 10, to discuss matters of Club concern. Special meetings may be scheduled, as the Board requires.

Proposed language changes in bold:

The Board shall **conduct meetings to discuss club issues using email through the Board’s Listserv, or by Zoom, Skype or other electronic means.**

Reason: We have never done periodic formal Board meetings. This eliminates the unnecessary reference to periodic meetings and reflects how we conduct business, which is by our [cwops-](#)

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board@groups.io Listserv.

Recommendation: Adopt the changes.

Section IV.C reads as follows:

The President shall preside at all meetings of the Board and shall conduct the same according to the rules adopted. The previous President may attend Board meetings and act in an ex-officio, non-voting capacity.

Proposed language changes in bold:

Board meetings may be conducted by electronic means, including but not limited to Zoom, Skype or Board Listserv email exchanges. The President may preside at such meetings, and former officers or other members deemed instrumental to success of the meetings may attend, as the President permits. Approval at a Board meeting shall be by the majority of the voting Board.

Reason: This updates how we actually conduct Board meetings. One problem is there is no requirement for any number of Board members to attend, comment, participate. What we will therefore include is a requirement that a majority of those voting be required for approval of any issue. What is NOT included is a provision for removal of a Board member who NEVER participates. That can probably be handled elsewhere.

Recommendation: Adopt the changes.

Section IV.D reads as follows:

Text, minutes, summaries or minutes of Board meetings and general meetings, including when such meetings are conducted via email, shall be retained for a reasonable period of time and shall be made available to members by the Secretary upon request. Issues relating to particular members or candidates or other matters that the Board judges confidential shall be discussed in executive session and shall not be made public.

Proposed changes in bold:

This section should be deleted because Section IV.A eliminates the need for it.

Reason: Revised Section IV.A removes the need for this section entirely. Because IV.D was the last subsection under IV, no renumbering is necessary.

Recommendation: Adopt the change.

Section V reads as follows:

A. The Nominating Committee, which will prepare slates of Officers and Directors.

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- B. The Internet Committee, which will maintain the Club email reflector, and the members-only and public websites.
- C. The Activities Committee, which will coordinate on-air and social events.
- D. Education and Outreach Committee, which will manage matters involving educational objectives, outreach efforts and donations.
- E. Membership Committee, which handles membership processing and procedure.
- F. The UHF, VHF, QRP Committee, which handles the needs and benefits of UHF/VHF/QRP operators.

Revision of the list and language as follows:

- A. The Nominating Committee, which will prepare slates of Officers and Directors.

Other committees may be established by the Board from time to time, as permanent or temporary committees with specific objectives set forth by the Board. They will be listed on the club's website with contact information.

Reason: We don't need a list of committees in the Bylaws other than maybe the Nominating Committee. The others are either defunct already (like the UHF Committee) or can be listed on the club website WITHOUT being listed in the Bylaws.

This completes the proposed Bylaw changes.

Each CWops member will receive an email containing a link for a ballot that asks for a vote on the proposed club Bylaw changes approved by the Board.

Voting will close on November 30.

The 2022 CW Open

[Bruce Meier](#), N1LN



Sponsored by THE CW OPERATORS' CLUB

The CW Open is always held on the first weekend of September. This year it was held on September 3, 2022. CW Open Session 1 started on September 3 at 0000Z. Session 2 started at 1200Z and Session 3 started at 2000Z. This flexible session schedule and format allows participants to operate in all sessions or any combination of sessions. The winners of the trophies are selected by ITU region based on session high scores and combined scores. The plaques are also ITU region based and awarded by session for high scores in each power level; High, Low, QRP. The specific winners of the trophies and plaques can be found below for each session.

This was not the year to set new records as almost all stats for every session were lower than the two previous years. As in previous years, Region 2 had the highest log submission count, but Region 3 turned in their highest log submission counts to date of 18, 22 and 14 per session respectively. Here are a couple of high-level statistics. In 2022 we had 1,121 logs submitted compared to 1,167 in 2021 and 1,141 in 2020. In 2022 we had submissions from 525 unique call signs, compared to 532 in 2021 and 518 in 2020. Hopefully this does not show the beginning of a trend. Even with the decrease for 2022, all statistics are well above the pre-Covid years of 2018 and 2019. Perhaps some of the reductions can be attributed to the increased local and global activities and travel as Covid risks are decreased.

We would like to once again recognize and thank ICOM America for providing the beautiful trophies and plaques to the CW Open winners.

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The CW Operators Club really appreciates ICOM's continuing support of our premier operating event. Please be sure to check out ICOM at: <http://www.icomamerica.com/en/amateur/>



I hope every participant had as much fun with this year's CW Open as I did. So, let's take a look at the 2022 session results.

Session 1 - 0000Z to 0400Z

Session 1 results are based on 347 logs received, down 9 from last year with all 3 ITU Regions submitting logs. Zone 3 log submission increased to 18 and set a new record, but just missed the 100 QSO minimum for award qualification. Session 1 statistics were not spared from the overall decrease in all categories. QSO totals decreased by 1.5%, multipliers were down by 1.5%, logs were down by 2.5%, but because of the distribution overall points were up by .9% and points per log were up by 3.5%.

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

Call	Op	QSO	Mult	Score	Power	Call	Op	QSO	Mult	Score	Power
AA3B	BUD	618	358	221244	HIGH	VE6RST	MAX	324	260	84240	HIGH
K3WW	CHAS	578	341	197098	HIGH	W3FV	BARRY	343	245	84035	HIGH
N4YDU	NATE	575	341	196075	HIGH	N5TOO	VAN	345	242	83490	HIGH
N4AF	HOWIE	517	330	170610	HIGH	W2GD	JOHN	375	220	82500	HIGH
N5ZO	MARKO	499	315	157185	HIGH	N6RK	RICK	330	245	80850	HIGH
N3RD	DAVE	489	304	148656	HIGH	K6NR	DANA	333	241	80253	HIGH
W8FJ	JOHN	478	291	139098	HIGH	W3US	RUSTY	353	225	79425	HIGH
N1LN	BRUCE	461	301	138761	HIGH	VE4EA	CARY	316	242	76472	HIGH
K5OT	LARRY	454	303	137562	HIGH	AD4EB	JIM	314	241	75674	HIGH
K6RB	ROB	428	287	122836	HIGH	AA5JF	ANDY	331	227	75137	HIGH
VE3DZ	YURI	436	279	121644	HIGH	N5UM	AL	315	238	74970	HIGH
N3OC	BRIAN	418	284	118712	HIGH	W8FN	RANDY	331	226	74806	HIGH
N5OT	MARK	406	275	111650	HIGH	N4ZR	PETE	325	229	74425	HIGH
K4BAI	JOHN	412	267	110004	HIGH	N8KH	KEN	304	244	74176	HIGH
K5TU	KIM	401	274	109874	HIGH	K1EBY	FRANK	331	224	74144	HIGH
N4BP	BOB	394	277	109138	HIGH	N3AM	JOHN	320	222	71040	HIGH
K3MM	TY	391	277	108307	HIGH	AJ6V	ED	305	232	70760	HIGH
K7RL	MITCH	419	258	108102	HIGH	K3UL	BOB	305	232	70760	HIGH
KE2D	BOB	394	268	105592	HIGH	W6SX	HANK	308	229	70532	HIGH
AE6Y	ANDY	388	268	103984	HIGH	K4QPL	JIM	311	223	69353	HIGH
KR2Q	DOUG	371	280	103880	HIGH	VE5MX	TODD	283	236	66788	HIGH
W0UA	GEO	392	262	102704	HIGH	DK9PY	ARMIN	292	223	65116	HIGH
K2AV	GUY	373	269	100337	HIGH	N3JT	JIM	289	220	63580	HIGH
W4WF	CHRIS	379	264	100056	HIGH	K2LE	ANDY	279	222	61938	HIGH
K3WJV	BILL	392	255	99960	HIGH	N4CWZ	DAVE	286	216	61776	HIGH
WG3J	ERIC	371	268	99428	HIGH	K7NJ	RIKI	281	212	59572	HIGH
KR2AA	ERIC	365	271	98915	HIGH	KT5C	MIKE	269	220	59180	HIGH
N5RZ	GATOR	357	271	96747	HIGH	N4FP	WAYNE	292	202	58984	HIGH
AB0S	TIM	373	253	94369	HIGH	N6ZFO	BILL	286	197	56342	HIGH
K4RUM	MIKE	356	261	92916	HIGH	OL8R	PETR	264	208	54912	HIGH
VE3NE	LALI	359	258	92622	HIGH	VE3EJ	JOHN	244	207	50508	HIGH
WT3K	DARYL	345	265	91425	HIGH	W3MA	JOHN	256	197	50432	HIGH
WO4O	RIC	341	261	89001	HIGH	NW3Y	CC	250	201	50250	HIGH
NOTA	JOHN	342	253	86526	HIGH	DL3DXX	MAR	225	223	50175	HIGH
K9YC	JIM	339	255	86445	HIGH	K8JQ	STEVE	241	193	46513	HIGH
N5EE	KEN	333	256	85248	HIGH	VE2FK	DUB	231	200	46200	HIGH

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Call	Op	QSO	Mult	Score	Power	Call	Op	QSO	Mult	Score	Power
WN7S	DICK	246	181	44526	HIGH	K1TH	TOM	99	91	9009	HIGH
N3QE	TIM	223	190	42370	HIGH	WE5P	BILL	105	85	8925	HIGH
N2NT	ANDY	228	179	40812	HIGH	M4N	MIKE	100	89	8900	HIGH
K3PP	GLENN	234	170	39780	HIGH	DF5EG	JOE	96	92	8832	HIGH
KQ4R	ED	221	178	39338	HIGH	G4DRS	JOHN	100	85	8500	HIGH
K6AW	STEVE	207	185	38295	HIGH	AF5J	HAL	93	86	7998	HIGH
K1DJ	RICH	235	156	36660	HIGH	K1MT	DAVID	95	80	7600	HIGH
W1UJ	JAY	200	177	35400	HIGH	W4NZ	TED	82	82	6724	HIGH
N7US	JIM	213	164	34932	HIGH	DL6KVA	AXEL	80	79	6320	HIGH
KU8E	JEFF	193	166	32038	HIGH	KB3Z	MARK	75	75	5625	HIGH
K6MM	JOHN	197	157	30929	HIGH	WB8BZK	MIKE	75	74	5550	HIGH
KOINN	TOM	183	160	29280	HIGH	OZ3SM	STEVE	83	66	5478	HIGH
W6LAX	ROGER	175	161	28175	HIGH	KC7V	MIKE	74	74	5476	HIGH
N1RO	DAVE	184	139	25576	HIGH	NS5EP	STEVE	78	69	5382	HIGH
KT4O	BEN	176	142	24992	HIGH	WB2PJH	DAVE	73	71	5183	HIGH
KI7Y	JIM	184	134	24656	HIGH	AC0E	JIM	61	56	3416	HIGH
K1RV	PI	166	148	24568	HIGH	K2YR	CARL	59	57	3363	HIGH
VA3SB	SERGE	149	149	22201	HIGH	W4ZXT	JAY	56	54	3024	HIGH
YQ6A	JOSKA	148	146	21608	HIGH	NM5G	KEITH	53	51	2703	HIGH
K3WA	BILL	156	136	21216	HIGH	K8LF	JAY	51	49	2499	HIGH
N4KH	JIM	154	134	20636	HIGH	W1KM	GREG	49	49	2401	HIGH
K5UV	MIKE	151	132	19932	HIGH	VK2GR	ALLAN	48	48	2304	HIGH
GW4J	STEW	148	120	17760	HIGH	UA6LCN	GEO	47	47	2209	HIGH
WA6URY	DAN	137	120	16440	HIGH	K1ESE	JOHN	46	46	2116	HIGH
W1RM	PETE	130	122	15860	HIGH	W0GAS	GREG	46	44	2024	HIGH
NS8O	LEE	137	112	15344	HIGH	JN1THL	KEN	45	40	1800	HIGH
AF4T	DOUG	135	113	15255	HIGH	N4QS	DAVE	42	42	1764	HIGH
K4HR	DAVY	142	103	14626	HIGH	N5KO	TREY	42	42	1764	HIGH
NT2DR	RUS	127	115	14605	HIGH	WA5LXS	DENNIS	42	41	1722	HIGH
HG1G	GUS	124	117	14508	HIGH	AC6ZM	JUAN	41	41	1681	HIGH
KT4XN	TOM	130	111	14430	HIGH	K5PI	ROB	35	35	1225	HIGH
PA3AAV	GERT	125	115	14375	HIGH	K5LY	LEE	37	33	1221	HIGH
NN4K	MAC	121	106	12826	HIGH	KF6NCX	LARRY	31	30	930	HIGH
AA3R	FRED	123	101	12423	HIGH	HA5PP	ZOLI	30	30	900	HIGH
OK1RR	MARTIN	128	97	12416	HIGH	UT5NC	JP	29	29	841	HIGH
VE3TW	STAN	129	96	12384	HIGH	SD1A	ERIC	24	21	504	HIGH
KA5M	MARSH	119	104	12376	HIGH	W7JET	BB	21	21	441	HIGH
KA7MDM	GREGG	122	100	12200	HIGH	JF1UOX	MISA	19	18	342	HIGH
NE5A	GEORGE	122	98	11956	HIGH	RL3T	AL	16	16	256	HIGH
K4WW	BO	113	103	11639	HIGH	JS2AHG	ATSU	15	15	225	HIGH
LZ3ND	NICK	106	103	10918	HIGH	LW1D	ROB	14	14	196	HIGH
K7HP	HANK	110	99	10890	HIGH	EC7K	TONY	13	13	169	HIGH
N2NC	JOHN	100	100	10000	HIGH	DL4ME	RON	13	11	143	HIGH
KB1NO	JOHN	104	96	9984	HIGH	YO3GNF	JACK	10	9	90	HIGH
W0VX	DAVE	103	93	9579	HIGH	E21EIC	CHAMP	10	7	70	HIGH
W2CDO	PETER	97	94	9118	HIGH	JH1GNU	SHIGE	7	7	49	HIGH
K0VBU	BILL	95	95	9025	HIGH	JF1UOW	MIT	5	4	20	HIGH
Call	Op	QSO	Mult	Score	Power	Call	Op	QSO	Mult	Score	Power
N4ZZ	DON	410	288	118080	LOW	K4FN	DAN	299	216	64584	LOW
K7SV	LAR	399	267	106533	LOW	N4OO	BRIAN	292	216	63072	LOW
W5TM	ED	376	252	94752	LOW	NK4O	AJ	285	217	61845	LOW
WJ9B	WILL	367	245	89915	LOW	K3JT	TERRY	274	219	60006	LOW
K9OM	DICK	340	253	86020	LOW	KY0Q	RICK	264	208	54912	LOW
WT9U	JIM	362	237	85794	LOW	KG5U	DALE	273	195	53235	LOW
KG9X	FRED	349	233	81317	LOW	K2ZR	DICK	263	199	52337	LOW
K1VUT	DAVE	334	225	75150	LOW	W0AAE	BOB	257	201	51657	LOW
W0UO	JIM	319	224	71456	LOW	N1DC	RICK	253	195	49335	LOW
W7CXX	JACK	294	227	66738	LOW	NJ3K	BRUCE	231	210	48510	LOW
N8AA	JOHN	310	214	66340	LOW	NS2N	PAUL	255	187	47685	LOW
W3KB	KEITH	320	207	66240	LOW	N4AO	JEFF	264	179	47256	LOW
K3QP	BILL	280	231	64680	LOW	N2YO	CHIP	253	184	46552	LOW

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Call	Op	QSO	Mult	Score	Power	Call	Op	QSO	Mult	Score	Power
NM5M	ERIC	231	201	46431	LOW	K1DW	DW	88	82	7216	LOW
CO8NMN	NOE	220	181	39820	LOW	VE3OMV	MARIA	86	81	6966	LOW
KV8Q	TOM	221	173	38233	LOW	G3LDI	ROGER	90	74	6660	LOW
N3CKI	DAVE	205	179	36695	LOW	EU2F	ART	86	74	6364	LOW
K1RF	STEVE	218	165	35970	LOW	K1GU	NED	78	75	5850	LOW
AA2IL	JOE	210	168	35280	LOW	W3TB	TED	75	74	5550	LOW
KG5OA	DOUG	209	168	35112	LOW	NF8M	FRANK	81	68	5508	LOW
N8NA	ED	214	154	32956	LOW	K2SX	DENNIS	73	73	5329	LOW
N2RC	MIKE	200	161	32200	LOW	SN5J	JAN	79	66	5214	LOW
KM4FO	DWIGHT	201	159	31959	LOW	W8OV	DAVE	69	68	4692	LOW
W7ZRC	ROD	196	150	29400	LOW	K5VG	JOHN	72	62	4464	LOW
N8LR	GARY	199	146	29054	LOW	K8RGI	BOB	65	60	3900	LOW
VE3TM	VLAD	188	152	28576	LOW	N4IJ	DOUG	62	60	3720	LOW
KW0J	GARY	182	156	28392	LOW	W4CMG	CATHY	61	60	3660	LOW
W6AYC	JOE	180	155	27900	LOW	NF6R	BILL	63	58	3654	LOW
K4FT	JOHN	203	137	27811	LOW	K5XU	MIKE	63	57	3591	LOW
K3PI	RUSS	162	162	26244	LOW	VE3NRT	CHRIS	56	54	3024	LOW
K3UA	PHIL	183	142	25986	LOW	K3ZGA	BOB	53	52	2756	LOW
KN7T	MARK	179	143	25597	LOW	W8EH	ERNIE	53	52	2756	LOW
W0TG	BILL	169	126	21294	LOW	F5SGI	JEAN	50	47	2350	LOW
WU6P	NIAN	154	126	19404	LOW	G3YLA	JIM	53	44	2332	LOW
NO5W	CHUCK	148	131	19388	LOW	W9NXM	GUS	48	48	2304	LOW
SP1D	ROBERT	151	127	19177	LOW	WU9D	MIKE	51	45	2295	LOW
KY4GS	AMANDA	160	117	18720	LOW	KC8J	WALT	50	45	2250	LOW
W3WHK	SAUL	144	129	18576	LOW	KB4DE	BILL	48	46	2208	LOW
WA8KAN	DAVE	140	118	16520	LOW	K16OY	LEE	48	46	2208	LOW
KD2KW	KEN	144	110	15840	LOW	K6CTA	ED	49	45	2205	LOW
K5GQ	MARK	142	110	15620	LOW	WU6X	DENNIS	44	44	1936	LOW
N2UU	BOB	137	114	15618	LOW	KE6JAC	AL	47	40	1880	LOW
N8BJQ	STEVE	144	108	15552	LOW	W1VKE	VIN	47	40	1880	LOW
WA3AAN	GRANT	126	120	15120	LOW	J1RXQ	HIRO	43	41	1763	LOW
W7IY	STU	124	117	14508	LOW	K5KXJ	CW	43	41	1763	LOW
W2LCQ	ED	131	107	14017	LOW	N4JEH	JENNA	43	39	1677	LOW
N4KS	KEN	122	114	13908	LOW	K8LBQ	BAIN	39	39	1521	LOW
NN5O	LARRY	126	110	13860	LOW	G3WRJ	DICK	39	37	1443	LOW
N5XE	CARL	127	105	13335	LOW	K0ALT	ROSE	37	37	1369	LOW
K5GA	BILL	120	110	13200	LOW	KP4JRS	JOSE	35	34	1190	LOW
W4JM	STEVE	130	100	13000	LOW	W6GMT	BROCK	35	34	1190	LOW
KP3W	JOSE	117	110	12870	LOW	VA3PM	PIERRE	35	33	1155	LOW
W6QX	STEVE	120	106	12720	LOW	WN4AFP	DAVE	34	33	1122	LOW
KG3V	TOM	115	104	11960	LOW	PA2TA	TJ	35	32	1120	LOW
AC5XK	DON	116	100	11600	LOW	EI8KW	RYAN	36	30	1080	LOW
PY4XX	CARLOS	111	94	10434	LOW	KW7WP	JAMIE	33	32	1056	LOW
W9CF	KEVIN	104	96	9984	LOW	M0RYB	PETER	34	31	1054	LOW
AA8IA	MIKE	102	96	9792	LOW	KN6IPE	DEN	33	31	1023	LOW
W4EE	JIM	101	93	9393	LOW	PY2BBQ	HILTON	33	28	924	LOW
NW0M	MITCH	99	90	8910	LOW	SM5IMODAN		31	28	868	LOW
N6DE	DEAN	94	94	8836	LOW	WE4AUB	JOHN	27	27	729	LOW
K2NV	TONY	99	88	8712	LOW	LB2WG	AL	26	26	676	LOW
9A1AA	IVO	103	84	8652	LOW	NS3L	STEVE	25	25	625	LOW
AA9WJ	JEFF	95	88	8360	LOW	KN6BAZ	ALEX	22	22	484	LOW
N7WY	BOB	103	81	8343	LOW	KB6NU	DAN	18	18	324	LOW
NC3Y	TOM	96	86	8256	LOW	N4IU	PAT	18	18	324	LOW
AE1T	PETER	98	82	8036	LOW	UR7MZ	VLAD	18	17	306	LOW
K7JQ	BOB	95	82	7790	LOW	W6DER	DEREK	15	15	225	LOW
N4NTO	TRIPP	96	81	7776	LOW	OE1TKW	HELMUT	14	14	196	LOW
W0EJ	BILL	94	81	7614	LOW	JH4FUF	IKKAN	15	12	180	LOW
K0AF	ANDY	87	87	7569	LOW	AE5MM	LOYD	13	13	169	LOW
WA9LEY	LEE	95	79	7505	LOW	K2EJ	STEVE	12	12	144	LOW
VE9BK	JOE	86	86	7396	LOW	YL2TD	GENE	12	12	144	LOW
KY4ID	MIKE	90	82	7380	LOW	KE3GK	TOM	9	9	81	LOW
KB3FW	HARV	92	79	7268	LOW	JH1PXH	AKI	6	6	36	LOW

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Call	Op	QSO	Mult	Score	Power	Call	Op	QSO	Mult	Score	Power
KF3G	SAM	6	6	36	LOW	J17OED	KAZ	5	4	20	LOW
OH5ZA	ZABA	6	6	36	LOW	KP4JFR	JOSE	4	4	16	LOW
UN7LDR	AN	6	6	36	LOW	DF1GRA	SVEN	3	3	9	LOW
JF1JDG	HIRO	7	5	35	LOW	JA4MRL	MASAG	2	2	4	LOW
RA3XCZ	VLAD	6	5	30	LOW	JA1LJW	TAD	1	1	1	LOW
JJ1VNV	AKKY	5	5	25	LOW	JK7UST	SUGI	1	1	1	LOW
KD4AN	DAN	5	5	25	LOW	JM8FEI	MIU	1	1	1	LOW
JF1EGO	KAKU	6	4	24	LOW						

Call	Op	QSO	Mult	Score	Power	Call	Op	QSO	Mult	Score	Power
N0LY	JON	200	167	33400	QRP	N4FUR	WILL	60	58	3480	QRP
N5ER	JOHN	150	134	20100	QRP	KO1H	JOHN	57	51	2907	QRP
W6JTI	FRANK	160	124	19840	QRP	NQ2W	WILL	32	31	992	QRP
W4ER	JOHN	131	117	15327	QRP	OK2NAJ	JIRI	26	26	676	QRP
N5AW	MARV	105	100	10500	QRP	K8BZ	STEVE	25	25	625	QRP
W7LG	MIKE	100	85	8500	QRP	NH6O	BOB	13	13	169	QRP
N4NM	CHUCK	97	87	8439	QRP	N9EEE	DICK	7	7	49	QRP
KJ4YM	MARK	81	68	5508	QRP	AH7RF	HEATHER	2	2	4	QRP

Session 1 Analysis:

For Region 1 High Power, Armin (DK9PY) came in first with final numbers of 292 QSOs, 232 Multipliers and a score of 65,116. Get used to reading Armin's name and scores as he won all three sessions for Region 1! Mar (DL3DXX) came in second for Region 1 with a score of 50,175. No surprise in Region 2 with Bud (AA3B) coming in first with an outstanding QSO count of 618, 358 Mults and a score of 221,244. Chas (K3WW) came in second place with a score of 197,098. There were no Region 3 submissions that attained the 100 QSO count for an award. Moving on to Low Power, the Region 1 winner was Robert (SP1D) with a QSO total of 151 and a mult total of 127 resulting in a score of 19177. As with Armin, get used to seeing Robert's name and call in the analysis as he won all 3 sessions. Ivo (9A1AA), last year's big winner, came in second posting a score of 8,652. For Region 2 Don (N4ZZ) finished first again this year with a QSO total of 410, a mult total of 288 and a score of 118,080 points. Lar (K7SV) placed second this year with a score of 10,6533. In the QRP category, Region 2 was the only region to make the 100 QSO required total with Jon (N0LY) finishing first with a QSO total of 200, mult total of 67 and a total score of 33,400.

Session 2 – 1200 to 1600Z

Session 2 results are based on 391 logs received, down by 18 from last year, with submissions from all 3 ITU Regions. The QSO totals were down by 7.2% dropping by 3,931. The multipliers also dropped by over 3,000 resulting in a 7.7% drop. When these factors are rolled together it resulted in a total point decrease of just under 100K. Even with these lower stats and the 100 QSO minimum, all three Regions qualified for the awards as you will read below.

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

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Call	Op	QSO	Mult	Score	Power
AA3B	BUD	546	341	186186	HIGH
N2IC	STEVE	557	334	186038	HIGH
K3WW	CHAS	500	335	167500	HIGH
N5RZ	GATOR	463	312	144456	HIGH
N4AF	HOWIE	460	314	144440	HIGH
N3RD	DAVE	436	303	132108	HIGH
N1LN	BRUCE	417	306	127602	HIGH
N5ZO	MARKO	452	276	124752	HIGH
K5OT	LARRY	436	283	123388	HIGH
KZ5D	ART	414	282	116748	HIGH
K3MM	TY	406	282	114492	HIGH
N5OT	MARK	397	282	111954	HIGH
W0UA	GEO	400	263	105200	HIGH
W04O	RIC	371	273	101283	HIGH
K5TU	KIM	389	255	99195	HIGH
WM6Y	PJ	361	269	97109	HIGH
AD4EB	JIM	372	260	96720	HIGH
W8FJ	JOHN	378	252	95256	HIGH
K4BAI	JOHN	374	244	91256	HIGH
W4WF	CHRIS	320	283	90560	HIGH
N4BP	BOB	348	254	88392	HIGH
K3WJV	BILL	342	252	86184	HIGH
K6AR	JIM	343	247	84721	HIGH
KT5C	MIKE	320	246	78720	HIGH
AE6Y	ANDY	325	237	77025	HIGH
N0TA	JOHN	315	242	76230	HIGH
K5KU	GARY	329	228	75012	HIGH
N4OX	JAY	320	232	74240	HIGH
WG3J	ERIC	302	241	72782	HIGH
KR2Q	DOUG	311	228	70908	HIGH
N5EE	KEN	321	219	70299	HIGH
K8IA	BOB	296	235	69560	HIGH
K7NJ	RIKI	305	228	69540	HIGH
W2GD	JOHN	319	216	68904	HIGH
WT3K	DARYL	292	233	68036	HIGH
KE2D	BOB	304	220	66880	HIGH
DK9PY	ARMIN	274	238	65212	HIGH
K7QA	TOM	287	224	64288	HIGH
K5AX	TOM	287	222	63714	HIGH
N3AM	JOHN	289	217	62713	HIGH
N4FP	WAYNE	284	219	62196	HIGH
KU8E	JEFF	292	211	61612	HIGH
AB0S	TIM	292	206	60152	HIGH
KQ4R	ED	283	207	58581	HIGH
VE3NE	LALI	272	215	58480	HIGH
AE2W	DEN	270	214	57780	HIGH
N3JT	JIM	286	198	56628	HIGH
N4ZR	PETE	267	203	54201	HIGH
W2CDO	PETER	261	201	52461	HIGH
W8FN	RANDY	256	198	50688	HIGH
W6SX	HANK	265	189	50085	HIGH
K6RB	ROB	254	195	49530	HIGH
K4RUM	MIKE	242	204	49368	HIGH
K1EBY	FRANK	243	202	49086	HIGH
VK2GR	ALLAN	226	216	48816	HIGH
N6RK	RICK	251	193	48443	HIGH
N5TOO	VAN	246	196	48216	HIGH
W3MA	JOHN	244	193	47092	HIGH
KR2AA	ERIC	237	197	46689	HIGH
W3FV	BARRY	252	185	46620	HIGH
K4WW	BO	243	187	45441	HIGH
K2LE	ANDY	229	195	44655	HIGH
KY7M	LEE	218	198	43164	HIGH

Call	Op	QSO	Mult	Score	Power
VA3SB	SERGE	222	186	41292	HIGH
VE2FK	DUB	199	199	39601	HIGH
K1DJ	RICH	221	174	38454	HIGH
N4CWZ	DAVE	207	176	36432	HIGH
K3PP	GLENN	207	174	36018	HIGH
K2SX	DENNIS	205	170	34850	HIGH
GW4J	STEW	185	176	32560	HIGH
PA3AAV	GERT	185	175	32375	HIGH
K3UL	BOB	182	175	31850	HIGH
ND8L	RAY	178	173	30794	HIGH
HG1G	GUS	185	163	30155	HIGH
VE3EJ	JOHN	181	165	29865	HIGH
WS1L	CHUCK	188	155	29140	HIGH
VE6RST	MAX	190	153	29070	HIGH
NE5A	GEORGE	195	145	28275	HIGH
M2G	JOHN	167	167	27889	HIGH
N4QS	DAVE	174	159	27666	HIGH
W0VX	DAVE	176	154	27104	HIGH
N1RO	DAVE	191	140	26740	HIGH
OZ3SM	STEVE	173	153	26469	HIGH
WN7S	DICK	181	142	25702	HIGH
K4QPL	JIM	173	147	25431	HIGH
K6AW	STEVE	165	151	24915	HIGH
K5PI	ROB	162	153	24786	HIGH
K0INN	TOM	177	138	24426	HIGH
NW3Y	CC	172	137	23564	HIGH
WA4JUK	JOE	161	138	22218	HIGH
YL2PJ	SIGI	160	136	21760	HIGH
AA3R	FRED	149	135	20115	HIGH
N3QE	TIM	151	133	20083	HIGH
WE5P	BILL	154	125	19250	HIGH
KC7V	MIKE	143	128	18304	HIGH
VE5MX	TODD	134	134	17956	HIGH
NS8O	LEE	140	126	17640	HIGH
N3CW	ED	147	113	16611	HIGH
AA5JF	ANDY	130	126	16380	HIGH
NT2DR	RUS	141	115	16215	HIGH
YQ6A	JOSKA	126	125	15750	HIGH
G4DRS	JOHN	124	116	14384	HIGH
OY1CT	CAEN	120	119	14280	HIGH
UR5ECW	ALEX	121	108	13068	HIGH
K3WA	BILL	123	106	13038	HIGH
K1ESE	JOHN	117	104	12168	HIGH
NN4K	MAC	114	105	11970	HIGH
K2NV	TONY	109	109	11881	HIGH
W2XYZ	FRANK	120	99	11880	HIGH
K2AV	GUY	112	103	11536	HIGH
VE3CT	ART	110	103	11330	HIGH
K1TH	TOM	109	102	11118	HIGH
W1RM	PETE	107	101	10807	HIGH
EC7K	TONY	103	102	10506	HIGH
K8JQ	STEVE	104	99	10296	HIGH
W4XO	LEX	106	97	10282	HIGH
M4N	MIKE	106	95	10070	HIGH
N2NT	ANDY	101	99	9999	HIGH
KT4XN	TOM	105	91	9555	HIGH
K5UV	MIKE	98	96	9408	HIGH
K1MT	DAVID	103	90	9270	HIGH
UA6LCN	GEO	95	95	9025	HIGH
KP3W	JOSE	105	83	8715	HIGH
LZ1HW	SPAS	101	86	8686	HIGH
AC6ZM	JUAN	94	90	8460	HIGH
SD1A	ERIC	98	82	8036	HIGH

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Call	Op	QSO	Mult	Score	Power	Call	Op	QSO	Mult	Score	Power
KA5M	MARSH	90	88	7920	HIGH	N5KO	TREY	33	33	1089	HIGH
VE3DZ	YURI	88	87	7656	HIGH	K2YR	CARL	32	31	992	HIGH
K1RV	PI	85	85	7225	HIGH	ACOE	JIM	32	30	960	HIGH
RM2D	MATS	85	85	7225	HIGH	K2EJ	STEVE	29	29	841	HIGH
JN1THL	KEN	89	81	7209	HIGH	KT4O	BEN	29	29	841	HIGH
AF4T	DOUG	84	73	6132	HIGH	G4UZE	CHRIS	29	27	783	HIGH
KB1NO	JOHN	79	77	6083	HIGH	JS2AHG	ATSU	29	27	783	HIGH
KI7Y	JIM	80	69	5520	HIGH	OH5ZA	ZABA	29	26	754	HIGH
AD0AB	JIM	80	66	5280	HIGH	N2SO	CHAS	27	27	729	HIGH
W4PF	STEVE	79	65	5135	HIGH	RL3T	AL	26	26	676	HIGH
K0MD	SCOTT	72	71	5112	HIGH	WA5LXS	DENNIS	25	25	625	HIGH
KC2LSD	CODY	73	70	5110	HIGH	YO3GNF	JACK	25	24	600	HIGH
DL4ME	RON	77	65	5005	HIGH	JH1ASG	NAKA	28	21	588	HIGH
M0AGP	MIKE	68	68	4624	HIGH	K4NMR	TOM	23	23	529	HIGH
WB2PJH	DAVE	68	65	4420	HIGH	KA7MDM	GREGG	22	21	462	HIGH
N2NC	JOHN	69	58	4002	HIGH	JA3AVO	SUMI	20	20	400	HIGH
OK1RR	MARTIN	62	59	3658	HIGH	W0GAS	GREG	20	20	400	HIGH
W8EH	ERNIE	58	55	3190	HIGH	VE3TW	STAN	17	16	272	HIGH
N4KH	JIM	55	54	2970	HIGH	W1UJ	JAY	17	16	272	HIGH
EI6LA	RAFAL	55	50	2750	HIGH	WA3GM	GREG	15	15	225	HIGH
G3WZD	MAC	53	51	2703	HIGH	JF1UOX	MISA	13	13	169	HIGH
PC4H	HENK	55	48	2640	HIGH	JF1EGO	KAKU	12	11	132	HIGH
AF5J	HAL	51	47	2397	HIGH	JA2HYD	TOSHI	10	10	100	HIGH
K1BZ	DAVE	51	46	2346	HIGH	UT5NC	JP	9	9	81	HIGH
N5EP	STEVE	49	47	2303	HIGH	F5PHY	IVAN	8	8	64	HIGH
N7US	JIM	46	46	2116	HIGH	HA5PP	ZOLI	5	5	25	HIGH
WA6URY	DAN	49	43	2107	HIGH	JA2ORW	JIN	4	4	16	HIGH
E21EIC	CHAMP	47	43	2021	HIGH	JF1UOW	MIT	4	4	16	HIGH
SF1Z	JENS	44	44	1936	HIGH	G3WPH	MIKE	30	0	0	HIGH
KE3GK	TOM	39	35	1365	HIGH	LA9OI	OLAV	20	0	0	HIGH
N4YDU	NC	40	34	1360	HIGH	N4LSJ	TOM	36	0	0	HIGH
JH1GNU	SHIGE	36	36	1296	HIGH						

Call	Op	QSO	Mult	Score	Power	Call	Op	QSO	Mult	Score	Power
NM5M	ERIC	338	233	78754	LOW	CO8NMN	NOE	173	146	25258	LOW
K0AD	AL	305	222	67710	LOW	K4FT	JOHN	174	144	25056	LOW
N5XZ	ALLEN	274	239	65486	LOW	KV8Q	TOM	173	139	24047	LOW
W0UO	JIM	313	209	65417	LOW	RA3AN	NICK	164	144	23616	LOW
WT9U	JIM	295	216	63720	LOW	K3JT	TERRY	167	140	23380	LOW
WJ9B	WILL	287	207	59409	LOW	K1RF	STEVE	169	138	23322	LOW
K1VUT	DAVE	271	213	57723	LOW	NJ3K	BRUCE	163	142	23146	LOW
KG9X	FRED	286	201	57486	LOW	VE3TM	VLAD	158	142	22436	LOW
N4OO	BRIAN	275	204	56100	LOW	AC5XK	DON	162	137	22194	LOW
N4AO	JEFF	277	201	55677	LOW	KB3AAY	RON	166	131	21746	LOW
W5TM	ED	261	211	55071	LOW	N2RC	MIKE	162	134	21708	LOW
KY4ID	MIKE	243	200	48600	LOW	SM6F	LARS	155	139	21545	LOW
NK4O	AJ	246	179	44034	LOW	N8BJQ	STEVE	155	129	19995	LOW
W3KB	KEITH	249	176	43824	LOW	N8NA	AL	156	126	19656	LOW
KG5U	DALE	248	170	42160	LOW	WA3AAN	GRANT	152	120	18240	LOW
W8CAR	DAN	229	181	41449	LOW	KY4GS	AMANDA	157	115	18055	LOW
SP1D	ROBERT	211	188	39668	LOW	EU2F	ART	142	127	18034	LOW
KG5OA	DOUG	209	163	34067	LOW	K3QP	BILL	142	127	18034	LOW
W3TB	TED	205	163	33415	LOW	N8AA	JOHN	138	130	17940	LOW
K2ZR	DICK	202	163	32926	LOW	W8OV	DAVE	148	117	17316	LOW
W0AAE	BOB	201	155	31155	LOW	G4PVM	PAUL	129	111	14319	LOW
KY0Q	RICK	206	150	30900	LOW	W0EJ	BILL	134	105	14070	LOW
9A1AA	IVO	187	165	30855	LOW	N5KB	MIKE	123	107	13161	LOW
N1DC	RICK	186	162	30132	LOW	NM2A	MARK	117	109	12753	LOW
WN4AFP	DAVE	181	155	28055	LOW	DK2FG	PETER	125	102	12750	LOW
N8LR	GARY	190	140	26600	LOW	NO5W	CHUCK	115	104	11960	LOW
K3PI	RUSS	171	155	26505	LOW	N3CKI	DAVE	108	103	11124	LOW

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Call	Op	QSO	Mult	Score	Power	Call	Op	QSO	Mult	Score	Power
W7IY	STU	111	99	10989	LOW	NF6R	BILL	44	39	1716	LOW
N4NTO	TRIPP	113	97	10961	LOW	K1GU	NED	41	41	1681	LOW
K4FN	DAN	105	100	10500	LOW	KB4DE	BILL	41	39	1599	LOW
HB9ARF	PHIL	104	98	10192	LOW	VE3NRT	CHRIS	39	39	1521	LOW
KM4FO	DWIGHT	102	99	10098	LOW	NS3L	STEVE	40	37	1480	LOW
K5GA	BILL	112	90	10080	LOW	W6GMT	BROCK	41	36	1476	LOW
N5XE	CARL	114	86	9804	LOW	IT9VDQ	GIU	37	37	1369	LOW
M0RYB	PETER	101	94	9494	LOW	AE1T	PETER	37	36	1332	LOW
KD2KW	KEN	101	91	9191	LOW	K8LBQ	BAIN	37	35	1295	LOW
K5XU	MIKE	100	91	9100	LOW	LZ2CH	KRASI	37	34	1258	LOW
KW0J	GARY	102	88	8976	LOW	KD4AN	DAN	34	34	1156	LOW
EA2KV	JC	97	92	8924	LOW	LB2WG	AL	37	31	1147	LOW
NW0M	MITCH	100	85	8500	LOW	F6JOE	JEAN	33	32	1056	LOW
WA8KAN	DAVE	100	84	8400	LOW	K0AF	ANDY	33	32	1056	LOW
AA0AW	DOUG	97	86	8342	LOW	PA3EWG	HENRY	31	30	930	LOW
NS2N	PAUL	99	84	8316	LOW	N6DE	DEAN	30	29	870	LOW
AA9WJ	JEFF	93	86	7998	LOW	PA5GU	JAAP	29	28	812	LOW
SM5CSS	ALLAN	95	82	7790	LOW	N4DPM	RICH	27	27	729	LOW
K7JQ	BOB	98	79	7742	LOW	N4QI	GEORGE	27	27	729	LOW
OZ1AAR	VILLY	87	83	7221	LOW	JK7UST	SUGI	25	25	625	LOW
W4CMG	CATHY	91	79	7189	LOW	K5KXJ	CHAS	25	24	600	LOW
J11RXQ	HIRO	85	82	6970	LOW	K4GM	GEO	24	24	576	LOW
VE9KK	MIKE	90	73	6570	LOW	N7WY	BOB	23	23	529	LOW
W7CXX	JACK	86	76	6536	LOW	EI8KW	RYAN	24	22	528	LOW
N6TTV	CJ	84	73	6132	LOW	AA8IA	MIKE	23	22	506	LOW
W6AYC	JOE	77	77	5929	LOW	JH4FUF	IKKAN	24	21	504	LOW
KB4CG	JACK	83	71	5893	LOW	JF1JDG	HIRO	25	20	500	LOW
NF8M	FRANK	77	74	5698	LOW	SV2BBK	THEO	22	22	484	LOW
F5SGI	JEAN	76	74	5624	LOW	UN7LDR	AN	23	20	460	LOW
DJ1OJ	HEIJO	75	71	5325	LOW	IN3FHE	HELGA	21	21	441	LOW
W4EE	JIM	76	69	5244	LOW	NB7O	KEVIN	22	20	440	LOW
VE4EA	CARY	71	71	5041	LOW	DG0KS	MIKE	20	20	400	LOW
UA6GO	VLAD	69	69	4761	LOW	G3YJQ	FRED	17	17	289	LOW
K1DW	DW	70	68	4760	LOW	RK3TT	DIMA	16	16	256	LOW
K3UA	PHIL	68	68	4624	LOW	RN4SC	ALEX	16	16	256	LOW
SP7OGP	PIOTR	70	66	4620	LOW	IK0NOJ	DANY	15	15	225	LOW
N4DW	DAVE	67	63	4221	LOW	K0VW	JJ	15	15	225	LOW
LZ4UU	ILIYA	65	64	4160	LOW	KG3V	TOM	15	15	225	LOW
KB3FW	HARV	70	59	4130	LOW	K16OY	LEE	15	15	225	LOW
G3LDI	ROGER	69	57	3933	LOW	DL1NKB	BERND	14	14	196	LOW
UB4Y	VLAD	69	57	3933	LOW	DF7IH	UWE	13	13	169	LOW
SM7CIL	ARNE	63	62	3906	LOW	NJ4Q	WILL	13	13	169	LOW
SM5IMODAN		65	59	3835	LOW	WU9D	MIKE	13	13	169	LOW
PA2TA	TJ	64	57	3648	LOW	PE4KH	KOOS	12	12	144	LOW
K0ALT	ROSE	61	59	3599	LOW	JH1RFU	NOEL	10	10	100	LOW
K2QB	JIM	65	55	3575	LOW	KN6IPE	DEN	10	10	100	LOW
K3ZGA	BOB	62	57	3534	LOW	VA3PAF	PAT	10	10	100	LOW
K7AZT	PAUL	64	54	3456	LOW	N4JEH	JENNA	8	8	64	LOW
N2UU	BOB	59	58	3422	LOW	SM7RYR	ROGER	8	8	64	LOW
K9NW	MIKE	58	53	3074	LOW	K5VG	JOHN	7	7	49	LOW
RV3AJ	ARTUR	55	51	2805	LOW	RA3XCZ	VLAD	7	7	49	LOW
N4IU	PAT	52	52	2704	LOW	GM5TDX	TED	6	6	36	LOW
WU6X	DENNIS	51	47	2397	LOW	KN6BAZ	ALEX	6	6	36	LOW
N9TTK	JUSTIN	47	47	2209	LOW	KF3G	SAM	4	4	16	LOW
W4SSF	STAN	48	45	2160	LOW	VA3FN	JOHN	4	4	16	LOW
G3YLA	JIM	50	42	2100	LOW	G8VPE	JOHN	5	3	15	LOW
VA3PM	PIERRE	46	43	1978	LOW	E25KAE	BUN	3	2	6	LOW
W6QX	STEVE	49	39	1911	LOW	J11CJ	SAM	2	2	4	LOW
KC8J	WALT	46	41	1886	LOW	F4GFT	ANDY	1	1	1	LOW
UR7MZ	VLAD	44	41	1804	LOW	JH1PXH	AKI	1	1	1	LOW
K0EA	TERRY	42	42	1764	LOW	JJ1VNV	AKKY	1	1	1	LOW
KE8G	JIM	42	42	1764	LOW	KE6JAC	AL	1	1	1	LOW

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Call	Op	QSO	Mult	Score	Power	Call	Op	QSO	Mult	Score	Power
7L2CDG	KAME	7	0	0	LOW	EI9ES	PETER	0	0	0	LOW
AB5XM	ALLAN	12	0	0	LOW	G3SQU	CHRIS	9	0	0	LOW
EA2ESK	ADRI	12	0	0	LOW	JG0AWE	WAKA	1	0	0	LOW

Call	Op	QSO	Mult	Score	Power	Call	Op	QSO	Mult	Score	Power
N5AW	MARV	254	204	51816	QRP	AA9RK	MIKE	45	42	1890	QRP
VE3KI	RICH	179	146	26134	QRP	OK2NAJ	JIRI	47	40	1880	QRP
N0LY	JON	173	136	23528	QRP	HF5WIMWIM		35	35	1225	QRP
N5ER	JOHN	142	114	16188	QRP	PE2K	ADI	33	32	1056	QRP
W1UU	PETER	136	113	15368	QRP	YO4AAC	GEORGE	25	25	625	QRP
W7LG	MIKE	73	67	4891	QRP	W4ER	JOHN	15	15	225	QRP
WO9B	MIKE	71	63	4473	QRP	N9EEE	DICK	12	11	132	QRP
KO1H	JOHN	50	46	2300	QRP	EW8G	VAL	8	8	64	QRP
KJ4YM	MARK	44	44	1936	QRP	J1AEP	TOR	1	1	1	QRP

Session 2 Analysis:

For Region 1 High Power, Peter (DK9PY) came in first again with final numbers of 274 QSOs, 238 Multipliers and a score of 65,212. Stu (GW4J), our CWops President, came in second in Region 1 with a score of 32,560. Bud (AA3B) finished in first place for Region 2 with a QSO count of 546, 341 Mults and a score of 186,186. Steve (N2IC) came in second place with a score of 186,038 and only 148 points behind Bud. For Region 3, Allan (VK2GR) came in first with an outstanding Q count of 226, 216 Multipliers and a score of 48,816. Moving on to Low Power, the Region 1 winner was once again Robert (SP1D) with a QSO total of 211 and a mult total of 188 resulting in a score of 39,668. Ivo (9A1AA) placed second with a score of 30,855. For Region 2 Eric (NM5M) claimed first place with a QSO total of 338, a mult total of 233 and a score of 78,754 points. Al (K0AD) placed second with a score of 67,710. Moving on to the QRP class, Marv (N5AW) finished in first place for Region 2 with 254 QSOs, 204 mults and a score of 51,816. Rich (VE2KI) came in second with a score of 26,134.



Session 3 - 2000Z to 0000Z

Session 3 results are based on 383 logs, down 19 from 2021, represent the most significant session and category statistical decrease for 2022. The QSO count also dropped slightly by .5%. The multipliers were down by 1,886 or 4.0%. When all factored together the overall QSO point count almost equaled 2021 with a drop of only .1%. As with session 2, all three regions had submissions exceeding the 100 QSO minimum to qualify for awards.

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

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Call	Op	QSO	Mult	Score	Power	Call	Op	QSO	Mult	Score	Power
K3WW	CHAS	591	390	230490	HIGH	KR2Q	DOUG	265	210	55650	HIGH
AA3B	BUD	592	385	227920	HIGH	K6AW	STEVE	256	212	54272	HIGH
N1LN	BRUCE	484	350	169400	HIGH	N8KH	KEN	252	213	53676	HIGH
N4AF	HOWIE	482	329	158578	HIGH	N6RK	RICK	259	200	51800	HIGH
N5ZO	MARKO	479	327	156633	HIGH	K3PP	GLENN	251	204	51204	HIGH
WD6T	DAVE	457	318	145326	HIGH	N4FP	WAYNE	243	204	49572	HIGH
N3RD	DAVE	466	310	144460	HIGH	W4WF	CHRIS	222	211	46842	HIGH
K7RL	MITCH	442	320	141440	HIGH	WN7S	DICK	233	195	45435	HIGH
K3MM	TY	427	316	134932	HIGH	K5PI	ROB	251	180	45180	HIGH
W8FJ	JOHN	450	299	134550	HIGH	K3UL	BOB	230	196	45080	HIGH
K5OT	LARRY	443	289	128027	HIGH	N5TOO	VAN	227	197	44719	HIGH
K8IA	BOB	409	297	121473	HIGH	N4CWZ	DAVE	222	190	42180	HIGH
N3QE	TIM	375	306	114750	HIGH	K6DGW	SKIP	224	186	41664	HIGH
N5OT	MARK	390	294	114660	HIGH	K5TU	KIM	216	190	41040	HIGH
DK9PY	ARMIN	394	279	109926	HIGH	W6SX	HANK	227	180	40860	HIGH
AE6Y	ANDY	395	274	108230	HIGH	VA7DX	NEIL	213	189	40257	HIGH
K4BAI	JOHN	384	281	107904	HIGH	VE6RST	MAX	207	192	39744	HIGH
NS0R	MO	380	283	107540	HIGH	WA4JUK	JOE	209	181	37829	HIGH
K6AR	JIM	384	271	104064	HIGH	GW4J	STEW	221	170	37570	HIGH
KY7M	LEE	360	283	101880	HIGH	AF4T	DOUG	209	173	36157	HIGH
AD4EB	JIM	347	280	97160	HIGH	N2NT	ANDY	209	172	35948	HIGH
WO4O	RIC	350	275	96250	HIGH	KA5M	MARSH	202	168	33936	HIGH
K3WJV	BILL	367	262	96154	HIGH	K7HP	HANK	202	161	32522	HIGH
K9YC	JIM	354	271	95934	HIGH	K0INN	TOM	191	167	31897	HIGH
W3FV	BARRY	359	263	94417	HIGH	W2CDO	PETER	186	163	30318	HIGH
KE2D	BOB	349	269	93881	HIGH	K8JQ	STEVE	183	162	29646	HIGH
K6RB	ROB	351	265	93015	HIGH	AA5JF	ANDY	188	156	29328	HIGH
K6NR	DANA	347	266	92302	HIGH	NT2DR	RUS	177	163	28851	HIGH
N5EE	KEN	337	265	89305	HIGH	K5UV	MIKE	176	163	28688	HIGH
NOTA	JOHN	343	260	89180	HIGH	VA3SB	SERGE	172	165	28380	HIGH
W2GD	JOHN	342	255	87210	HIGH	G4DRS	JOHN	184	146	26864	HIGH
K4RUM	MIKE	329	262	86198	HIGH	HG4I	TIB	165	157	25905	HIGH
KR2AA	ERIC	331	260	86060	HIGH	K9CT	CRAIG	167	142	23714	HIGH
N3AM	JOHN	335	254	85090	HIGH	W0VX	DAVE	168	134	22512	HIGH
N4KS	KEN	317	264	83688	HIGH	W6EU	JIM	150	132	19800	HIGH
KZ5D	ART	325	252	81900	HIGH	HG1G	GUS	154	128	19712	HIGH
NA2U	FRED	339	239	81021	HIGH	KQ4R	ED	150	128	19200	HIGH
WT3K	DARYL	322	246	79212	HIGH	KI7Y	JIM	157	122	19154	HIGH
KC7V	MIKE	301	262	78862	HIGH	WE5P	BILL	147	130	19110	HIGH
K7NJ	RIKI	317	248	78616	HIGH	K3WA	BILL	150	126	18900	HIGH
W8FN	RANDY	310	252	78120	HIGH	AC6ZM	JUAN	141	133	18753	HIGH
N4BP	BOB	298	258	76884	HIGH	VE2FK	DUB	144	123	17712	HIGH
N4OX	JAY	323	238	76874	HIGH	M4N	MIKE	157	111	17427	HIGH
K3MD	JOHN	312	242	75504	HIGH	N5RZ	GATOR	137	127	17399	HIGH
K6KM	ROB	308	236	72688	HIGH	KB1NO	JOHN	139	125	17375	HIGH
W6LAX	ROGER	299	242	72358	HIGH	NE5A	GEORGE	135	122	16470	HIGH
K0MD	SCOTT	306	233	71298	HIGH	K5KU	GARY	126	125	15750	HIGH
VE3NE	LALI	306	232	70992	HIGH	W4XO	LEX	136	114	15504	HIGH
K2LE	ANDY	293	240	70320	HIGH	W0FOC	DREW	124	123	15252	HIGH
KT5C	MIKE	289	243	70227	HIGH	K4PV	JIM	131	116	15196	HIGH
K4QPL	JIM	296	237	70152	HIGH	VK2GR	ALLAN	129	117	15093	HIGH
N6ZFO	BILL	295	236	69620	HIGH	OK1RR	MARTIN	135	105	14175	HIGH
N4ZR	PETE	307	225	69075	HIGH	K1ESE	JOHN	118	115	13570	HIGH
K1EBY	FRANK	289	239	69071	HIGH	PA3AAV	GERT	119	108	12852	HIGH
LZ3ND	NICK	296	232	68672	HIGH	K1SM	BILL	121	105	12705	HIGH
DL3DXX	MAR	301	220	66220	HIGH	W2XYZ	FRANK	118	107	12626	HIGH
K7QA	TOM	302	215	64930	HIGH	9A5MX	SVEN	114	107	12198	HIGH
N3JT	JIM	286	227	64922	HIGH	N3CW	ED	122	99	12078	HIGH
W3MA	JOHN	287	217	62279	HIGH	W1KM	GREG	108	103	11124	HIGH
AJ6V	ED	285	216	61560	HIGH	WC7Q	SAM	105	104	10920	HIGH
K1DJ	RICH	271	217	58807	HIGH	VE3CT	ART	105	103	10815	HIGH
K4WW	BO	254	230	58420	HIGH	N2NC	JOHN	106	99	10494	HIGH

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Call	Op	QSO	Mult	Score	Power	Call	Op	QSO	Mult	Score	Power
AA3R	FRED	108	97	10476	HIGH	PY4RGS	RAFAEL	44	44	1936	HIGH
K2SX	DENNIS	106	97	10282	HIGH	OH5ZA	ZABA	49	39	1911	HIGH
K1MT	DAVID	106	95	10070	HIGH	AC0E	JIM	44	41	1804	HIGH
W1RM	PETE	103	97	9991	HIGH	W4ZXT	JAY	42	40	1680	HIGH
K3ATO	HAL	101	97	9797	HIGH	WA3GM	GREG	40	39	1560	HIGH
K1TH	TOM	103	95	9785	HIGH	KF6NCX	LARRY	41	38	1558	HIGH
N4QS	DAVE	98	98	9604	HIGH	JN1THL	KEN	40	37	1480	HIGH
OZ3SM	STEVE	108	85	9180	HIGH	AG1C	LARRY	37	37	1369	HIGH
EA5FID	JUAN	96	95	9120	HIGH	SD1A	ERIC	41	31	1271	HIGH
K4HR	DAVY	102	89	9078	HIGH	G3WZD	MAC	35	35	1225	HIGH
KT4O	BEN	99	89	8811	HIGH	VK2BJ	BARRY	33	32	1056	HIGH
K0VBU	BILL	93	93	8649	HIGH	K2YR	CARL	31	31	961	HIGH
EC7K	TONY	97	87	8439	HIGH	KE3GK	TOM	31	31	961	HIGH
KA7MDM	GREGG	97	82	7954	HIGH	ADOAB	JIM	31	30	930	HIGH
KT4XN	TOM	93	81	7533	HIGH	K8LF	JAY	27	27	729	HIGH
WB2PJH	DAVE	91	82	7462	HIGH	RL3T	AL	26	24	624	HIGH
KU8E	JEFF	87	85	7395	HIGH	UT5NC	JP	24	23	552	HIGH
WA6URY	DAN	72	69	4968	HIGH	WA5LXS	DENNIS	23	23	529	HIGH
K6MM	JOHN	70	70	4900	HIGH	OK1FIA	ZDENEK	22	22	484	HIGH
K1RV	PI	67	67	4489	HIGH	W7JET	BB	22	22	484	HIGH
UA6LCN	GEO	73	61	4453	HIGH	K2EJ	STEVE	21	21	441	HIGH
N5EP	STEVE	68	65	4420	HIGH	VE3NRT	CHRIS	18	18	324	HIGH
N7US	JIM	65	62	4030	HIGH	JH1ASG	NAKA	18	12	216	HIGH
KC9EE	GARY	64	62	3968	HIGH	M0NGN	NIGE	11	11	121	HIGH
G8CW	ANDY	68	58	3944	HIGH	JF1UOX	MISA	14	8	112	HIGH
N5AW	MARV	61	60	3660	HIGH	N4YDU	NC	10	10	100	HIGH
W0GAS	GREG	60	60	3600	HIGH	LW1D	ROB	7	7	49	HIGH
NS4X	BART	60	59	3540	HIGH	JS2AHG	ATSU	6	6	36	HIGH
W9ILY	JOHN	60	59	3540	HIGH	JF1EGO	KAKU	7	5	35	HIGH
W1TO	TOM	59	58	3422	HIGH	DL4ME	RON	4	4	16	HIGH
W8EH	ERNIE	59	58	3422	HIGH	JA3AVO	SUMI	4	4	16	HIGH
PY1VOY	RICK	54	54	2916	HIGH	JF1UOW	MIT	4	3	12	HIGH
VE3EJ	JOHN	51	51	2601	HIGH	JH1GNU	SHIGE	3	3	9	HIGH
N2SO	CHAS	50	48	2400	HIGH	G3WPH	MIKE	78	0	0	HIGH
N4KH	JIM	50	47	2350	HIGH	LA9OI	OLAV	2	0	0	HIGH
PC4H	HENK	47	47	2209	HIGH	N4LSJ	TOM	22	0	0	HIGH
W3US	RUSTY	46	44	2024	HIGH						

Call	Op	QSO	Mult	Score	Power	Call	Op	QSO	Mult	Score	Power
W0UA	GEO	381	273	104013	LOW	SP1D	ROBERT	217	158	34286	LOW
N4ZZ	DON	362	284	102808	LOW	KK0U	JIM	198	171	33858	LOW
WT9U	JIM	347	269	93343	LOW	N4DW	DAVE	201	163	32763	LOW
WJ9B	WILL	342	260	88920	LOW	N3CKI	DAVE	181	171	30951	LOW
W5TM	ED	333	256	85248	LOW	KN7T	MARK	183	163	29829	LOW
W3KB	KEITH	329	239	78631	LOW	KB3AAY	RON	193	154	29722	LOW
K1VUT	DAVE	320	240	76800	LOW	W7IY	STU	175	169	29575	LOW
N8AA	JOHN	296	226	66896	LOW	AA2IL	JOE	194	148	28712	LOW
NK4O	AJ	275	221	60775	LOW	N2RC	MIKE	186	150	27900	LOW
K9DX	JOHN	274	214	58636	LOW	9A1AA	IVO	170	146	24820	LOW
W0UO	JIM	269	217	58373	LOW	KG5OA	DOUG	164	149	24436	LOW
W6AYC	JOE	271	213	57723	LOW	K3PI	RUSS	154	154	23716	LOW
KY4ID	MIKE	252	229	57708	LOW	NM2A	MARK	159	144	22896	LOW
KG5U	DALE	260	204	53040	LOW	N8BJQ	STEVE	166	132	21912	LOW
CO8NMN	NOE	269	195	52455	LOW	NJ3K	BRUCE	153	142	21726	LOW
K3JT	TERRY	245	214	52430	LOW	N5XE	CARL	163	132	21516	LOW
K2ZR	DICK	240	214	51360	LOW	KY4GS	AMANDA	164	129	21156	LOW
K3UA	PHIL	239	193	46127	LOW	W3WHK	SAUL	149	138	20562	LOW
KG9X	FRED	219	187	40953	LOW	NS2N	PAUL	158	130	20540	LOW
VE3TM	VLAD	217	184	39928	LOW	W7CXX	JACK	141	141	19881	LOW
KV8Q	TOM	210	188	39480	LOW	W0EJ	BILL	159	125	19875	LOW
W1QI	WALT	210	184	38640	LOW	WA8KAN	DAVE	159	124	19716	LOW

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Call	Op	QSO	Mult	Score	Power	Call	Op	QSO	Mult	Score	Power
G4PVM	PAUL	165	119	19635	LOW	AC5XK	DON	59	59	3481	LOW
N8LR	GARY	149	130	19370	LOW	N7WY	BOB	59	59	3481	LOW
WN4AFP	DAVE	138	136	18768	LOW	N4NTO	TRIPP	61	56	3416	LOW
KD2KW	KEN	153	120	18360	LOW	KW7WP	JAMIE	61	55	3355	LOW
K4FN	DAN	143	128	18304	LOW	AA8TA	JOE	58	57	3306	LOW
KM4FO	DWIGHT	140	126	17640	LOW	DK2FG	PETER	64	48	3072	LOW
KP3W	JOSE	131	125	16375	LOW	W9NXM	GUS	55	54	2970	LOW
WA3AAN	GRANT	139	116	16124	LOW	K0AF	ANDY	53	53	2809	LOW
NF8M	FRANK	134	119	15946	LOW	K5GQ	MARK	54	48	2592	LOW
N6TTV	CJ	130	118	15340	LOW	SP7OGP	PIOTR	51	49	2499	LOW
K0ALT	ROSE	116	115	13340	LOW	PA2TA	TJ	52	48	2496	LOW
W0AAE	BOB	117	113	13221	LOW	KG3V	TOM	49	49	2401	LOW
K5XU	MIKE	123	106	13038	LOW	KC8J	WALT	49	45	2205	LOW
EU2F	ART	120	101	12120	LOW	LZ4UU	ILIYA	49	44	2156	LOW
K9NW	MIKE	110	108	11880	LOW	WE4AUB	JOHN	47	45	2115	LOW
M0RYB	PETER	127	93	11811	LOW	KB4DE	BILL	46	44	2024	LOW
K0VW	JJ	118	100	11800	LOW	KN6BAZ	ALEX	47	43	2021	LOW
AA0AW	DOUG	115	102	11730	LOW	N4JEH	JENNA	45	44	1980	LOW
W8OV	DAVE	117	96	11232	LOW	G3LHJ	DERRICK	47	42	1974	LOW
N2UU	BOB	110	102	11220	LOW	W4CMG	CATHY	45	43	1935	LOW
K1DW	DW	108	101	10908	LOW	VA3PM	PIERRE	46	42	1932	LOW
SN5J	JAN	126	84	10584	LOW	W6QX	STEVE	44	43	1892	LOW
NC3Y	TOM	109	97	10573	LOW	K3QP	BILL	43	43	1849	LOW
W2LCQ	ED	105	95	9975	LOW	KB3FW	HARV	45	40	1800	LOW
K7JQ	BOB	104	94	9776	LOW	N4IU	PAT	41	41	1681	LOW
N8NA	KARL	105	93	9765	LOW	OE1TKW	HELMUT	40	39	1560	LOW
W0TG	BILL	100	95	9500	LOW	VA3PAF	PAT	40	38	1520	LOW
K8RGI	BOB	103	92	9476	LOW	SM7CIL	ARNE	41	37	1517	LOW
W4EE	JIM	105	90	9450	LOW	K1NY	GERRY	38	36	1368	LOW
F5SGJ	JEAN	102	90	9180	LOW	UA6GO	VLAD	39	35	1365	LOW
K7AZT	PAUL	98	88	8624	LOW	K8LBQ	BAIN	37	35	1295	LOW
K5VG	JOHN	99	87	8613	LOW	LB2WG	AL	39	28	1092	LOW
N2ZN	KEN	97	88	8536	LOW	W4PF	STEVE	33	33	1089	LOW
N6DE	DEAN	97	87	8439	LOW	KE6JAC	AL	35	25	875	LOW
G3LDI	ROGER	104	81	8424	LOW	EI8KW	RYAN	32	26	832	LOW
AE1T	PETER	100	84	8400	LOW	J11RXQ	HIRO	30	26	780	LOW
W3TB	TED	93	90	8370	LOW	KI6OY	LEE	27	27	729	LOW
KB6NU	DAN	92	90	8280	LOW	N9TF	GENE	27	27	729	LOW
KB4CG	JACK	97	84	8148	LOW	SV2BBK	THEO	27	27	729	LOW
N9HDE	SCOTT	96	83	7968	LOW	K4GM	GEO	26	26	676	LOW
G4PFZ	JOHN	94	78	7332	LOW	LU1AW	JUAN	26	26	676	LOW
G3WRJ	DICK	99	72	7128	LOW	KO4OL	AL	25	25	625	LOW
N5MF	MARK	84	84	7056	LOW	KP4JRS	JOSE	21	21	441	LOW
KE8G	JIM	83	82	6806	LOW	N4DPM	RICH	20	20	400	LOW
K4FT	JOHN	82	80	6560	LOW	RV3AJ	ARTUR	20	17	340	LOW
G3YLA	JIM	92	66	6072	LOW	NF6R	BILL	18	17	306	LOW
KW0J	GARY	81	73	5913	LOW	AA9WJ	JEFF	17	17	289	LOW
VE3MM	RICK	80	72	5760	LOW	DL2SWR	UWE	17	17	289	LOW
WU6P	NIAN	83	69	5727	LOW	KT3T	PAUL	17	17	289	LOW
DJ1OJ	HEIJO	75	73	5475	LOW	VA3EON	MARIO	16	16	256	LOW
N4QI	GEORGE	73	71	5183	LOW	PY7ZC	MARCO	15	15	225	LOW
VE3OMV	MARIA	74	69	5106	LOW	KD4AN	DAN	14	14	196	LOW
W4SSF	STAN	69	69	4761	LOW	G8VPE	JOHN	11	10	110	LOW
K4TZ	TOM	69	68	4692	LOW	JH4FUF	IKKAN	13	8	104	LOW
VE5UO	DAVE	66	66	4356	LOW	DL1NKB	BERND	10	10	100	LOW
W9CF	KEVIN	67	61	4087	LOW	KP4JFR	JOSE	10	10	100	LOW
NJ4Q	WILL	63	62	3906	LOW	N4CU	BOB	8	8	64	LOW
VA3FN	JOHN	64	61	3904	LOW	UR7MZ	VLAD	7	7	49	LOW
K3ZGA	BOB	63	59	3717	LOW	K5GA	BILL	6	6	36	LOW
SM5CSS	ALLAN	69	53	3657	LOW	JM8FEI	MIU	5	5	25	LOW
HB9ARF	PHIL	62	58	3596	LOW	JK7UST	SUGI	4	4	16	LOW

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Call	Op	QSO	Mult	Score	Power
NN5O	LARRT	4	4	16	LOW
JH1RFU	NOEL	3	3	9	LOW
PE4KH	KOOS	1	1	1	LOW

Call	Op	QSO	Mult	Score	Power
AB5XM	ALLAN	14	0	0	LOW
G3SQU	CHRIS	3	0	0	LOW
HA5BMS	SANDOR	10	0	0	LOW

Call	Op	QSO	Mult	Score	Power
N0LY	JON	188	158	29704	QRP
W1UU	PETER	176	139	24464	QRP
N5ER	JOHN	142	126	17892	QRP
W4ER	JOHN	110	89	9790	QRP
N4FUR	WILL	98	91	8918	QRP
K4PQC	PHIL	58	53	3074	QRP
OK2NAJ	JIRI	50	42	2100	QRP

Call	Op	QSO	Mult	Score	Power
KO1H	JOHN	48	43	2064	QRP
PE2K	ADI	45	39	1755	QRP
AA9RK	MIKE	32	31	992	QRP
KJ5T	STEVE	25	23	575	QRP
NQ2W	WILL	23	23	529	QRP
VE2ZDX	ANDRE	15	15	225	QRP
N9EEE	DICK	11	11	121	QRP

Session 3 Analysis:

For Region 1 High Power, Armin (DK9PY) completed a three session sweep with final numbers of 394 QSOs, 279 Multipliers and a score of 109,926. Nick (LZ3ND) came in second with a score of 68,672. Chas (K3WW) moved Bud (AA3B) out of first place and finished first in Region 2 with a QSO count of 591, 390 Mults and a score of 230,490. That impressive point total is the 2022 highest 2022 CWOpen single session score. Bud (AA3B) came in second with a score of 227,920. For Region 3, Allan (VK2GR) came in first with 129 QSOs, 117 Multipliers and a score of 15,093. Moving on to Low Power, for Region 1 Robert (SP1D), like Armin, completed his three session sweep with a QSO total of 217 and a mult total of 158 resulting in a score of 34,286. Ivo (9A1AA) again finished in second with a score of 24,820. For Region 2 Geo (W0UA) claimed first place with a QSO total of 381, a mult total of 273 and a score of 104,013 points. Second place went to Don (N4ZZ) with a score of 102,808. Moving on to the QRP class, Region 2 first place once again was won by Jon (N0LY) with another impressive showing with a QSO total of 188 QSOs, 158 mults and a score of 29,704. Peter (W1UU) came in second with a score of 24,464.

Team Scores

The 2022 CW Open also delivered in the team entry statistics. Putting together a team to participate in the CW Opens is always a fun way to increase participation and friendly intra and inter team competition. This year we had 25 teams register. The team sizes ranged from a minimum of 3 members up to the maximum allowed of 10 members. All Regions had team member representation. The team scores followed the 2022 overall statistics and dropped some, but were still excellent. Even with the overall drop in scores, there were a few good horse races as you will see below.

Here are the detail scores and team finishes:

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FRC Team Proficiency

Call	Session 1	Session 2	Session 3	Total
AA3B	221,244	186,186	227,920	635,350
K3PP	39,780	36,018	51,204	127,002
K3UL	70,760	31,850	45,080	147,690
K3WW	197,098	167,500	230,490	595,088
KE2D	105,592	66,880	93,881	266,353
N3RD	148,656	132,108	144,460	425,224
W2GD	82,500	68,904	87,210	238,614
W3KB	66,240	43,824	78,631	188,695
W3MA	50,432	47,092	62,279	159,803
W8FJ	139,098	95,256	134,550	368,904
Total				3,152,723

PVRC Team #1

Call	Session 1	Session 2	Session 3	Total
N1LN	138,761	127,602	169,400	435,763
N4YDU	196,075	1,360	100	197,535
N4AF	170,610	144,440	158,578	473,628
WJ9B	89,915	59,409	88,920	238,244
K3PI	26,244	26,505	23,716	76,465
N4NTO	7,776	10,961	3,416	22,153
N4CWZ	61,776	36,432	42,180	140,388
N4FP	58,984	62,196	49,572	170,752
K4QPL	69,353	25,431	70,152	164,936
WT3K	91,425	68,036	79,212	238,673
Total				2,158,537

Deep Dixie CC Team Steamboat

Call	Session 1	Session 2	Session 3	Total
AB0S	94,369	60,152	0	154,521
K5KU	0	75,012	15,750	90,762
KZ5D	0	116,748	81,900	198,648
N0TA	86,526	76,230	89,180	251,936
N5EE	85,248	70,299	89,305	244,852
N5OT	111,650	111,954	114,660	338,264
N8AA	66,340	17,940	66,896	151,176
N8BJQ	15,552	19,995	21,912	57,459
W0UA	102,704	105,200	104,013	311,917
W5TM	94,752	55,071	85,248	235,071
Total				2,034,606

SECC#1

Call	Session 1	Session 2	Session 3	Total
K4BAI	110,004	91,256	107,904	309,164
W8FN	74,806	50,688	78,120	203,614
N4OX	0	74,240	76,874	151,114
KU8E	32,038	61,612	7,395	101,045
AA5JF	75,137	16,380	29,328	120,845
NN4K	12,826	11,970	0	24,796
KY4GS	18,720	18,055	21,156	57,931
N4BP	109,138	88,392	76,884	274,414
W4WF	100,056	90,560	46,842	237,458
N4AO	47,256	55,677	0	102,933
Total				1,583,314

NCCC Team #1

Call	Session 1	Session 2	Session 3	Total
AE6Y	103,984	77,025	108,230	289,239
K6RB	122,836	49,530	93,015	265,381
K6AW	38,295	24,915	54,272	117,482
N6ZFO	56,342	0	69,620	125,962
W6SX	70,532	50,085	40,860	161,477
K9YC	86,445	0	95,934	182,379
AJ6V	70,760	0	61,560	132,320
WD6T	0	0	145,326	145,326
K6DGW	0	0	41,664	41,664
K6KM	0	0	72,688	72,688
Total				1,533,918

Geezers

Call	Session 1	Session 2	Session 3	Total
N3AM	71,040	62,713	85,090	218,843
N3JT	63,580	56,628	64,922	185,130
DK9PY	65,116	65,212	109,926	240,254
WB2PJH	5,183	4,420	7,462	17,065
NS8O	15,344	17,640	0	32,984
KR2Q	103,880	70,908	55,650	230,438
KV8Q	38,233	24,047	39,480	101,760
N4ZR	74,425	54,201	69,075	197,701
OK1RR	12,416	3,658	14,175	30,249
W2CDO	9,118	52,461	30,318	91,897
Total				1,346,321

DFWCG NR1

Call	Session 1	Session 2	Session 3	Total
W0UO	71,456	65,417	58,373	195,246
W8OV	4,692	17,316	11,232	33,240
NM5M	46,431	78,754	0	125,185
WA5LXS	1,722	625	529	2,876
N5RZ	96,747	144,456	17,399	258,602
K5OT	137,562	123,388	128,027	388,977
KG5U	53,235	42,160	53,040	148,435
KG5OA	35,112	34,067	24,436	93,615
KD2KW	15,840	9,191	18,360	43,391
Total				1,289,567

AOCC Gunslingers

Call	Session 1	Session 2	Session 3	Total
K8IA	0	69,560	121,473	191,033
N4ZZ	118,080	0	102,808	220,888
N2IC	0	186,038	0	186,038
KC7V	5,476	18,304	78,862	102,642
K7NJ	59,572	69,540	78,616	207,728
NA2U	0	0	81,021	81,021
W9CF	9,984	0	4,087	14,071
KY7M	0	43,164	101,880	145,044
K7JQ	7,790	7,742	9,776	25,308
K7HP	10,890	0	32,522	43,412
Total				1,217,185

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PVRC Team #2

Call	Session 1	Session 2	Session 3	Total
K3WA	21,216	13,038	18,900	53,154
K3MM	108,307	114,492	134,932	357,731
W3US	79,425	0	2,024	81,449
N3QE	42,370	20,083	114,750	177,203
K2AV	100,337	11,536	0	111,873
Total				781,410

FRC Team Competency

Call	Session 1	Session 2	Session 3	Total
AA3R	12,423	20,115	10,476	43,014
K3QP	64,680	18,034	1,849	84,563
N2NC	10,000	4,002	10,494	24,496
N2NT	40,812	9,999	35,948	86,759
N2RC	32,200	21,708	27,900	81,808
NW3Y	50,250	23,564	0	73,814
W3WHK	18,576	0	20,562	39,138
WA3AAN	15,120	18,240	16,124	49,484
NS3L	625	1,480	0	2,105
K3WJV	99,960	86,184	96,154	282,298
Total				767,479

K1USN Radio Club

Call	Session 1	Session 2	Session 3	Total
K1VUT	75,150	57,723	76,800	209,673
K1RV	24,568	7,225	4,489	36,282
N1DC	49,335	30,132	0	79,467
K1EBY	74,144	49,086	69,071	192,301
K1DJ	36,660	38,454	58,807	133,921
N1RO	25,576	26,740	0	52,316
K1TH	9,009	11,118	9,785	29,912
WS1L	0	29,140	0	29,140
Total				763,012

Deep Dixie CC Team Firebird

Call	Session 1	Session 2	Session 3	Total
NN5O	13,860	0	16	13,876
KA5M	12,376	7,920	33,936	54,232
KA7MDM	12,200	462	7,954	20,616
KE8G	0	1,764	6,806	8,570
N8LR	29,054	26,600	19,370	75,024
OL8R	54,912	0	0	54,912
K7RL	108,102	0	141,440	249,542
Total				476,772

Team Website

Call	Session 1	Session 2	Session 3	Total
SV2BBK	0	484	729	1,213
KB6NU	324	0	8,280	8,604
KC8J	2,250	1,886	2,205	6,341
AC5XK	11,600	22,194	3,481	37,275
KD4AN	25	1,156	196	1,377
K4RUM	92,916	49,368	86,198	228,482
W7IY	14,508	10,989	29,575	55,072
KW0J	28,392	8,976	5,913	43,281
Total				381,645

SECC#2

Call	Session 1	Session 2	Session 3	Total
N4IJ	3,720	0	0	3,720
K8LBQ	1,521	1,295	1,295	4,111
KB3FW	7,268	4,130	1,800	13,198
KT4O	24,992	841	8,811	34,644
NK4O	61,845	44,034	60,775	166,654
N4OO	63,072	56,100	0	119,172
N4KH	20,636	2,970	2,350	25,956
Total				367,455

KCG

Call	Session 1	Session 2	Session 3	Total
K4FN	64,584	10,500	18,304	93,388
K4WW	11,639	45,441	58,420	115,500
KE4KY	0	0	0	0
N4QS	1,764	27,666	9,604	39,034
AA4WW	0	0	0	0
KM4FO	31,959	10,098	17,640	59,697
W4PF	0	5,135	1,089	6,224
K4TZ	0	0	4,692	4,692
WE5P	8,925	19,250	19,110	47,285
Total				365,820

Spider Monkeys

Call	Session 1	Session 2	Session 3	Total
NE5A	11,956	28,275	16,470	56,701
N4JEH	1,677	64	1,980	3,721
N5KB	0	13,161	0	13,161
N4IU	324	2,704	1,681	4,709
NM4N	0	0	0	0
W0EJ	7,614	14,070	19,875	41,559
KT5C	59,180	78,720	70,227	208,127
KE0LUA	0	0	0	0
AF5J	7,998	2,397	0	10,395
Total				338,373

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TDXS

Call	Session 1	Session 2	Session 3	Total
N5DTT	0	0	0	0
K5TU	109,874	99,195	41,040	250,109
N5XZ	0	65,486	0	65,486
K5GQ	15,620	0	2,592	18,212
NM5G	2,703	0	0	2,703
K5TIA	0	0	0	0
Total				336,510

YCCC Morse Marauders

Call	Session 1	Session 2	Session 3	Total
ZF2VE	0	0	0	0
K2LE	61,938	44,655	70,320	176,913
K1LZ	0	0	0	0
KO1H	2,907	2,300	2,064	7,271
K1MT	7,600	9,270	10,070	26,940
VE4EA	76,472	5,041	0	81,513
KC1KUG	0	0	0	0
Total				292,637

United Keyers

Call	Session 1	Session 2	Session 3	Total
GW4J	17,760	32,560	37,570	87,890
G4DRS	8,500	14,384	26,864	49,748
G4PVM	0	14,319	19,635	33,954
M4N	8,900	10,070	17,427	36,397
G3LDI	6,660	3,933	8,424	19,017
G3YLA	2,332	2,100	6,072	10,504
G3WZD	0	2,703	1,225	3,928
G4PFZ	0	0	7,332	7,332
G8CW	0	0	3,944	3,944
M5D	0	0	0	0
Total				252,714

Swamp Fox Contest Group

Call	Session 1	Session 2	Session 3	Total
KY4ID	7,380	48,600	57,708	113,688
K4FT	27,811	25,056	6,560	59,427
WN4AFP	1,122	28,055	18,768	47,945
Total				221,060

Santiago de Cuba Contest Team

Call	Session 1	Session 2	Session 3	Total
CO8NMN	39,820	25,258	52,455	117,533
CO8WN	0	0	0	0
CO8OH	0	0	0	0
CM3OR	0	0	0	0
Total				117,533

NCCC Team #2

Call	Session 1	Session 2	Session 3	Total
N6DE	8,836	870	8,439	18,145
K6MM	30,929	0	4,900	35,829
WU6X	1,936	2,397	0	4,333
N6TTV	0	6,132	15,340	21,472
KI6OY	2,208	225	729	3,162
KF6NCX	930	0	1,558	2,488
W6JTI	19,840	0	0	19,840
K6CTA	2,205	0	0	2,205
NF6R	3,654	1,716	306	5,676
Total				113,150

A1 Club

Call	Session 1	Session 2	Session 3	Total
JF1UOX	342	169	112	623
JF1UOW	20	16	12	48
WA6URY	16,440	2,107	4,968	23,515
JS2AHG	225	783	36	1,044
J1CJ	0	4	0	4
JK7UST	1	625	16	642
JJ1FXF	0	0	0	0
JH1RFU	0	100	9	109
JF1PMF	0	0	0	0
JJ1NVN	25	1	0	26
Total				26,011

Team Japan

Call	Session 1	Session 2	Session 3	Total
JN1THL	1,800	7,209	1,480	10,489
JA3AVO	0	400	16	416
JH1GNU	49	1,296	9	1,354
JH4FUF	180	504	104	788
JF1JDG	35	500	0	535
J11RXQ	1,763	6,970	780	9,513
JH1PXH	36	1	0	37
JA2ORW	0	16	0	16
JA2HYD	0	100	0	100
JH1ASG	0	588	216	804
Total				24,052

WiscKey

Call	Session 1	Session 2	Session 3	Total
WO9B	0	4,473	0	4,473
AA9RK	0	1,890	992	2,882
N9EEE	49	132	121	302
Total				7,657

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Team Analysis:

Consistency is a word to describe the 10 member team from the FRC. Once again FRC Team Proficiency certainly proved they were “Proficient” by turning in a VERY impressive 3,152,723 point total. The PVRC Team #1 came in second with a score of 2,158,537. The Deep Dixie Team Steamboat was third with a score of 2,034,606. This was our first year to have a team with all 10 members from Region 3 and we actually had two registered Region 3 teams. Team Japan and the A1 Club team. It was our second year to have a Region 1 team with all 10 members from the UK, Team United Keyers.

Trophies and Plaques:

Below is a listing of the 2022 Trophy and Plaque winners. As in the past, should the same individual qualify for more than one award, the awards will be grouped on one Trophy or Plaque.

Trophies: High Score, each session, each ITU Region

Armin Sturm, DK9PY

Combined Scores, ITU Region 1 Winner

960 QSOs	740 Multipliers	240,254 points
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Session 1, ITU Region 1, Winner

292 QSOs,	223 Multipliers	65,116 points
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Session 2, ITU Region 1, Winner

274 QSOs,	238 Multipliers	65,212 points
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Session 3, ITU Region 1, Winner

394 QSOs	279 Multipliers	109,926 points
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Bud Trench, AA3B

Combined Scores, ITU Region 2 Winner

1,756 QSOs	1,084 Multipliers	635,350 points
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Session 1, ITU Region 2, Winner

618 QSOs	358 Multipliers	221,244 points
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Session 2, ITY Region 2, Winner

546 QSOs	341 Multipliers	186,186 points
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Chas Fulp, K3WW

Session 3, ITU Region 2 Winner

591 QSOs 390 Multipliers 230,490 points

Allan Mason, VK2GR

Combined Score, ITU Region 3 Winner

403 QSOs 381 Multipliers 66,213 points

Session 2, ITU Region 3 Winner

226 QSOs 216 Multipliers 48,816 points

Session 3, ITU Region 3 Winner

129 QSOs 117 Multipliers 15,093 points

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

HIGH POWER –

Armin Sturm, DK9PY

Session 1, ITU Region 1, Winner

292 QSOs, 223 Multipliers 65,116 points

Session 2, ITU Region 1, Winner

274 QSOs 238 Multipliers 65,212 points

Session 3, ITU Region 1, Winner

394 QSOs 279 Multipliers 109,926 points

Bud Trench, AA3B

Session 1, ITU Region 2, Winner

618 QSOs 358 Multipliers 221,244 points

Session 2, ITU Region 2, Winner

546 QSOs 341 Multipliers 186,186 points

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Charles Fulp, K3WW

Session 3, ITU Region 2 Winner

591 QSOs	390 Multipliers	230,490 points
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Allan Mason, VK2GR

Session 2, ITU Region 3 Winner

226 QSOs	216 Multipliers	48,816 points
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Session 3, ITU Region 3 Winner

129 QSOs	117 Multipliers	15,093 points
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LOW POWER -

Robert Helminiak, SP1D

Session 1, ITU Region 1, Low Power Winner

151 QSOs	127 Multipliers	19,177 points
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Session 2, ITU Region 1, Low Power Winner

211 QSOs	188 Multipliers	39,668 points
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Session 3, ITU Region 1, Low Power Winner

217 QSOs	158 Multipliers	34,286 points
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Don Binkley, N4ZZ

Session 1, ITU Region 2, Low Power Winner

410 QSOs	288 Multipliers	118,080 points
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Eric Silverthorn, NM5M

Session 2, ITU Region 2, Low Power Winner

338 QSOs	233 Multipliers	78,754 points
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Geo Schultz, W0UA

Session 3, ITU Region 2, Low Power Winner

381 QSOs	273 Multipliers	104,013 points
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QRP -

Jon Duda, N0LY

Session 1, ITU Region 2, QRP Winner

200 QSOs 167 Multipliers 33,400 points

Session 3, ITU Region 2, QRP Winner

188 QSOs 158 Multipliers 29,704 points

Marvin Bloomquist, N5AW

Session 2, ITU Region 2, QRP Winner

254 QSOs 204 Multipliers 51,816 Points

In summary: A BIG CONGRATULATIONS to the winners of trophies and plaques in the 2022 CW Open. Thanks to all the participants in the 2022 sessions, both CWOps members and non-members. Hopefully everyone agrees with me that this was another great way to spend a few hours on the bands, talking to friends and perhaps making a few new ones. I would like to thank Rob, K6RB, for the outstandingly quick turnaround of the log processing and checking. I would also like to thank the regional communications volunteers that helped me get the message out there. They are Region 1; Bert (F6HKA) and Roger (G3LDI) Region 2; Lar (K7SV). Region 3; Barry (VK2BJ). Looking ahead a few months, next year the propagation should be improved. Both 15 and 10 meters are opening more and more. Based on the September 2023 calendar, the CWO will be held on September 2, so time to mark your calendars and keep the date and times open! Until then, I will see you on the bands and in the weekly CWTs.

73, [Bruce, N1LN](#), CW Open Manager (CWops #1141)

SC

CW Open Anecdotes

Compiled by Dick Strassburger, N9EEE (#3113)

KD4AN: I normally just have a 20m full wave loop in my attic, but I wanted to get on 40m for this contest as well. I decided to put up my EFHW out of the bedroom shack window. Before the rest of the family woke up, I dropped a paracord out of the second story bedroom window, went outside, and threw my line and antenna into the tree. Then I went back inside, pulled up the other end of the antenna, and connected it to my KM4ACK unun. After tying it down, I closed the window as much as possible and pulled the curtains. I have 6, 4, and 2 year olds, so I didn't want

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them seeing the open window and trying anything hihi. Out of sight, out of mind, and I forgot to pull the tree end taut. It turned out to be a **non**-invented V with the middle bit laying on the ground. Surprisingly, the SWR on the rig was great! After lunch I went outside and saw my mistake. I then realized why some stations that were S7 kept calling CQ over and over and not hearing me!

KB6NU: I am one of the guys who maintains the CWops website. A couple of weeks before the CW Open, Theo, SV2BBK, my co-maintainer, and I got an email from Bruce, N1LN, expressing some concern that the CW Open Team Registration form wasn't working quite right. Since the forms are my responsibility, I looked into it. To test the form, I registered Team Website, with Theo and me being the two team members.

A week or so later, Bruce published the first official list of teams, and Theo noticed that Team Website on the list. He suggested to Bruce that Team Website be deleted, since the submission had been only a test and neither of us are really contesters. I was copied on that email and replied that perhaps we should leave it on the list, and just operate however much we cared to in the CWO. We'd be operating for the fun of it, not to achieve a high score.

Theo agreed, and thus was born Team Website. Theorizing that other CWops members might enjoy being part of a low-pressure kind of team, we decided to invite others to join us. I sent the following to the CWops mailing list:

You're eligible for team membership if you've ever authored a page on our website, or your name or call sign appears somewhere on our website (HINT: Almost every member's name and call sign appears on our website), or even if you know the URL (cwops.org) of our website. Send me your call sign, and I'll see that you get added to the roster.

In the end, we signed up six other team members for a total of eight. How did we do? Well, honestly, I'd be surprised if we didn't come in last, but who cares? We had a lot of fun doing it.

N9EEE: Team Wisckey, as in 3 CW ops from Wisconsin, the land of beer, brats, and cheese curds. So with the best of intentions and great delight as there are three CWops members in the Milwaukee (WI) area, we decided to join the fray in the CW Open. With no experience, we plotted our strategy: one will be doing SOTA, one will be entertaining his son's friends at a park, and I will be operating portable next to a beach. So, not a serious contest effort but more of a "who had more fun" kind of entry. MJ was limited to a couple of hours in one session. Michael was limited to an endurance test of focusing on CW contacts and herding cats, I mean kids for a parts of a couple of sessions. And I was challenged by a makeshift EFHW inverted-V at 20ft above ground. A platry score by contesting standards, but more fun than you can shake at an empty beer can (another Wisconsin reference). 73 - AA9RK, N9EEE, WO9B

W6QX: I CW opened as a guest operator at Jim K6AR's station for the 1st session 2022 where I had access to a great antenna system and an Elecraft rig. It was a hoot, huge thanks to Jim for the generous invitation.

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M0RYB: I was trying to work a running station whose call escapes me now, but his name was 'AL'. It was fairly early on in the session, and I noted he was sending serial numbers in the mid teens, with the '1' sent as 'A', and by the time I worked him, my number would have been '19'. As the number precedes the name, I thought, "he's not going to, is he? Is he?" Sure enough, he did, sending 'AN' 'AL'.

K3JT: Always fun QRQ – still feel the need for speed!

NS0R: Was brutal the last hour.

K3QP: I was on for just the last 17 minutes. Hoo boy, the thrill of being fresh meat!

N1LN: Conditions much better on all bands. In the last half hour the mults just kept coming and coming on 40 meters. I was going to move run to 80, but it was just too good on 40.

N50T: Missed 400 QSOs by "that much."

K3PP: Boy, I sure like these CW Open events! My computer barfed on me and it took me off the air for about 20 minutes. It's MUCH more fun doing these live at a real radio! I need to do remote sometimes, but it just ain't the same!

KJ5T (QRP): Always good to work friends and fun to see where I can be heard when I turn the power down.

KA7MDM: Put up my BuddiHex in the front yard. Very close to the shack. Had to put ferrite on the USB, keyboard, power, and keying lines of the QSK box. Sorry for the erratic CW early on. Australia heard me on 15 meters, but I could not copy the serial number

KG5U: Great fun and a great finish...I've put 7.026.51 in K4D memory for the next contest. ☐ Ya just never know...it might be a "magic" frequency.

W4QDV: What a ride! Thank you to all the fine ops who I had the pleasure of meeting even for a few seconds. Thank you, CW Ops for a great contest experience! And thank you CW Academy and instructor Terry WB0JRH for all his encouragement.

K4PQL: This was the first year in many I was home for Labor Day weekend and could get into this contest. I like the split session format. Choosing not to use history files made for challenging sessions. Needed more fills than usual to get something resembling your name into the log. The log checkers will have a field day destroying my claimed score but I needed the practice both hearing and typing. My high school typing teacher probably knew more than I that at 80 I would still be using a skill learned at 15!

K5OY: Boy!! If you look in the dictionary under "slog", it will give you today's session!! Still a lot of fun.

K9KMD: Hope I win!



Antenna Project

Bruce Manning, NJ3K (#2431)

I was first licensed in December of 1972. I was in the U. S. Navy at the time stationed at NAS Quonset Point, R.I. The club station on the base had a 20, 15 and 10 meter Yagi-Uda on the roof. This was an old WWII 2 story building, so it was about 30 – 35 feet above ground. I believe it was a TH-6DXX. I had the use of this antenna while I was stationed there.

Ever since I have used nothing but wire antennas. With good results. I have 9 Band DXCC, my DX Challenge stands at 2005. I only need two more DXCC Entities to get on the Honor Roll. So wire antennas do work well. But I have always wanted a beam antenna. Someone much wiser than I once said “If you have \$100.00 to put into an Amateur Radio station, put \$90.00 into the Antenna, \$9.00 into the Receiver and \$1.00 into the Transmitter.” Now we all know \$100.00 won't get you much of a station but the ratio is still good today.

Move ahead to 2019. I have had several sections of Rohn 25 tower for many years. So I decided that now is the time. I purchased a JK Antennas Mid-Tri tri band antenna. 12 Elements all together. 5 on 10, 4 on 15 and 3 on 20. I had the Rohn catalog which showed how to install the tower, with drawings for the concrete work to be done. I decided to talk to Tim Duffy, K3LR, about who I could get to do the actual installation of the tower and beam. He suggested Tim Jellison, N3YQ. I met Tim at a summer get together of the North Coast Contesters Club in West Middlesex, Pa. We had a discussion and I was all set to go. Well like most things other things caused some delays, the concrete guy was booked full. Then COVID-19 hit. So after 2 Plus years things are almost back to normal. I got the concrete guy to schedule me in for early spring 2022. I purchased some hardware the Tim requested I have, turn buckles, guy anchors, 11 foot mast, tower base plate and pin, thrust bearing and top plate. I also purchased 500 feet of Coax and 300 feet of rotor control cable.

Picking the location for the tower was next. I found a suitable spot and needed to remove a few small trees. Then I needed to lay out where the tower would set and the 3 guy points at 120 degrees. That was a problem. I had an approximate location but needed to be more precise. The distance from the base of the tower was easy to determine, but the distance from guy point to guy point was more difficult. I could not use Pythagorean Theorem as it was not a 90 angle, it was 120 degrees. So after a long search on the internet, and I mean long, I found the formula. Now I took Algebra and Trig in high school in 1968 but as I was looking at this formula I thought this does not even look remotely familiar at all. $C = \sqrt{b^2 + a^2 - 2ba \cos(c)}$ Just in case anyone needs to know the formula.

But it works. So I cut 2 pieces of rope one 33 feet long, distance from the tower to the guy points, and one 55 feet 5 inches distance from guy point to guy point. Looked good on paper but the ground where I was installing the tower was not flat, so I had to allow a little wiggle room.

The concrete guy showed up I gave him the drawings and explained everything and we were all set.

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Next step build the antenna. The antenna had been setting in my shed for 2 + years. The directions stated to build it on a 2 inch OD pipe. Well I did not have a 2 inch OD pipe but, 1 ½ thin wall conduit has an OD of 1.740 inches, close enough. So I purchased a 10 foot joint of the conduit and attached it to one of my clothes line poles with tie wraps and rope. (Note, it just fit in my car) Then I started to assemble the boom and the elements. Every connection has Petrox on it. You need to be sure there is no way you can get interference from an arcing loose connection. This antenna has a 24 foot boom and the dimensions are fairly critical. I kept everything within 1/16 of an inch, and measured everything twice if not 3 times.



Almost done but the house is in the way! I could not put the ends of the 20 meter reflector and driven elements on. (I couldn't convince Peggy we needed to move the house 3 feet east!)

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Along the way I put up the first 10 foot section of the tower, attached the ground, and the electric box. Then I had to run the coax and rotor cable from the house to the tower. Again Tim, K3LR, to the rescue. He suggested I use a pressure washer to cut the trench. So that is what I did. I stretched out both the coax and rotor lines, and starting at the house and put in the trench about 2 feet at a time. Then stuffed the wires into the trench. Took about 5 + hours in the hot sun. I took several breaks, (I am 71) I was covered in mud when I got done. But that part was complete. Soldered on the PL-259 and attached it to the lightening arrestor in the box. The extra rotor cable was rolled up and taped to the tower for now.

Everything was going well. I had the 10 foot section guyed with 3 pieces of rope and several DANGER tapes hanging from the rope. Then my neighbors horse got loose. He hit one or more the guy ropes. Tipped the tower over, bent the center pin and the bottom plate. The bottom plate needed replaced and DX Engineering had one to me the next day. The pin was okay just a small bend in it. So I put all of that back together. Tim N3YQ, was trying to find time to do the work, he had a job that cancelled on the same weekend as the Pa QSO Party. I had Steve, KC3KZQ, and Joe, KC3KZT, lined up to give me a hand but they were busy with the contest. I too was going to do the contest but I needed to strike when I could. So I contacted my fire chief and he got one of the firefighters and he got a friend to help me. It is nice to have a couple of young guys to give me a hand.

So Tim arrived on Saturday morning. I had everything ready, I think? I ran 120 VAC to the work location for his electric wench. Then we attached better guy straps to the first 10 feet of tower so he could build the remaining sections. We had to cut and install the 3 guy wires and the turn buckles. That part went well, no problems there.



Now how to get 104 lbs of antenna on the top? By the way the mast you can see in the top right photo is 11 feet long 2 inch OD and ¼ inch thick wall. You really should not use just plain pipe, as it is not strong enough. Tim said we will tram the antenna up to the top. So he rigged a line from the top of the tower to the front axel on my lawn mower. He had another line from a pully on top of the mast to a pully on the bottom of the tower to the wench on the back of his car. The antenna was suspended on a pully and setting on my saw horses. I backed the lawn mower up and up

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came the antenna. I was not balanced very good so he hung a tool bucket off it to balance it. Also the elements would hit the guy wires so we needed to tilt it just a little. You can see the two tool buckets in the next photos.



Of course Tim put the rotor up and tightened the thrust bearing bolts to the mast. So next was attaching the antenna. The tower is 40 feet, 4 - 10 foot sections. The thrust bearing plate is another foot and a half. The antenna is about another foot and a half above the top of the tower. So the antenna is at 43 feet.



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Tim then attached the coax and the rotor cable. I had the rotor controller in the house and it and the rotor set to north. So tim pointed the antenna north and tightened everything up. Then I made sure it rotated okay. Tim used a Rig Expert AA55 to check the antenna from the top of the mast before he attached the coax. The SWR curves all looked good.

I can't say enough about Tim's work, he put never-seize on all fittings and bolts. He sealed all the coax connections and rotor connections. He is a true expert at this, as he should be as he does this work for a living. I would recommend his work to anyone.



Does it work? Oh yes! First remember that a beam antenna does two things for you. It has gain, it concentrates your signal. Second, it points your signal where you want it pointed. I have done some comparisons with my wire antenna. Sometimes I can just barely hear a station with the wire antenna, but with the beam, usually 6 to 20 dB louder. Front to side is very good indeed.

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This helps cut down on QRM. As does front to back. But as they say “the proof is in the pudding” I will have a much better idea in a few weeks during the ARRL CW Sweepstakes.



View of our house from the top of the tower.

SC

An Afternoon POTA Activation with the PENNTEK TR-45L

[Mark Yergin](#), W8EWH (#2911)

I have a hard time resisting new QRP radios, and I have an equally hard time resisting getting outdoors when late October brings 70F (21C) temps to Michigan. Days like these are especially sweet given we saw the first snow here last week (no accumulation – but still...). For me there was no better way to enjoy this unexpected weather gift than with an early afternoon POTA activation with my newest QRP radio, the PENNTEK TR-45L.

The TR-45L is the latest radio from WA3RNC, joining the TR-35 and TR-25 in his [online store](#). It's a 5-band, 5-watt CW transceiver covering the 80, 40-, 30-, 20- and 17-meter bands. That in and of itself is not particularly noteworthy. But when you look at this radio, you'll immediately see what makes it different.

The retro look for me is unlike anything I have seen in a modern QRP radio. It frankly looks like it was removed from an Apollo Command Module. From the front meter to every knob and

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switch, this radio just begs to be fiddled with. And each knob and switch serve a function that means no longer needing to dig through menu after menu to find where the narrow filter is switched in because of nearby QRM, or so I can slow down when my CQ POTA is responded to by a slower CW call. A speaker is located on the (left) side of the radio, a feature many smaller QRP radios don't have, though headphones can be used via a front mounted jack.



The radio sounds great – I think the radio's case provides a nice sound chamber. The TR-45L comes with a couple of options, neither of which I chose to add to my order. One is a built-in rechargeable battery (5200 mAh), and the other an antenna tuner. I have plenty of batteries, and normally use resonant antennas.

With the Monday late morning temperature approaching 70 I packed the car with radio gear, and my wife, and we headed out to Island Lake State Recreation Area (POTA K-3315) to activate this park with the TR-45L for the first time. My wife is not a ham but often comes with me to POTA activations. While I set up, activate, and then pack up, she enjoys the outdoors with a magazine and crossword puzzle, and sometimes, like today, a light lunch. Usually, once the activation is complete, we'll go for a hike on park trails.

Island Lake is about a 20-minute drive from my house. It's 4000 acres is a mix of open fields and hardwood forests surrounding Kent Lake and the Huron River. Today it was warm enough that someone was using a paddle board on the lake.

I have found a set of picnic shelters on elevated ground overlooking Kent Lake as a great place from which to activate. I worked North Pole Alaska from this location on 20M CW using my IC-705 with 10W into an EFHW last May.



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Once at the shelter I set up my EFHW (KM4ACK kit) in a sloped configuration using a conveniently located mature tree and my throw line. It was roughly in and East/West orientation. Over the preceding weekend, I added PowerPole connectors to the provided power cord, and programed both internal CW keyer memory slots. These are activated using either dit or dah paddle when I toggle Play using the provided switch. Of course, I did a little POTA hunting using the home antenna to familiarize myself with the TR-45L's operation. The learning curve is short with nothing hidden deep behind any menus.

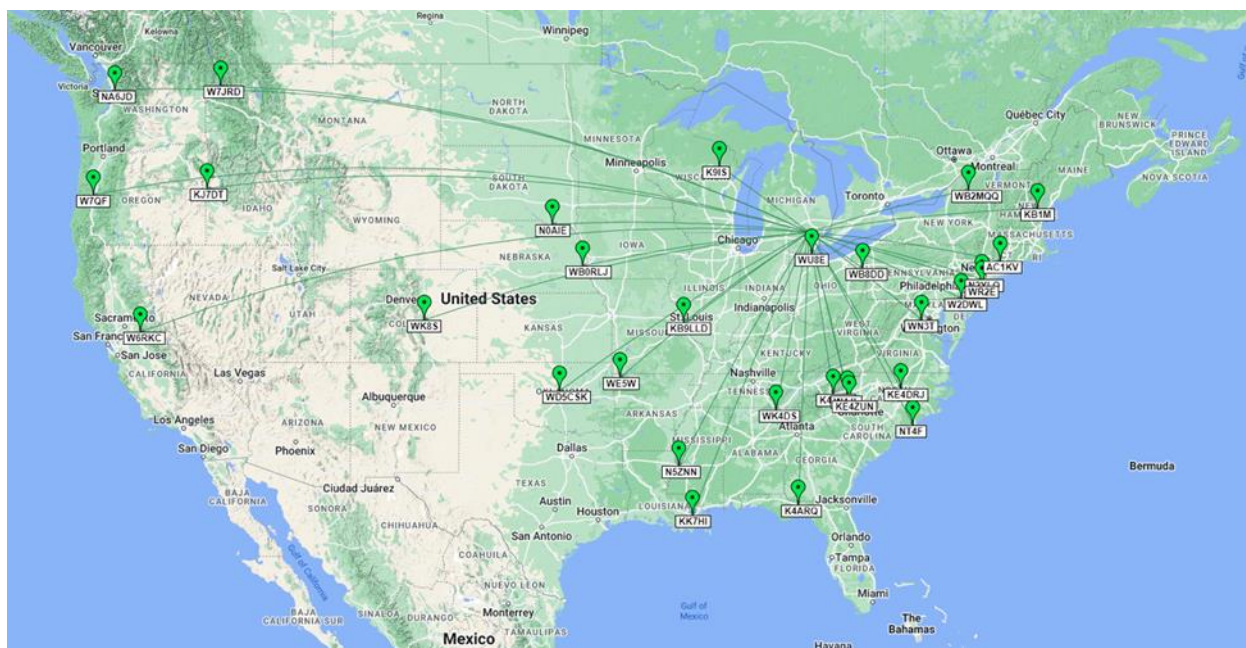
With the radio and antenna ready to go, I set up HAMRS on my iPad, spotted myself on the POTA website, and started calling CQ POTA on 14.0615. Over the course of the next 35 minutes, I worked a total of 30 stations on 20M and 40M (most on 20M) at which point I basically ran out of hunters. Not bad for a weekday afternoon. I packed up and went on a couple mile hike with my wife.

The TR-45L is an absolute joy to use. I forgot to put it in CW Narrow mode at first, and when nearby QRM popped up, I was able to add this in with the throw of one switch. QRM gone. (Note, this setting – wide vs. narrow filtering – must not be retained after the power is shut off or the battery is disconnected.) It sounds wonderful. I used the side speaker the whole time as my wife doesn't seem to mind, although the random guy who wandered in with a laptop to get some work done on a warm fall day decided to find somewhere else to work. There are front mounted jacks for headphones, paddles and a straight key. Even a rear mounted jack for an external speaker. The built-in speaker can be turned off and on via a toggle switch. The two CW memory slots are easy to fill using your paddle. The front meter can show power output or SWR based on toggle switch position, and you are alerted to high SWR via a front mounted red LED.

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I waited a while to get this radio. Recent supply chain issues caused unexpected delays, but it's available for order now in factory-built form and most definitely worth the wait. Kits will eventually be available. Check out all the TR-45L details [here](#).



SC

POV: Is Morse Code a Language?

[Guy Immega](#), VA7GI (#3256)

Language is an everyday miracle. Animal calls aren't languages. Parrots don't understand what they're saying. Washoe the chimp, Koko the gorilla, and Chaser the border collie, each learned hundreds of vocabulary words, but never acquired language with syntax. No animal, except humans, has ever achieved true language. Speech is so difficult that it likely evolved only once—as compared to true flight (four times) and eyes (forty times).

To speak, you must formulate a thought, instantly select words from a learned vocabulary of tens of thousands, arrange the words in a grammatical sentence, and vocalize them using the many muscles that control the breath, vocal cords, tongue, jaws and lips. Your tongue muscles never get fatigued.

To understand speech, you must recognize words in real time, interpret syntax (word order—subject, verb, object in English), and decode meaning. Human speech is monumental task that requires true consciousness. Computers, using AI and natural language processing (NLP), only simulate understanding. Babies start to speak at two to three years of age.

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Written language is a graphic representation of sounds (except logographic languages, such as Chinese). Most readers don't focus on individual letters or hear words in their heads, but rather comprehend printed words directly. However, literacy (reading and writing) isn't generally considered to be a separate language.

Morse code is the *transliteration* of written language into sound patterns, letter by letter. Morse depends on basic literacy, using an alphabet—it can't be learned *de novo* by preliterate children. No one thinks in Morse code. Thus, some linguists argue that Morse code is not a true language, but rather it is built on top of a pre-existing written language. Morse can be compared to fingerspelling for the deaf (not ASL, which is a true, natural language), or Braille for the blind, or semaphore signaling with flags.

POV = Point Of View

This article contains claims or statements that are those of the author and may or may not be linguistically or scientifically accurate. This article is presented as a point of view to spark interest among our readership to form their own opinion.

The goal of “conversational Morse” is to exchange information in a manner similar to a spoken language. English speakers can reach up to 150 words per minute when talking. Speed readers can work faster, some at 200-400 WPM. Most skilled Morse operators can only copy 30-40 WPM (although a few can copy over 100 WPM). On average, spoken English is about 5 times faster than Morse code.

Why is Morse so slow? The audio spectrum only supports a low bandwidth—higher (radio) frequencies can carry far more bits of data. However, human language compresses information with vocabulary and syntax, vastly increasing effective bandwidth—complex ideas can be expressed in a few words. Morse is slow because words are spelled rather than spoken, and the repetition rate of *dits* & *dahs* is limited by low audio bandwidth. For me, Morse code above 50 WPM sounds like a blur of noise, without distinguishable characters. Faster speeds above 30-35 WPM bring diminishing returns, because fewer operators can copy at those rates on the air.

Some experienced Morse operators practice “copying from behind,” a technique for remembering sent characters for a short time, so that they can be written or typed a few moments later. This has been called a “symbolic dialect” and was/is important for accurately receiving long transmissions from a third party, such as for telegraph, railroad or military messaging, where comprehension is not required. For example, an operator using a mechanical typewriter would type a full page text, remove it from the machine, insert a new sheet, and continue typing without missing sent words. Extremely skilled operators could listen and automatically type text without reading or understanding it, while carrying on a verbal conversation on another topic (this is somewhat like driving a car in traffic and talking with a passenger). Of course, Morse speeds were generally slower in the past. The International Amateur Radio Union (IARU) stages high-speed telegraphy (HST) contests, including receiving five character groups of random letters and numbers, where copying from behind is essential. Today, ham radio operators may copy behind to comprehend long or unusual words, but they must maintain active attention to understand meaning.

Various methods for “conversational Morse” have been discussed, where operators try to anticipate the word being sent (the opposite of copying from behind). All experienced operators

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achieve ICR (instant character recognition), and some IWR (instant word recognition) for common words. For “headcopy,” (understanding Morse without writing it down) the operator must hear each letter and automatically recognize words and sentences. The inverse skill is “headsending,” where the operator must compose and spell Morse words in real time.

For high-speed headcopy, the listener must remember a series of words to comprehend a whole sentence. For complex topics, the memory must also accommodate a paragraph or abstract ideas. Perhaps skilled operators compartmentalize headcopy memories (for letters, words, sentences, and paragraphs) to avoid confusion. Headcopy of conversational Morse requires extraordinary memory gymnastics, which unexpectedly becomes easier at higher speeds, since low-level information needs to be held in the mind less long.

There is one characteristic of Morse code which may qualify it as a language. Morse uses an efficient binary code based on letter frequency in English. The words of a spoken language are comprised of many phonemes, the smallest units of distinct sound (e.g., consonants & vowels). English has 40-44 phonemes, Khoisan (a South African click language) has almost 100 phonemes, while Hawaiian has only 13 phonemes³. With fewer the phonemes, more syllables are used say a word. In Morse code, there are only five phonemes—a short *dit*, a longer *dah*, plus three timed spaces (intra-character, inter-character, and inter-word)—so sending a word is slow. Unique phonemes are objective evidence that Morse code is a true language. For John Sixel N5HCN², neuroplastic brain “rewiring” makes CW a language comparable to reading printed text. He reads audio books in Morse code.

Although Morse code may (or may not) be an independent language, it *feels* like it is. CW has several language-like characteristics. Like speech, it is an aural communications mode that can express any thought. Experienced operators can subsume the complexities of code without (much) conscious effort, freeing themselves to converse in words, sentences and paragraphs. Morse code may recruit the speech circuits in the Broca area of the brain. Many skilled operators believe that Morse is a language—at 178 years, the world’s youngest.

I recently completed the CWops Advanced course and I’m now competent at 25 WPM, a *big* improvement! At faster speeds, Morse is a satisfying skill. However, I still stumble on long, unusual, or unexpected words—I suppose that’s no different than odd words in regular speech. But headcopy of conversational Morse challenges me; it’s like halting efforts to converse in a foreign language. Rag chewing is the highest form of the CW art. I hope immersion and practice will bring fluency.

Amateur radio operators communicate in an esoteric code that can span the planet, a skill mere mortals can only envy!

¹Ben-Yami, Hanoch, *Can Animals Acquire Language?* Scientific American, March 1, 2017 <https://blogs.scientificamerican.com/guest-blog/can-animals-acquire-language/>

²Silze, John – N5HCN, *A Case for “Book Copy”* - Solid Copy May 2018 Page 10. <http://cwops.org/newsletter/2018/05scopy18may.pdf>

³Wikipedia, *List of languages by number of phonemes*, https://en.wikipedia.org/wiki/List_of_languages_by_number_of_phonemes

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⁴Wikipedia, *Khoisan languages*, https://en.wikipedia.org/wiki/Khoisan_languages

⁵Schlaffke L, Leemans A, Schweizer LM, Ocklenburg S and Schmidt-Wilcke T, *Learning Morse Code Alters Microstructural Properties in the Inferior Longitudinal Fasciculus: A DTI Study*. Front. Hum. Neu- rosci. 11:383, (2017). <https://www.frontiersin.org/articles/10.3389/fnhum.2017.00383/full>

⁶Maier J, Hartvig, NV, Green AC, Stodkilde-Jorgensen H, *Reading with the Ears*, Neuroscience Letters, 364, 185–188, (2004). <https://doi.org/10.1016/j.neulet.2004.04.040>

SC

Giving Back Update

[Rob Brownstein](#), K6RB

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 October results:

AA0YY: K1MLP, N5GPI, KA5SGE, WV0H, WB8APR, K5SGE, NN2L, KC8YTV, VE3UEE, W0ITT, KD9LPR, NF0R

E25JRP: E24ZST (3), HS0GWL, HS9UAC, E25FUK, HS2KWO

G0POT: M0NNK/P, 2I0FIP, HB9GUR, M7TSM, M0ALH, 2E0WDT

GW2CWO: M0MCL (2), ON4ASZ, DK7DC, IK6TSJ, SM3CNH, EA2BJ, DL1KH, DL1KGT, G4HXY, I5ECW, SM0HCI, G4BEW, GM4PSL, DL2LQC, HA1BJ/P, RA6LUU, F6GSI/P, DM3KF, PA2MT, RA1ALS, IZ7AVY, YT1XC, RA6AGR

J1FXF: JH4EMX, JJ0SFV, JK1EDT/1, HL5BLF, JS2LOG (2), JF5XPJ (4), JA4IJ (3), JE6WGA (2), JG0KJC, JA2MHY, JJ1FWH, JO4MKA, DS5RLI, JJ5QLV, JR1DTN, JR1EHL, JS2AHG, K2QOD, KE7LOY, M0AIA, N6CUQ, R0AT, R3PJN, RA4ACX, JA9MCM, VK2DVA

J1VNV: JJ0SFV, JF5XPJ, JN1VFV, JH0DOE, JS2LOG, JK1EDT/1, JQ3GIP, JA4IJ

JO1DGE: 6K2HJI, JA4IJ (2), JA6MER, JF5XPJ, JG1BGT, JH4EMX, JN1FAO, JQ1JFW, JS2LOG (2)

JM4AOA: JE6WGA (3), JF5XPJ (6), JG1BGT, JJ1FWH, JJ1IZW, JK1EDT/1, JK1FYU, JK1IVL, JM2LOF, JN1FAO, JQ1JFW (2), JS2LOG

JR1WYW: JH8DWD, JE7RMT, JS2LOG (2), DV3QEA, JJ0CCZ, JQ1JFW, JA6MER, JH4RCT, JO4MKA, JF1DFA, JO4IFG

K6RB: K7SHR, AD0IU, K6XDX, W3WW, KD2FSH, N7GBH, W8MDE, K0HNL, AG5XU, W6NFU, N3A/7, KK7GRV, VA3FN, NB3W, W6QX, W8KIX, W4SYV, KK7RR, PT7BT, W8NNC, K9UYCX, W8DLW, K4UY, W9LD, VE7BGJ, N5CW, N6EED

K7NJ: VE3NUL, K2QBN, K0FCG, W4SYV, W2KEZ, W4BOH, NB3W, KG0TS, WZ6T/6, K3TLP, WD8LSR, WB5KJE, K2MYQ/1, K6DF, WA6JCH, KK7XV, N4AHO (2), KK7XV, KB6DA, N0YJ, K9UCX, KA6JLY,

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N0QLR, N5TJ, W4MCX, XE2YWP, KF9VV, N9DDC, N9AK, NI8W, KA8TNK, KA6IOM, W0UH, W7BGA, KC3RN, WA2RVT, K1DFT, NE9H, N0ZT

N2GSL: K8MPH, VA3PTJ, K2OHK

N4TMM: K2FW, KA5TJS, K4EWG, AI8AI

N5OT: VA3AJB, KX2P, N3A/O, NP4C, KE8ROY, KI4GDN

N6HCN: AI6U, WA7A, WB6UBK

SV2BBK: IK2GAJ, LA4IM, OZ1OM, IZ4VSZ, IW2ENA, DL1DHM

W2XS: N4QR, VE2PID, W7FW, K4IBZ, W1ASP, WA4IAR, AB8AV, AA2YK

WE5P: KB9RPG

7N2XZB: JS2LOG, JF5XPJ (6), HL5BLF, JJ5QLV, JA4IJ

Giving Back Operating Schedule - 7 PM Local 40 meters 7.035-7.045 MHz and/or 80 meters 3.535-3.545 MHz											
UTC+9	UTC+7	UTC+3	UTC+2	UTC+1	UTC/BST	UTC-1	EDT UTC-4	CDT UTC-5	MDT UTC-6	PDT UTC-7	Hawaii UTC-9
Mon											
JH2HTQ					G2CWO		W2XS	AA0YY		N6HCN	
JO1DGE							WK4WC				
TUE											
JH2HTQ	E25JRP		SV2BBK		GW2CWO		N4TMM	W8OV	K7NJ	K6RB	
JR1WYW							WE5P		K0ES		
7N2XZB											
Wed											
JH2HTQ							K3ZGA	W2ITT			
JM4AOA								K8UDH			
Thurs											
JH2HTQ			SV2BBK				KV8Q	N5OT	K7NJ		
JJ1VNV											
FRI											
JH2HTQ			SV2BBK		GW2CWO		N2GSL	AA0YY	WB7S	K6RB	
JR1WYW											
Sat											
JJ1FXF											
JM4AOA											
Sun											
JJ1FXF				IZ8NXG			W5DT			K6RB	
JM4AOA											



CW Academy

[Joe Fischer, AA8TA](#) [Bob Carter, WR7Q](#) [Roland Smith, K7OJL](#)

The September-October 2022 CW Academy semester has come to an end. The following is a summary of the completed classes as of the time that this article was written.

This semester had 329 students successfully complete a class. We were very fortunate to have had 66 advisors leading our classes.

We greatly appreciate the dedication and efforts of these advisors who led groups of students:

Joe, AA2IL; Buzz, AC6AC; Jed, AD7KG; Jon, AI6W; John, AJ1DM; Jack, AK7O; Chris, G0JPS; Jerry, K0ES; Richard, K1DJ; Dallas, K1DW; Michael, K1LHO; Kelly, K3UQ; Mark, K5GQ; Charles, K5KXJ; Kate, K6HTN; Peter, K6PB; Rob, K6RB; Roland, K7OJL; Bruce, K8UDH; Bruce, K9OZ; Gregg, KA7MDM; Jason, KB3SAR; Rostislav, KC3FQF; Ken, KD2KW; Shawna, KE0LUA; Christian, KF7WX; Randal, KG5IEE; Mike, KI7OMH; Joseph, KK5NA; Roy, KK6M; Richard, KN4CQB; David, KT5V; A. Chris, KT9N; Tom, KV8Q; Enzo, M0KTZ; Will, MI0WWB; Randy, N1SP; Marcus, N3VO; Jenna, N4JEH; Otto, N4UZZ; John, N6FVY; Gary, N8LR; Kevin, NB7O; Philip, NE0S; Morgan, NJ8M; Dana, NN0G; Quinton, NU7Y; Bert, PA1BBO; Leon Dusan, S55AC; Mark, VE3BXG; Ron, VE3FXX; Bill, W0EJ; Tom, W0FN; Bill, W3PNM; Carl, W4IF; Tim, W7EEE; Darin, W7PFY; Mark, W8EWH; David, W8OV; David, WA3SCM; Terry, WB0JRH; Andy, WB7DKZ; Steven, WJ0C; Bob, WR7Q; Nianfeng, WU6P and Hanz, YL3JD.

The following students successfully completed an advanced class (39):

AA5ND, AA9WP, AD5US, AH7RF, AJ6CU, HB9AJ, IZ4APU, K0AWG, K2VRT, K4WA, K6YDS, K7EFW, K7NXL, K7UV, KB1FGC, KB4DE, KC3O, KE0QKF, KE8HXE, KF0FFL, KH6AQ, KK9TT, KN6OMN, N0IP, N0ZT, N3BQ, N4OQV, N7AUE, N8ZV, NJ6I, NJ7V, PE1RCT, SV2HUD, VA7GI, VK1TE, W3ZWN, WD5HCK, WU7X and WZ4M.

The following students successfully completed an intermediate class (88):

AD0L, AD9AC, AE4GS, AG5ZN, AG6ZE, AI5GP, AJ6HO, DG5CW, DL9BU, DV9/VE7HQT, EA3IEB, EC4CWT, EI2KU, F5YW, G3NDS, I2PHD, IU2OZV, IU3QEZ, IU8PWP, JK1MVC, K0MJG, K4EAK, K4PZ, K5EFJ, K6KY, KA9KBG, KB5QHO, KB6Q, KC0WEA, KC3TAU, KD2VXW, KD7ZVQ, KE4EOC, KE7UAE, KH6UU, KI5GDZ, KJ7DT, KK7ETF, KK7RV, KM4JEG, KN6BAZ, KN6RDC, KO4GEO, KO4TQF, KU9S, KZ0X, KZ3A, M0NGZ, M0NNQ, N0RPM, N1CFO, N3JG, N3RTW, N4JEH, N5BMD, N8VCL, PA2RG, PA2WLE, S58KX, SP5NZF, VA2OF, VA3SAX, VK3GQ, VK3TCP, VK4ANS, VK6MK, VU2VTG, W0WL, W1FIF, W1LEM, W2TJ, W4CWA, W7DLR, W7JKC, W7PAT, W7XFS, WA3SWJ, WB7UOF, WD1V, WE1C, WU8H, WV7W, WZ5L, N4JEH, W4CWA, NU6T, W4QDV and W5CYN.

The following students successfully completed a fundamental class (95):

2E0VGI, AC3D, AE6MO, AJ6VB, DL7DS, EI4KO, G0OBQ, G8SKG, GM5TDX, JP3REM, K0DAG, K1TNT, K2PMD, K4WSD, K5IJB, K6FRB, K6ZAP, K7IYB, K9VEG, KA0RTB, KA0RTM, KA6PRW, KB1ND, KB1VUN, KC1NOP, KC3PBY, KC5ZX, KC9ZMY, KD2WYO, KD2YMM, KD5RXP, KE0FFA, KE0LQH,

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KE4JSU, KF0JPG, KF3K, KG6ECW, KI5CDF, KI7MWA, KN6EY, KN6TZK, KO4NTA, KRASIY, M0LXY, M0LZN, M0NJX, M0RGM, M0SDB, M0VPH, N1ETO, N2HMM, N3EJG, N5LOT, N6POM, N7CKJ, N8KOM, N9CAT, N9SEB, ND7C, NQ6F, OH1HAQ, PA2PIM, SA4ZAB, SP6BAZ, VA3TTM, VA7FK, VE1RL, VK3XD, VU2YYE, VU3BOJ, W1ZU, W3MAM, W4CLW, W5LNA, WA7ECF, WA7WS, WB4CAL, WB6NCT, WB7NYV, WJ0I, EI4KO, KA0RTB, KA0RTM, K2PMD, KG6ECW, N5LOT, N9CAT, VE1RL, WJ0I, G8SKG, M0NJX, PA2PIM, WB6NCT, WB7NYV and W5LNA.

The following students successfully completed a beginner class (107):

2E0RQD, 2E0XUP, AC0TG, AC4JL, AC9KX, AE5EZ, AE5TG, AE6I, AG2N, AI6FL, AJ6TL, COHN, CT1EMS, DM5DK, EA1FNL, EI6IUB, EI9IRB, JESSOP, K4BOX, K4NHW, K6VGO, K7BPM, KB1HAX, KB3LYB, KB5FAH, KC3ROS, KD0AEI, KD2PGE, KD6BSU, KD6CZ, KD7JL, KD8VQW, KD9MEQ, KD9VRH, KF0AER, KF0GEN, KI5RSV, KI5RSX, KI8I, KJ7OYQ, KK4LWR, KK7FDD, KK7HXU, KL5IO, KN6NXM, KN6UZQ, KR0HN, KU1T, KW4NJA, KX4OU, KY4AWB, LU1WNI, LZ1AMA, M5CAH, M5UK, N0XES, N2OG, N2XIT, N3LSB, N4OG, N4RHL, N6CTA, N6DXQ, N9LUC, NZ5TX, OK1NP, PA2ADX, PU2XFF, SA6TAS, SCHNIDER, SP5ORI, SP5UX, SP6IA, SQ2PRZ, VE3JO, VE3LBL, VE5KE, VE9RK, VK2BRE, VK6JK, VY2MP, W0NY, W1HRB, W2BLT, W2DU, W2JVO, W4RDJ, W7KZM, W7MRC, W7QF, WA4YDJ, WO6JO, KO4OVZ, KK4TW, N2PLG, VE9RK, AC9KX, KI5SX, N6DXQ, AE5TG, KB5FAH, KD8VQW, NZ5TX, AG7UF, W5DLM, KD7JL and KW4NJA.

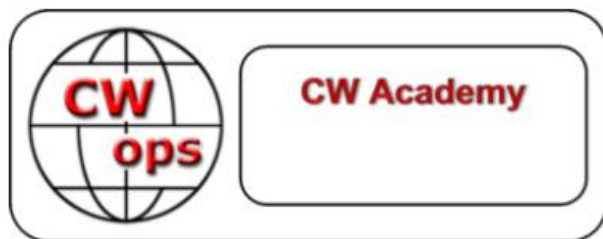
It is great to see students from outside our traditional North American and European areas starting and advancing through the CW Academy. We hope that trend continues.

The following students listed above have become CWops members since the semester began:

AA5ND, AA9WP, AH7RF, HB9AJP, K4WA, K6YDS, K7EFW, K7NXL, KE0QKF, KE8HXE, KK9TT, KN6OMN, N4JEH, N4OQV, N7AUE, N8ZV, PE1RCT, SV2HUD, VA7GI, WD5HCK, WU7X and DG5CW.

There could well be additional students who have been nominated, so if you are a CWops member, please check if you can sponsor them.

We are now on our autumn break and a few of us are preparing for the winter semester when we will do all this again. As an advisor, it is a truly wonderful feeling to see students do something that many of them doubted they could do. Despite the challenges, many students get a lot out of our classes and enjoy the learning experience. As always, we are interested in discussing advising with a person who has a passion for CW and would like to pass on that passion. You do not need to be a CWops member to be an advisor.



New Members

Trung Nguyen, W6TN

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

CWops	Call	Name	CWops	Call	Name	CWops	Call	Name
3241	IK3VUT*	Luca	3254	AI0Y*	Joe	3267	N2EIM*	Bob
3242	KA1RVM*	Bill	3255	K7NXL*	Dan	3268	KO1H	John
3243	DG5CW*	Tom	3256	VA7GI*	Guy	3269	HB9AJ*	Chris
3244	ZB2FK*	Tito	3257	N8ZV*	Bob	3270	ZL3CW	Jacky
3245	WD5GRW*	Jim	3258	KN6OMN*	Don	3271	K7SHR*	Paul
3246	M0AGP*	Mike	3259	K6YDS*	Bob	3272	AH7RF*	Heather
3247	ZS6MSW*	Michael	3260	WU7X*	Dale	3273	PE1RCT*	Andreas
3248	AA5ND*	John	3261	KK9TT*	Joe	3274	K7EFW*	Ed
3249	VA2NM*	Simon	3262	KG1V*	George	3275	K7NT*	Mike
3250	WF4I*	Derek	3263	WD5HCK*	Russ	3276	EA6EJ*	Ini
3251	K4WA*	Steve	3264	KE8HXE*	Brad	3277	KE0QKF*	Mike
3252	AA9WP*	Don	3265	VE9KK*	Mike			
3253	N4OQV*	Bruce	3266	WB7S*	Jerry			

* = Life Member

Current Nominees

As of November 6, 2022

Need Sponsors: N1QD

Invitations Extended: ZA1ME

For more details about nominees and up-to-date status, check the "Membership" then "Members only" page on the website: <http://www.cwops.org>.

For information about joining CWops, check the "Membership" page on the website: <http://www.cwops.org>

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

73, Trung W6TN (CWops #1707)

Membership Manager



CWops Tests

[Rich Ferch](#), VE3KI

As of the end of October we are now up to 172 CWTs. The leading participant totals are from G3LDI with 172 sessions to his credit, N4BP with 171, and PA2TA with 170; no change from last month except that the numbers are larger by 16.

As of November 1 there are now 84 members who have reached the gold medal/certificate level, 161 more who have reached the silver medal/certificate level (many of whom will reach the gold level by the end of the year), and a further 171 who have reached the bronze medal/certificate level (of whom many will move up to the silver level). If you are a member of the CWops group at groups.io, the current standings can be found in the toplist.txt file in the files area (<<https://cwops.groups.io/g/main/files/toplist.txt>>).

Participation numbers in the 1300Z and 1900Z sessions were up slightly in October relative to the previous month, but not enough to get excited about.

Clocks in much of North America fell back to standard time on the first weekend of November. In much of Europe, the change was on the last weekend in October. We will see what kind of effect this will have on participation in the next few weeks.

Enjoy the CWTs and keep those reported scores coming!

73, Rich VE3KI (CWops #783)

CWT Manager

Did your **CALL SIGN** change recently?

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

Congratulations!

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

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



CWops Member Awards

[Bill Gilliland, WØTG](#)

Monthly Update

During October, additional members submitted logs and the number of active participants in the awards program increased to 266 participants. The scores and rankings for the first week of November 2022 have the same familiar calls in the top six positions with **KR2Q** remaining in first place and leading second place **AA3B** by 169 points. The only changes in the top ten rankings this month are **KG9X** moving into seventh place followed by **K3WJV**, **DL6KVA** and **N7US** in eighth, ninth and tenth place. The top ten this month are **KR2Q, AA3B, K3WW, N5RZ, N5ZO, NA8V, KG9X, K3WJV, DL6KVA and N7US**.

Fifty-seven members have now contacted CWops members in 100 or more DXCC entities, no change from last month. The number of participants who have accomplished CWops WAS grew to 157 this month with the addition of **AA2IL, K0AF, K1SM, K4HR, K5AX, KK0U, N5KD, NB7O, VE9VIC, W0NF** and **W0VX**. You can see complete rankings for all award categories at <https://cwops.telegraphy.de/scores>.

CWops Award Tools Participation

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

At the end of 2021 we had 257 active participants in the Member Awards Program. As of November 4, 2022, we have 266 active participants exceeding last year's participation. If you haven't yet submitted any logs for 2022, please do so soon, and we can include your score among the participants.

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

You can see the final 2021 scores or final scores for any other year by going to the Score Overview Table and selecting the desired year from the "Final scores:" list at the top of the page. All scores categories on the page will then show the final scores and standings for the end of the selected year.

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

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"

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selection at the top of the page. For more information about CWT Participation Awards, please go to <https://cwops.org/cwops-tests/>.

About the CWops Member Awards Program

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

A set of tools for managing your awards status is provided on the CWops Award Tools website and if you regularly upload your logs your awards will be automatically tracked for you. **To view complete data for all currently active participants and see where you and others rank among active participants in the awards program, use the tools at <https://cwops.telegraphy.de/scores-by-call>.** For more details on the tools provided, see the August 2021 Solid Copy article.

Please Join Us!

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

More Information

For more information on the CWops Awards Program, please go to <https://cwops.org/contact-us/awards/>, and address any questions or comments to cwopscam@w0tg.com.

Current ACA Top 100

Here are the top 100 ACS scores for the first week of November 2022:

Rank	Call	ACA	CMA	DX	WAS	WAE	WAZ	Rank	Call	ACA	CMA	DX	WAS	WAE	WAZ
1	KR2Q	1847	7152	160	50	56	37	9	DL6KVA	1279	6757	180	50	62	37
2	AA3B	1678	12429	129	50	48	38	10	N7US	1272	5956	113	50	43	33
3	K3WW	1582	9716	132	50	50	38	11	K7QA	1261	5536	84	50	39	29
4	N5RZ	1488	8361	122	50	45	36	11	N5AW	1261	5606	97	50	45	33
5	N5ZO	1372	8336	109	50	46	34	12	DK9PY	1238	4219	102	50	45	32
6	NA8V	1364	7677	112	50	47	35	13	W1RM	1213	8384	214	50	62	38
7	KG9X	1340	5713	86	50	38	27	14	K3JT	1192	5491	103	50	46	30
8	K3WJV	1292	6990	114	50	49	31	15	VE3KI	1189	7219	139	50	53	37

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Rank	Call	ACA	CMA	DX	WAS	WAE	WAZ	Rank	Call	ACA	CMA	DX	WAS	WAE	WAZ
16	K4WW	1179	4902	84	50	38	29	59	K1SM	860	4077	131	50	46	36
17	KC7V	1174	5268	90	50	36	32	60	WS7L	836	2241	50	50	23	20
18	K1VUT	1169	5119	77	50	41	23	61	DF7TV	831	2650	100	50	48	34
19	K3PP	1123	5290	103	50	45	28	62	K2TW	827	3587	61	50	32	21
20	K6NR	1110	4539	64	50	31	28	63	PA0INA	824	2078	89	48	44	31
21	WT9U	1105	5493	103	50	41	30	64	KA1YQC	821	2061	61	50	33	20
22	AA5JF	1102	3645	84	50	39	29	65	W6LAX	820	2303	42	49	20	21
23	W8FN	1096	4023	72	50	36	23	66	K0AF	817	1312	45	50	22	18
24	VE3TM	1087	3550	88	50	43	26	67	KE8G	810	3361	78	50	35	25
25	CO8NMN	1077	4011	72	50	35	23	68	KM4FO	808	2830	46	50	18	16
26	K9WX	1066	5020	100	50	39	30	69	AA2IL	806	1625	34	50	15	16
27	W1AJT	1065	3271	93	50	43	31	70	K4EU	803	1411	47	48	27	19
28	W0UO	1062	3803	63	50	34	22	71	SM6CUK	797	4565	156	50	56	38
29	VK2GR	1061	1975	70	49	38	28	72	KY4GS	796	1419	37	49	22	15
30	W9ILY	1055	6157	134	50	45	36	73	EA1X	791	2570	76	48	42	28
31	N4CWZ	1039	3017	56	50	32	20	73	W1UU	791	4264	113	50	41	32
32	NJ3K	1037	3413	66	50	38	21	74	W9SN	783	1353	51	49	30	21
33	K1EBY	1034	3968	94	50	42	31	75	OZ3SM	779	2737	103	49	48	35
34	K5AX	1033	4712	92	50	38	32	76	K8AJ	776	4202	104	50	44	31
35	N5KD	1031	2488	87	50	40	33	77	N4FP	775	2612	59	50	32	20
36	WN7S	1020	4145	76	49	36	26	78	G4LPP	765	2053	83	49	45	28
37	K1DJ	1017	4543	107	50	44	29	79	K4GM	764	3784	85	50	37	27
37	K3QP	1017	3004	76	50	37	24	79	W0NF	764	1373	25	50	10	14
38	K0WA	992	2027	38	48	18	16	80	W0GAS	762	1988	44	50	18	20
39	N1DC	976	4813	86	50	40	24	81	W4CMG	761	1625	42	49	21	16
40	NA4J	970	3653	74	50	34	24	82	F5SGI	757	2048	92	49	48	30
41	N3QE	966	7346	128	50	48	35	83	K8JQ	742	4699	65	50	31	23
42	W0VX	957	5679	128	50	45	36	84	K3ZGA	741	2080	56	50	30	19
43	9A1AA	955	4295	125	49	52	38	85	GW0ETF	730	3984	115	50	50	35
44	W4WF	951	4417	89	50	41	31	85	W3WHK	730	3062	73	50	34	21
44	WT3K	951	4092	80	50	42	25	86	EA6BF	728	1784	70	46	42	26
45	WT2P	944	4642	85	50	31	27	87	EA3FZT	723	2071	77	47	45	24
46	K3ZA	939	2504	49	50	33	18	88	I2WIJ	722	3772	93	49	44	32
46	KK0U	939	1988	47	50	27	20	89	OK1RR	717	3840	148	50	52	38
47	N8BJQ	934	7459	133	50	48	39	90	EA4OR	712	2482	78	50	46	27
48	WA4JUK	933	3791	84	50	41	26	91	AE1T	698	4367	111	50	49	33
49	KV8Q	921	2817	65	50	31	23	92	K0TC	684	2979	62	50	27	22
50	AF4T	911	2911	71	50	36	26	93	DL1VDL	683	1493	69	46	40	27
51	VE3MV	900	3487	81	50	41	20	93	K1AJ	683	2665	91	50	39	30
52	AF5J	897	2528	54	50	22	22	94	W2CDO	682	2494	62	50	36	21
53	KT5V	896	3325	79	50	29	29	95	W0TG	681	2972	68	50	29	25
54	AC6ZM	890	4074	66	50	36	22	96	SP1D	674	1949	71	48	41	26
55	KC4WQ	889	3172	57	50	28	25	97	4X6GP	666	2691	115	48	46	34
56	K4TZ	874	2763	43	50	20	16	98	N3CKI	665	1429	43	48	25	15
57	N5XE	863	3187	78	50	36	27	99	NN4K	663	2774	61	50	30	22
58	N2UU	861	5298	112	50	46	31	100	W4UT	652	2917	64	50	32	22

73, Bill WØTG (CWops #1873)

CWops Operating Awards



QTX Report: Enjoying the Art of Conversational CW

[Bruce Murdock, K8UDH](#)

It seems like CW ragchewing is a lot like fishing. You may have a fishing spot that always gives you good results and you like being there. Similarly, you may have a frequency where you like to hang out because you frequently have nice ragchew QSOs in that area. When we call CQ we never know who will take the hook? How long will they be on the line? Will it be for only 1 minute, 27 minutes, or will it be a Marathon QSO over 60 minutes long? Also, what will we learn about them?

Your experience could be like Dennis WA2USA described in his comments. He had a QSO for over an hour with Wes AC5K and learned about his mobile biking QRP station setup. As Chip W9EBE said in his comments, there are "always good ragchews to be had." VE2WH put it this way. "It didn't seem too hard to find someone who just wanted to yak." Sometimes we just need to get in the right place at the right time.

I also received a question from Dwight KB4WLF who asked, do you know of any regularly scheduled informal roundtables that would be considered ragchewing groups? If you do, please respond directly to Dwight via his email address on QRZ.

Now let us take a look at some interesting comments from our CW ragchewers.

Comments from QTX Submissions

KY4GS: I recently started keeping track of length (so there were actually more that should have counted). I need a better system or logger for doing this.

KF6NCX: My most surprising ragchew happened on Sept. 8. I went to 10 meters and found it completely quiet. I started calling CQ and soon got a call from N3JT, Jim Talens, whose CWops number is #1. That was a surprise. I had worked Jim in CWTs several times before becoming a CWops member. I did not think my next qso with him would be a QTX qso, and especially not on 10 meters.

K7VM: It seems to be getting easier to settle into a longer QSO. Thanks for encouraging QTXs Bruce.

K5KKJ: Had a fast start (5 by 10/6/22) then hard time getting longer QSOs. Lots of less than 10 min. Had a great time rag chewing from 15 to 30 wpm and learned about an antenna offering that may well fit my needs.

M0KTZ: Less activity overall this month, but still lots and lots of very nice rag-chew QSOs. All QRP, as usual. Keep chatting on the bands! 72/73 de Enzo M0KTZ

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WS1L: After recovering from emergency gallbladder surgery in mid-September it was a month before I got back on track with ragchewing. It's good to be back on the bands!

WA2USA: I had a pleasurable Q with a Wes AC5K for over an hour. Wes gave me details of his biking mobile station setup with battery, radio, antenna and paddle. Evidently he has written articles on his mobile biking QRP accomplishments.

VE2WH: This month was amazing! The band conditions have made it possible to have decent QTX conversations into Europe on higher HF frequencies while the lower HF spectrum didn't disappoint either. It didn't seem too hard to find someone who just wanted to yak.

W9EBE: Despite some nasty RFI from a neighbor's outdoor Halloween decorations, the bands treated me quite well this month. Always good ragchews to be had! 73 es ZUT

K6DGW: Really time-limited in October. Rain, maybe snow, tonite, November may offer more opportunities. SFI has been peaking around 130-150, I'll have to try 10, the "faux dead band"

W3WHK: Only one QTX this month, but a good one, as usual, with Vic, K9UIY(#505).

AJ1DM: Not bad considering the amount of travel this month. I should probably get an honorary QTX for an eyeball QSO I had with Jim N3BB while visiting my daughter in Austin TX! One way or another, CWops make great friends. 73 de John AJ1DM

AA0YY: Most exciting was a QSO with one of our CWA students, Phil KD0AEI. Brief but exciting.

K5YQF: Best month so far. Trying to focus on 17, 15, 12, 10 as openings occurred. Average 30 min per QSO but not many of those good old hour plus ones. Also a lot of new calls added to the log. What a great hobby!

KB6NU: Fell just short again of my goal of one per day. I guess that's just going to be how it goes. :)

N6HCN: Enjoyed many QTX (over an hour?) as the weather and good coffee slow things down. Talked to Don, AI6U, for two hours. Mike, WA6ARA was enjoying his off-grid cabin at 6000 feet in the Eastern Sierras. Even a QTX with Wally up at K6KPH.

N2DA: In addition to some very nice sked QSOs, had ragchew QSOs this month with two CWA students from AJ1DM's Intermediate class, Frank W4CWA and Rob KN4CNU. I've been assisting as Associate Advisor. Nice to see the students progress!

KG5IEE: Several nice ragchews this month but the highlight was having QSOs with three of my Beginner students from CW Academy. That is a treat.

K8UDH: October was filled with lots of activities. Ham radio tops the list. We had some very enjoyable QSOs this month.

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Awards and Medals for 2022

Medals for 2022 are awarded for three different levels in QTX.

Gold – 400 QTX QSOs

Silver Medal – 300 QTX QSOs

Bronze – 200 QTX QSOs

Cecil K5YQF with 550 QTX QSOs has qualified for a Gold Medal. Bruce K9OZ with 399, Sam VE3WH with 397, and Chuck WS1L with 330 QTX QSOs have qualified for Silver Medals. We have three hams who have qualified for a Bronze Medal. They are Bill N5IR with 269, Dan KB6NU with 247, and Joe KC0VKN with 208 QTX QSOs. Congratulations to all of you.

QTX for October

<u>Call</u>	<u>QTX</u>	<u>Call</u>	<u>QTX</u>	<u>Call</u>	<u>QTX</u>	<u>Call</u>	<u>QTX</u>
K5YQF	92	F5IYJ	23	K7VM	12	WA9ZZ	7
VE3WH	85	WA2USA	23	AA0YY	10	K0ALT	5
N5IR	36	K5KXJ	17	KG5IEE	10	M0KTZ	3
WS1L	36	N2DA	14	AJ1DM	9	GW0ETF	2
K9OZ	35	N6HCN	13	K8UDH	8	K6DGW	2
KB6NU	26	W9EBE	13	KY4GS	8	W3WHK	1

MQTX for October

<u>Call</u>	<u>MQTX</u>	<u>Call</u>	<u>MQTX</u>	<u>Call</u>	<u>MQTX</u>	<u>Call</u>	<u>MQTX</u>
M0KTZ	38	GW0ETF	16	KY4GS	13	K7VM	5
VE3WH	36	K5KXJ	16	AA0YY	6	N6HCN	5
K5YQF	18	SV2BBK	16	AJ1DM	6	WS1L	3
KG5IEE	17	W9EBE	15	K6DGW	5	K8UDH	2

QTX Totals (2022)

<u>Call</u>	<u>QTX</u>	<u>Call</u>	<u>QTX</u>	<u>Call</u>	<u>QTX</u>	<u>Call</u>	<u>QTX</u>
K5YQF	550	W9EBE	136	K5KXJ	33	N0BM	11
K9OZ	399	NE0S	114	KG7A	33	AC8RG	10
VE3WH	397	KG5IEE	100	W0GAS	33	KG5SSB	10
WS1L	330	AJ1DM	92	AA0IZ	32	SV2BBK	10
N5IR	269	K4AHO	92	WA9ZZ	31	AB7MP	6
KB6NU	247	K8UDH	91	KF6NCX	28	EI6LA	6
KC0VKN	208	N8AI	67	K6DGW	27	WT9Q	6
F5IYJ	192	W7JRD	55	K0ALT	25	MI0WWB	4
WA2USA	180	K7VM	54	W3WHK	19	N9EEE	4
N6HCN	148	EI5LA	44	W8OV	17	G3WZD	3
AA0YY	147	AA5AD	39	KY4GS	15		
N2DA	140	M0KTZ	37	GW0ETF	13		

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MQTX Totals (2022)

Call	MQTX	Call	MQTX	Call	MQTX	Call	MQTX
M0KTZ	227	K6DGW	80	K5KXJ	32	AB7MP	9
VE3WH	196	AA5AD	73	AJ1DM	28	WA9ZZ	9
W9EBE	185	K4AHO	43	AA0IZ	24	W3WHK	7
SV2BBK	168	K8UDH	40	KY4GS	21	EI6LA	4
AA0YY	148	W7JRD	39	NE0S	21	AC8RG	3
KG5IEE	143	N6HCN	38	K7VM	19	WT9Q	2
WS1L	118	EI5LA	34	KF6NCX	16		
GW0ETF	105	MI0WWB	34	N0BM	15		
K5YQF	103	KG5SSB	33	W8OV	13		
N8AI	97	KG7A	33	G3WZD	11		

We have numerous ways to enjoy CW. For many of us, CW ragchewing is our favorite way.

73, Bruce, K8UDH (CWops #1654)

QTX Manager

SC

Get Your Speed On!

CWT | MST | SST

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



My Story: New Member Biographies

Compiled by [Tim Gennett, K9WX](#)

Thomas "Tom" Paetzold, DG5CW

My passion for DX began as SWL when I was about 12 years old. Growing up in the Eastern part of Germany, modified tube radios and other homemade stuff were the only options for me. The fact that a licensed radio amateur (Y23GM) lived in the house next door probably also contributed to my interest in antennas. At the same time my enthusiasm for all broadcasting technology developed. That was in 1984.

After an apprenticeship I became a skilled worker for radio transmitters. Some years later I added a study in Berlin and became a communications engineer specialized in high frequency technology. In 2000 I got my amateur radio license, raised a tower next to my house but wasn't really much "on air." My passion was designing, building, testing with a single contact and moving on. With the start of cellular networks I was on the road every day for business to set up, measure or repair antennas or transmission technology. Thus, I fully parked all my ham activities. Several years followed in which I had the pleasure to deal in detail with the latest types of modulation and coding schemes and increasing complexity. With the introduction of self-optimizing technology and adaptive antennas, I felt that I lost touch with the actual hardware and would need a compensating hobby again, hi.

So back to the origin? Yes, around 2010 I dusted off the ham tech and got back on the bands. The digital operating modes were my playground. WSPR also had (and still has) its place to study propagation conditions. But all in all I realized that on the one hand basically machines were talking to each other and I wasn't really involved in the fun. On the other hand, I love to travel and to be outside in the nature with low weight equipment and as few dependencies as possible. I squeezed an IT-security study in my life, where I specialized in mobile security. So being influenced by the daily handling of attack vectors and security requirements, I did add simplicity to my major ham criteria. While I was listening to the 2019 Christmas transmission of the [Swedish Radio Station "Grimeton"](#), out of the blue the vision was born to make CW my operating mode for the rest of my ham journey.

This "let's try CW" turned into passion and real commitment. One of my major supporting milestones is the AGCW program "[Morsefreund](#)" where I got my personal tutor Marcus (DJ1DD) assigned, who introduced me to all the operational secrets and brought me up to speed. By far the



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biggest motivation to keep going, I got from the [CW Academy](#) program. With Buzz (AC6AC) I got an amazing advisor assigned, who exactly knew how to motivate students. I'm thankful for every class. Last but not least, joining the famous CWTs (until my ears were bleeding, hi) helped me to better cope with both, QRM and numbers – a big thanks to all the great CW operators out there. My special thanks goes to Ivo (9A1AA) for his efforts with my nomination and all my kind supporters.

Time to sum up – **I'm a CW latecomer who has found his destiny. DIT DIT**

Guy Immega, VA7GI

At age 13 in 1958, I assembled a two-tube Knight Kit Ocean Hopper regenerative receiver. It didn't work very well—the only shortwave station I could hear was HCJB, "The Voice of the Andes," from Quito, Ecuador. Amazing, but my Spanish was limited.

I soon discovered that if I turned up the regen, I could hear many Morse code signals. Novices on 40 meters sent slowly, and my Boy Scout code allowed me to copy a few callsigns. I was hooked on CW and started collecting SWL QSL cards. Within a year I had my Novice license, and eventually passed my General—K0UVL in St. Louis, Missouri. I assembled my first Speed-X bug from junked parts salvaged from a trash can in a local alley.



Antenna launch & solar powered remote station on Lasqueti Island XXX.

I taught a CW class at the University of Missouri radio club, independently inventing a kind of simple Farnsworth, fast letters at a slow wpm rate. I remained active almost exclusively on CW, while building the local campus carrier current radio station and studying electrical engineering.

After I lost my best friend in Vietnam, I joined the Peace Corps. Headed for Africa, I got a deal on a 1957 KWM-1, because it only worked on CW (the SSB mode was dead). I dreamed of a 2-year DXpedition from Niger in the Sahara Desert. Admin vetoed this plan saying that I would be

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mistaken for a CIA agent, with my life at risk. At 21 years, I was naïve. Instead, I vaccinated nomads in the Sahel in a smallpox epidemic.

When I returned from Africa, I finished my engineering degree. After many career twists and turns, I ended up in Canada running a small aerospace company designing autonomous space station robots for the Canadian Space Agency. During that period, I remained QRT for 45 years, while raising three children and working 80-hour weeks.

When I sold the company's patents and retired, I decided to resurrect my long-dead KWM-1. After I got it working, I discovered that Canada would honor my old license, and let me choose a new call. I was back on the air as VA7GI. But my CW was rusty and my ancient bug was a beast. With paddles and a keyer, and I gradually improved to 15-20 WPM. I love my Begali Signature!

I now operate two stations, one in Vancouver (an IC-7300 & 42-year-old Drake L7 amp to a beam)—and a second remote station on Lasqueti Island (a K3 & KPA-500 to dipoles). I joined a local contesting club and dabbled in many modes, SSB-RTTY-FT8, but always returned to my first love of CW for 90% of my Qs.

I'm fortunate that my wonderful wife, Gayle, supports my eccentric ham radio hobby (and also tolerates my writing science fiction, an even more eccentric diversion). I also spend time on technology to reverse global warming, see: www.planet-cooling.com.

I'm grateful to both Phil NE0S, my advisor in the Advanced CWops class, and Christine K0ALT, my assistant advisor, for boosting my CW skills to 25 WPM. Great fun!

Mike Spencer-Wilson, ZS6MSW

I got my Class A licence in 2014, after much persuasion by Graham ZS6GL. At the time I pulled out due to fear of failure, however Graham and his dad, together with Johan ZS6KY took the road forward, and did their RAE, they all passed. I wrote my RAE about 12 months after ZS6GL. During my over enthusiasm of radio, a call came out to assist Derek Middleton, another ham. I forget his call sign, to erect a tower for his HF beam.

Loving overland camping, I came across SOTA (Summits On The Air) and saw many hams doing phone and CW off mountain tops. It was not long before, I gathered the courage to do my own SOTA in the North West Province of South Africa. In the meantime, a surge of interested hams, all of a sudden came up on the most used 2m repeater in Africa, namely the ZS6STN 145.700 repeater, located right in the heart of leafy Sandton, on the Bryanston water tower. <https://www.zs6stn.org.za/> they were: ZR6GAK Graeme, now ZS1GAK; ZR6KAR Karen; ZS6SR Sean, ZS6DLL now Silent Key; ZS6MAX Max, now in the UK; lastly but not least Matthew ZS6MDV. During our chats on air, I mentioned that I will register on the SOTA website and activate the Magaliesberg Cable Car Summit. <https://www.sota.org.uk/> you need special permission to set up a radio there <https://>



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summits.sota.org.uk/summit/ZS/NW-041

At this point in time I had made radio friends with Daryl ZS6DLL, and knew later on he loved, and was very passionate about CW Morse code. Well the Saturday, came and we all met at the Cable car base, for a breakfast, feeling very nervous on how this was to pan out, whilst abiding with the SOTA rules of play <https://www.youtube.com/watch?v=9NCMXgQ4XZk> After a very exciting successful day out, Sean ZS6SR and I discussed how cool it will be to do CW Morse code from upon high... I immediately contacted Daryl ZS6DLL, Sean and I both asked him whether he won't mind teaching us the code, so we can apply it on future summits. Daryl said YES, no problem. Little did I know at this point in time, that I will battle and struggle through the maze of the unknown. We then as a group decided how to tackle this, and decided to use Hangouts, on which Daryl would play the sounds of the letters to us, and we would type back what we thought we heard being sent. Whilst doing this everyone in the group could see all your faults and successes, very humbling indeed.

We met once a week then twice a week, and were given homework to practice the letters, numbers and punctuation characters. Towards the middle of the lessons Andy ZS6ADY popped in and helped Daryl oversee the proceedings as a guest. I will tell you that I emptied 6 ball point pens writing the letters over and over as I heard them, I'm not exaggerating. The entire course took about six weeks, just to get proficient enough to dare get on air... The last 2 ½ weeks of the course, my peers overtook me, to such an extent, that I felt well out of my depth to continue contributing to the class, I really was the very last in the class, and often felt stupid even to guess what I heard, and publish it live.

Sadly to say ZS6DLL fell ill, and passed away. Sean ZS6SR also had opened a WhatsApp CW group, as well as a Facebook group. The WhatsApp has had a name change since; we have now CW ops in Africa and expanding. All this before I knew about Raoul ZS1C, the CWops coordinators for South Africa.

Unfortunately, due to the demands and pressure of life, a few have dropped out, so myself and a friend who also was in our class, Eric ZS5EL are the only ones still standing. Sean and Graeme did say they are making a comeback, of which I'm very grateful indeed. I will also mention that looking back in hindsight, Daryl was sending character speed letters of about 13 wpm, I very soon found out through research of my own that, if you want to copy faster Morse Code that you are comfortable with, set your character speed of the letters and number, including punctuation at the speed you ultimately want to peak at.

It was about 6 months after the passing of ZS6SDLL, I noticed that Sean and Graeme were learning at least 18 wpm. I did not want to fall behind again and tweaked my key to match their sending speed. Since then, I'm cruising at 20 wpm to 22 wpm; and improving FAST. All depends on your frame of mind, word spacing and various other factors at the time. Mood and relaxation doing Morse code is crucial in my opinion.

I've also established moderators / trainers all over the country except for Division 4, (again, all this effort before I even knew about CWops) we are still looking out for a willing Ham. I have three radios which do CW: My Yaesu 857d in a go box, you can see the Go Box here <https://>

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www.youtube.com/watch?v=vUjl9xHYqJs&t=209s I also have an Icom 7100 which is used as a base in the QTH, lastly I wanted to get a trail CW radio, and bought second-hand the QCX QRP CW only 5 watt radio, which I love to bits.

Simon Béliveau, VA2NM

I was exposed to CW at the Montreal University radio club VA2CEP while getting my electrical engineering degree in the mid-nineties. CW always amazed me, but it seemed overwhelming and I had no time for it. I nonetheless designed and built a 20m HF receiver for my graduation project. Ever since, my soul was into ham radio despite not being active.

Fast forward 2.5 decades later and the CW bug hit me again for good. Being a professional radio system designer, I bought an SDR receiver to listen to some VHF/UHF implementations that I designed in my area. It didn't take long before realizing I could SWL the HF bands with the newly acquired SDR. Hearing CW again was all I needed to get hooked. The timing was perfect, we were under COVID curfews in Quebec, I was working from home and was walking every day to break free from sitting in front of computers. I literally learned CW while walking.

Self-learning was done through smart phone applications. Starting from scratch, it took me 23 months to reach decent mind copy at 30 wpm and get the honor of joining the CWops community. But to be honest, I didn't really start from scratch, I knew how to copy "SOS." The learning journey has been exciting from day one and learning is far from over. I still walk every day and enjoy reading news in CW, every month a little faster.



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My favorite Android apps have been Morse Mentor for Koch learning, then Morse Player for reading eBooks, webpages and news. The latter application is great because it ignores undesired characters so there is no need for manual text cleaning beforehand. You just need to cut and paste whatever you feel like reading. Take note that I am not affiliated in any way with these apps.

Early into the learning journey I discovered the existence of SOTA. In November 2021 while hiking with my 2 teenagers, I forced myself to try SOTA for the first time. I did not expect so much enjoyment. The pileup was a little overwhelming, but it felt comforting in contrast with the brutal conditions on the summit. I managed to activate 33 summits over the course of the following year, not yet one year in fact, in heavy snow for the most part. CW made me discover the pleasures of winter hiking, and alpine skiing now feels bland in comparison. Beyond SOTA, I enjoy conversational QSOs and plan to do it much more in the coming year. Hope to meet you on the air for some QTX!

Steven Schmidt, K4WA

Licensed as a Novice in 1971, I acquired a receiver but never had a transmitter. I went off to college, my license lapsed, and I didn't think about it again until a newspaper article about amateur radio inspired me in 1993. I didn't remember the CW characters but was going on a three-day business trip, so I bought some code tapes along with Novice and Technician license study books to take on the trip with me. I listened to code tapes while driving and read the books at night. I was amazed how quickly the code came back to me. Realizing I copied at least a 5 wpm level, I checked and found there was a VEC license exam in Atlanta that I could visit on my drive home. I passed.



While waiting approximately ten weeks for my Technician license from the FCC, I practiced CW faithfully, and studied for the General exam. Passed the 13 wpm and General written exams the month before receiving my license.

Two weeks later I passed the Advanced exam. I vowed not to touch a microphone until I could pass the Extra exam, making many CW contacts as KR4DL, and kindled a love for CW and DX chasing. I passed the Extra code and written exams just over 4 months after that business trip. K4WA was one of my top choices in the vanity callsign lottery because I thought it would play well on CW. I chased DX for the next few years and started making trips to DX locations to operate from the "other end."

At the peak of what I viewed as my DXpedition CW op avocation, I spearheaded pursuit of a permit to activate KP5, Desecheo Island, which was at (or near) the top 10 most wanted. After months of effort, we were issued a Special Use Permit in February 1998 for an operation in early January 1999 and began organizing the team and logistics. After significant progress, our permit was abruptly rescinded at the end of April 1998. I was crushed, but pursued an appeal of the

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rescission for months. Our appeal was denied. I later heard a rumor our effort was rescinded due to a conflict with a joint Coast Guard/DEA operation to curb drug trafficking in the Mona Channel. I kept my head up, making trips to KP2, KP4, PJ2, J6, BV and BV9P.

Our KP5 team was invited to submit a proposal when the Fish and Wildlife Department was compelled to allow a radio operation from Desecheo. So, I pursued the permit again, even making a trip to the regional office in Boqueron to make the presentation. It was obvious from that staff's demeanor we were doomed before they even viewed our proposal. The second rejection, and watching the subsequent operation by another group, sprinkled salt in my wounds and contributed to my second hiatus from amateur radio. I made only one contact (it was with that KP5 group) in the seven years from 2008 through 2014, focusing instead on hobbies in photography, sculpture, music, and my jobs in real estate and city management.

After moving to Destin, Florida with my lovely and supportive wife Karen, I put up modest antennas and rekindled my interest in amateur radio, which has always centered on CW. I applied to CWops Academy because I thought it would be a good way for me to recapture some old mojo, and perhaps reach my ultimate goal, head copying at 30-35 WPM. I've been extremely pleased with the program, though getting back to my last speed was not as easy as in my youth when the goal was only 5-7 wpm. Now closer to my head copy goal, my passion for CW and DXing has been re-fired. I'm grateful for the example set by my advisors (Roy KK6M and Rob, K6RB), and thankful for the sponsors that supported my nomination for inclusion. It's truly an honor to be in the company of such consummate CW ops (I've worked many of you in the CWTs and realize how very good you are). I think this organization is filling a huge need, and I'm thrilled to be a part of it.

Bruce Sherman, N4OQV

I am honored to have been nominated and sponsored for membership in the CWops Club. Many thanks to my CWA Advisor and nominator, Rob K6RB, and my sponsors, Mike K4RUM, Marv N5AW and Tim N3QE.

I became interested in amateur radio while in high school in New Jersey and got my Novice license in 1966. My Elmer loaned me his Ameco records to learn Morse code and he later administered my Novice exam. My first call sign was WN2TZR and my station was a Heathkit DX-40 and a Gonset receiver. I made many CW QSOs the first few months after getting my ticket. A well-meaning friend loaned me a 2m AM radio (a Heathkit



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"Twoer" i.e., 2er), and though I had a lot of fun, I never got my code speed up to 13 wpm and failed my General exam. After that, I put ham radio on the back burner.

I had dropped out of college and received a letter from my draft board at the end of 1969. I decided to enlist to have some options about my future. An Army recruiter suggested I go to the induction center to take the battery of tests; I could return with those scores and see what schools would be available. Following the tests, I was called out and told my test scores, were very good and I was offered an opportunity to join the Army Security Agency. Because all members of the organization required a security clearance, they could not tell me much about it, but it piqued my interest and I signed up hoping to get one of the electronics repair schools. Once out of basic training, I was sent to school to be a Morse Intercept Operator, not what I was expecting but it turned out to be a good experience

I spent the remainder of my enlistment copying intercepted Morse code messages, and a year in Vietnam where my job was to fly in the back of small, twin-engine planes, and listen for enemy transmitters, which we would then locate by triangulating the signal with the airplane. I remained in the Army until 1973.

I moved to St. Thomas, in the U.S. Virgin Islands in 1975. I met a few hams there and took the Novice exam again around 1978 and became WP2ABR. I got back on the air with a Yeasu 301D and an off center fed dipole. Around that time, you still had to go to an FCC office to take a higher-class license exam. In 1979 I was working as an EMT on St. Thomas and was sent to Seattle, WA for a month for training. While there, I took and passed the General exam. At that time, I was attending The College of the Virgin Islands, studying nursing. I graduated with an RN degree and worked in the local hospital emergency room until I moved to Jacksonville, FL in 1984.

In Jacksonville I changed my call to N4OQV but did very little hamming until around 2017. I got a TS-480 and an EFHW antenna and got back on the air. I passed my Extra exam in 2019 and moved up to an IC-7300 and switched back and forth between CW and digital modes. I was in a rut at about 20 wpm and wanted to increase my speed and improve my head copy, which first brought me to the LICW Club and then to the CWA advance class. My advisor, Rob, K6RB, kept our sessions interesting and challenging and injected a lot of operating and contesting tips, anecdotes and some practical theory and my classmates and I made steady progress throughout the 8 weeks. He encouraged us to spend a lot of time with our homework assignments as well as Morse Runner and RufzXP, but it was all time well spent.

Prior to the CWA I was not interested in contesting. Getting involved with CWTs and contests has changed my perspective. Now I am looking forward to Wednesdays for CWTs and the upcoming Sweepstakes and other contests.

On a personal note, I still live in Jacksonville, I'm married and have a grown son and daughter and 4 grand kids, ages 7 to 1. I went from ER nursing to work for a large medical device manufacturer doing regulatory compliance work. I have been retired since 2016 and enjoy golf and I'm starting to play pickleball. My wife and I traveled quite a bit prior to the pandemic, and

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we are looking forward to get back on the road again next year. Until a couple of years ago I enjoyed trips on my Harley Davidson cruiser, but health issues prompted me to sell it. I'm active in the Beaches Amateur Radio Society and we help support many community events. I am also a Laurel VEC and administer amateur exams. I am looking forward to meeting more club members on the air in the coming year.

Dan C. Boren, K7NXL

As a teenager, I somehow sweated through my 5 wpm Novice test in 1977 and was licensed as WB7NXL. Being young and broke, I never did get on the air. My ticket expired and my interest in ham radio lay dormant for over 40 years.

When the pandemic hit, and as retirement approached, I decided to study up and get my license back. My closest friend from high school, Mike K7NT, was always an active CW operator, and for that and many other reasons I decided that I would only operate CW. The tools available now are far superior to what I had in the 70s and I set out on a program of self-study to re-learn the code. I don't remember how I learned of the CW Academy, but in January of 2022 I landed in a beginner's class, and by the end of that term I was on the air and making real QSOs. I never imagined that I would get any faster than the old 13 wpm General standard, but I found that, like many other skills, it's neither easy nor difficult, but simply a matter of putting in the effort. Simply doing the homework and participating in the Intermediate and Advanced classes was all that was needed to enjoy success far beyond what I thought possible.



One very memorable highlight of my journey came this June, when Mike and I were invited to drive out to Montana for Field Day. Our host was Chris KL9A, and I found myself in the company of ops who were light years ahead of me. I wasn't sure I'd even be permitted to touch a key, but Chris plunked me down in a chair and said "you got this." I ran for many hours and heard nothing but the most encouraging words the whole weekend.

I enjoy portable and QRP operating, and tinkering or experimenting in general. When not on the radio, I can often be found out in my shop doing woodworking projects. I especially enjoy building furniture and cabinets. I've built three Dobsonian telescopes, including grinding the mirrors. Stargazing on a clear night is a special joy. And on clear days, I still enjoy throwing a leg over the Harley and heading out on two wheels. I've done quite a bit of long-distance riding, including an epic, five-week ride across North America, going east in the northern U.S and back on the Trans-Canada Highway.

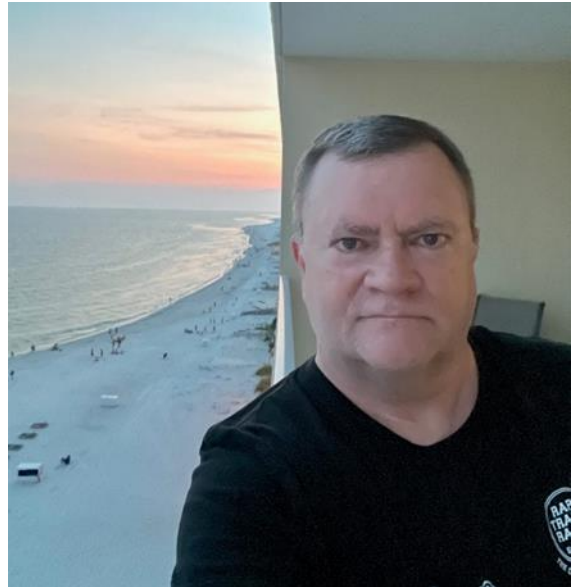
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I would like to publicly acknowledge and thank my CWA advisors. In temporal order, I am forever grateful to Randy N1SP, Tom WA9CW, Steve WD4CFN, Phil NE0S, and Christine K0ALT. These people provided endless encouragement and support, and believed in me before I believed in myself. The hobby is in good hands with these people.

Jim Hart, WD5GRW

I was born in 1963 in Ohio and moved to Texas with my parents in 1974. We lived in a small town called Murphy just outside of Plano, TX (north of Dallas). Our next door neighbor had this large antenna behind his house (these were about 1.5 acre lots) and my dad came to find out he was an amateur radio operator. His call was K5AT and we came to find out that he was one of only 5 known people at the time who could understand this thing called Morse code at over 100 wpm. A few years later both my dad (WN5OHM then WB5OHM) and myself got licensed. I became WD5GRW in 1977. Over time I obtained my Extra but decided to keep my call. I must have had some ability with rhythm as I not only learned code fairly easily (a requirement of 20 wpm for Extra) and became a drummer and played snare all through high school.



We moved to Plano shortly after I got licensed. My dad setup a station consisting of a TenTec Triton IV and a Cushcraft 3 element beam up 35 feet. There was also a pretty good sunspot cycle going on. I enjoyed CW at an early age mostly because it just seemed a little awkward “talking” to adults. I did well in the Novice Roundup earning 1st place in NTX and 2nd in Area 5.

As I got older – life happened and radio took a back seat - lol. Band, girls, work, girls, high school, girls, college, work, marriage (to my lovely wife Susan) and 3 of my own girls (all recently out of college).

Amateur Radio found me again after my college graduation in which I somehow ended up at a Christmas party for the local amateur radio club and was then recruited to play drums for a band called Lower Side Band made up of all amateur radio operators. This kept the radio connection there but not really active.

My real radio reinvigoration came with Parks On The Air and learning all the new (to me) modes etc. I just sort of stumbled into it – lots of very nice people. I do a lot of digital (just easier to make more contacts that way) and CW and SSB as I can. My favorite is still CW and I have activated many parks using mostly code. I really enjoy getting out and playing radio – more info on my QRZ page.

Unfortunately still in the work force for a few more years as a Site Reliability Engineer (think IT,

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AWS, GCP the “cloud” etc.) so CWTs will be scarce but will try as work allows – probably next year. CWops was also something I had heard of and look forward to advancing my skills with.

Mike Weber, M0AGP

I was licensed in Wisconsin as WN9WFJ in 1975, passed the General exam, and was renamed WB9WFJ a year later. My early loves were CW, building radio-related electronic stuff (a direct conversion receiver, several CW transmitters, numerous CW audio filters including designing and building a Morse code regenerator), building antennas, contesting and DXing.

In university in California (UCI) I was partially successful in resurrecting the ham radio club and I advertised and taught a Morse code course of my own devising (nowhere near as good as CW Academy!) and managed to help six lads pass their 5 wpm code tests.

Life intervened and I went QRT in 1981.



I did a PhD in physics and a postdoc at UCI and worked as a research physicist at the IFF-KFA in Juelich, West Germany. I then worked as a physics researcher at the University of Paris VI Jussieu. When I quit physics, I had published about 20 papers in peer reviewed journals. Most of my papers were on aspects of electromagnetic theory at surfaces.

In 1989 I moved to England and in 2008 got my reciprocal license M0AGP.

I currently work in England in financial risk management at a start-up fund management company after just under 20 years of derivatives trading and a bit over 10 years on the risk side.

I published a paper in theoretical physics (now another hobby) in 2019.

When COVID hit, I gained about three hours per day working from home and suddenly realised I had time to get back into ham radio. I became active again on Christmas day 2020 – best Christmas present ever!

I still have my original Radio Shack key as well as a second hand Kent telegraph key. I used to have a bug – when it was rescued from an attic in Wisconsin, it looked like a black lump of wax with wires coming out of it – nobody knew what it was! Careful archaeology-type techniques allowed me to resurrect the bug, and using a spring from a ball point pen, I got it working again.

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Sadly this was sold with all my ham gear (apart from my Radio Shack key and box of QSL cards) when I moved to Germany back in 1986.

The current station is an IC-7300, Acom 1000, fan dipole for 30m-6m up 50 ft, a full size vertical with two elevated radials on 80m and an inverted L with two elevated radials for 160m. I also have a Hustler 6BTV that I use for 40m. I am fortunate to live in a semi-rural location with low noise levels.

I am a member of RSGB, CDXC, FISTS, SKCC and now CWops.

Bill Hawley, KA1RVM

My interest in radio started around the age of eight. I followed the Apollo Space Program (watching everything there was on TV) and was fascinated astronauts could talk to people on earth (Mission Control) over radio.

In the fifth grade I was able to attend a ham radio demonstration. He was talking to someone "across the pond" with something that was small enough to sit on a desk!! I was just beside myself as I was watching and listening to all of this. I was hooked! However, there was a problem --- How



come I have to learn Morse code?? --- How come they don't have a license for someone that just wants to talk on the microphone! I wasn't wild about the Morse code requirement. However, I started getting all sorts of radio books and started learning. When out shopping with Mom, if there was a Radio Shack or an even better Lafayette Radio and Electronics, we had to stop so I could look; I was like a kid in a candy shop! The first *QST* magazine I got came from Lafayette. You could join the ARRL even if you didn't have a call, as I remember you could be an Associate Member, so, I joined; thanks, Mom, for paying for this! Now I looked forward to each issue of *QST*. Looking at all the radio pictures was a big deal to me.

I did build a code oscillator that I saw in *QST*. However, my real push for a ham ticket would come some 20 years later.

I am now working as an electrical engineer at a high tech company. One day a coworker asked if I wanted to join everyone that was going to TELCOM at lunch. I never heard of TELCOM, however I quickly found out that it is a local ham radio store. On walking into TELCOM the kid-in-the-candy-store syndrome came over me... I loved looking at all the radios and talking to the guy running the store. I managed to get brochures and pricing on a few different radios (the wheels were turning in my head); if I bought a radio and then didn't get a license, I would sure look

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dumb! I couldn't get that out of my head!

I found out from the store owner that tests are now typically given at local radio clubs and that there was a club in the town I lived in where I could take the test (the wheels still turning in my head).

A few days later I made up mind to get a radio, the Kenwood TS440S! It was Wednesday, I didn't feel very well, and my plan was to work for half a day, then go to TELCOM and buy the radio. I found out that the Local Radio Club was also having a meeting that night and that I could purchase from them the study material. Then, 10 days later on Saturday morning I took the Novice test and passed (passed the code test by the skin of my teeth!!).

I had to talk myself into my first CW Contact. Since I had spent a bunch of time learning the damn code I figured should make at least one CW Contact. Not only did I "survive" my first CW contact, I had fun. From there Morse code quickly grew on me and these days I am about 99% CW!

Other hobbies and interests include:

- Shooting pool
- Shooting skeet and trap
- Music (I am a drummer and have played professionally)
- Private pilot
- Keeping my lawn green

Bob Cardone, N2EIM

My interest in ham radio began when I received a gift of a crystal radio kit in the late 1950s. Listening to a radio that I built inspired me to learn more about ham radio. Growing up I often read *QST* Magazine in the library but I did not have an opportunity to become a ham because of the typical reasons cited: lack of an Elmer, lack of financial resources and fear of asking my mother if it was okay to drill a hole in the house for an antenna.

A couple of years before I retired I was looking for a hobby to occupy my free time. Ham radio seemed to be a good fit. I got my Tech license in 2013, followed in rapid succession by my General license and Extra license.

I joined a radio club and got HF operating experience at the club's shack. My first HF rig was a 50 watt Ten-Tec Argosy 525D. The 10m band was wide open at that time



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and I became hooked on ham radio. Six months later I purchased a Ten-Tec Eagle and I enjoyed working DX and contesting. I mostly operated SSB and all the digital modes earning WAS, DX100 and Worked All Continents.

The lure of working distant stations using low power drew me to CW. I tried teaching myself Morse code using online CW apps but I did not have much success. I read about the CWops CW Academy and enrolled in the Level 1 training class in fall of 2017. CWops requires that you use a paddle so I bought a Vibroplex Standard Iambic key which I still have. The training was great. I got on the air using CW and participated in the weekly CWTs before I finished the course. To improve my head copying ability and sending speed I enrolled in the CWops Level 2 training. I attended the Winter 2019 class. It was time well spent. Operating CW opened up a new world for me. I was able to make very long distance contacts with 100 watts and my compromised antennas.

My favorite radio activity is the CWTs. They are one hour of pure fun. Each week I try to increase my score.

In 2020 I purchased a Begali key and the day it arrived news broke that Covid-19 was raging in the Italian province where the Begali factory is situated. At that time the health experts were warning us that the virus could live on inanimate objects for up to two weeks so the box sat in my garage until it was "safe" to use. It was a long two weeks!

My next challenge was to become proficient operating QRP. I joined NAQCC and participated in their Sprints. I love the NAQCC Word Challenges because they motivate me to get on the air and operate QRP.

Recently I began activating Parks On the Air. I operate QRP CW from my car using a KX2 with KX2PD paddles. My antenna is a trunk lip mounted Wolf River coil with a 118" whip.

Current gear in my shack are an IC-7300 and a Begali Magnetic Classic key. I have a stealth tripod mounted vertical antenna with a counterpoise on my deck. I use a Wolf River Mini for the low bands.

I retired from Merrill Lynch Bank of America in 2015 where I was a Six Sigma Master Black Belt and a senior software development manager. Before my finance career I was a research chemist at Hoffmann-LaRoche. I am an avid birder and share this hobby with my significant other Christine, KD2EOZ. Chris is a great help with all of my antenna projects. We also enjoy providing radio support for community events like the NJ Triathlon, March Of Dimes Races, JOTA and BSA Radio Merit Badge training. I am a VE and teach Ham Cram at the Trenton Computer Festival.

I hope to hear you on the air. Please give me a call if you hear me doing a POTA activation. I will be activating many New Jersey parks this year.

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George Gardner, KG1V

First, I'd like to thank Jim (N7US) for nominating me. And thanks too to my sponsors: Jim (N3JT), Fred (KG9X) and Hank (W6SX). It's a pleasure to be part of the CWops family.

I was first licensed in 1960 as a Novice with the call WV2PSB. I lived in Kenmore (near Buffalo), New York. Back then the Novice license was valid for one year and not renewable, so I upgraded to General (WA2PSB). Incentive licensing had not yet started, so I didn't feel the need to upgrade further.



Like so many of my peers, I got "hooked" early with the magic of wireless communication. I built some crystal sets and then got an Allied Knight-Kit Ocean Hopper three-tube regenerative receiver as a birthday gift. Wow! I did a lot of SWLing with that radio. Listening to ham radio operators opened another exciting new world to me.

I was fortunate to have three wonderful Elmers: My dad, Frank Gardner. He never got his license, but was knowledgeable in electronics and was my biggest supporter. The other two were Burt Jones (W2CUU) and Fletcher (Bud) Warren (WA2STI, later K1ZHD).

After college, I moved to Massachusetts to start a job at Digital Equipment Corporation (DEC) as a Technical Writer. As I advanced there I took on additional course development and training responsibilities, eventually managing a corporate technical documentation and training group. I was fortunate to have been with DEC for 30 years.

Due to starting a career, serving some military time, getting married and starting a family, I was off the air for several years. I finally got back on the air in the late 70s. I had kept my General license current, changing my call to WA1GTQ when I moved. Incentive licensing had started and it didn't take me long to want those frequency privileges I no longer had! I upgraded to Advanced and then Extra Class, receiving the call KG1V.

While living and working in Acton, MA, I got involved with a local radio club, ABARC, Acton-Boxboro ARC. The club was active in Field Day and doing community service. I always volunteered for overnight duty on Field Day (40 CW) and had a blast. The club also held classes, helping prepare prospective hams; I was a club VE for several years.

I'm retired now and reside in southern New Hampshire. I have a modest station, running a TS-590SG barefoot to basic wire antennas. I enjoy DXing and contesting; CW is my favorite mode and

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continues to be “music to my ears.”

My wife Carolyn and I have two married daughters and six grandchildren. They all live nearby, so we get to enjoy some family gatherings. Carolyn and I enjoy traveling (hopefully more again soon, post pandemic) and hiking together. We both enjoy choral singing and are active in a community chorus; I also sing in a church choir. Other interests include cooking, and reading.

Paul Caldara, K7SHR

My introduction into ham radio at 13 years old are some of my fondest memories. My older brother's friend was getting out of ham radio. I bought his station in 1973 which included a Heathkit HW-16, Globe VFO, National NCX-3, a microphone (whatever that is!), keyer, SWR meter, and even the “Revolutionary New Word Method to Learn Radio Code” three record album by Russ Farnsworth that started me on CW. I received my Novice license in October of 1973 and CW became a part of me. I received my Extra ticket in 1982.



Almost fifty years and many rigs later, I have come to truly appreciate the gift of ham radio. There were some working years when I didn't give ham radio the attention I would have liked. I was an electric distribution engineer for a major utility, worked for a major university that has a co-generation power plant, and then finished my career as a professional engineer expert witness for a state public utilities commission. Ham radio is now front-and-center again.

I am amazed and delighted with what modern ham radio has to offer. With internet videos and podcasts, learning has never been easier. I'm learning about antenna analyzers (how did we live without them?), beacons, WSPR, solar flux, and other subjects. I'm also enjoying portable operations with my go-box. I often set up from the back of my SUV out in the Wyoming wind and cold on a friend's ranch. Even DX QSOs from there are very achievable. CW is a wonderful equalizer.

At my home QTH, I run an IC-7300 to a Comet H-422 four band dipole in the attic (yes, I'm in an HOA). I attached three more dipoles in a fan configuration, which gives me 40 through 10 meters. Even with the attic antennas, I have no problem working DX stations between rag chew QSOs, sprints, and casual contest ops. Thank you again, CW.

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My sweetheart has graciously become my “Logging Specialist” at the computer keyboard during contests and sprints. She is learning about ham radio by osmosis and has recently expressed an interest in getting her ticket.

I am heartened to see full CW bands during CWT, and that there is a market for keys and a variety of companies to fill that market. I remain humbly amazed that I partake in the art of CW. I have many keys, but I could use, well, just one more.

Thank you, Jim, N7US, for your nomination, and Fred, KG9X, Max, VE6RST, and Hank, W6SX for your sponsorships. I felt like a nervous new ham during my first CWT after becoming a member. (Did I really mess up my own call? Please don't revoke my number!)

CWops, along with CW Academy, provides an important cornerstone for ham radio and is a resource to bring hams into CW. I'm honored to be a member.

To all, CW forever.

