

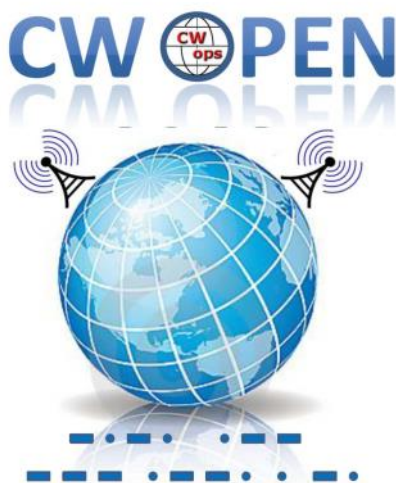
# Solid Copy

The CW Operators Club Newsletter

November 2019 — Issue 118



## CW Open: 2019 Results



[See story by Bruce N1LN on page 13.](#)

## President's Message

The hamfests in October and early November really drive home the importance of being visible to those who want to learn Morse Code. I set up the CWops booth so those who are interest-



ed in learning CW can find us and, secondly, to have some fun letting members and non-members participate in our callsign competition. I find that there is always someone like a new licensee, a no-code license holder and some parents who are hoping to help their

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### **CWops "CWT" Every Wednesday**

Start: 13Z, 19Z, 03Z (+1), 1 hour each session

Exchange: name/number (members)  
name/SPC (non-members)

### **Avoid DX pileups!**

Next slow speed CWT is March 11-12.

### **US Vanity 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"

**13+ wpm practice:** Tuesday, Friday, Sunday 6-8 pm "local time" 7.035-7.045

### **CWops Officers and Directors**

President: Mac McDonald [NN4K](#)

Vice President: Peter Butler [W1UU](#)

Secretary: Jim Talens [N3JT](#)

Treasurer: Craig Thompson [K9CT](#)

Director: Stew Rolfe [GW0ETF](#)

Director: Nodir Tursoon-Zade [EY8MM](#)

Director: Raoul Coetzee [ZS1C](#)

Webmaster: Dan Romanchik [KB6NU](#)

Editor/Publisher: Tim Gennett [K9WX](#)

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child find a way to learn CW. During the conversation I answer their questions and give them a handout about CWops CW Academy. Hopefully many of them will find their way into a class by way of our website.

Some of those inquiring have heard about CW Academy from former students or friends who have become familiar with it. It seems that we need to make an effort to find ways for more people can find us. Word of mouth is good, but I suspect that we need to find a way for members of existing ham radio clubs to promote our opportunity. This could take several forms such as making monthly announcements in their club meetings and possibly including a note in their club newsletters with a link to our website. One of the reasons that CWops created the post of CWops Ambassador was for there to be a go-to person in a region who could attend club meetings and provide information about CW Academy and how to enroll for training. That could still be done but I'm looking for ways to leverage the spread of coverage about CW Academy. The best place to [get more information about it is the CW Academy website](#).

Applications for class enrollment is on the website. There is no secret information so prospective students could go further and look at our training syllabi for the three Levels. Beginners need to start on Level 1 while those who know CW could apply for Level 2 or even Level 3 if they meet the prerequisites. Key benefits that CWops has is A.) Live on-line classes with advisers, B.) Small class size of 5 students, C.) Using video conferencing so no one has to travel to attend a training, D.) The courses, all of them, are offered free of charge. Why do we do this? Our club is dedicated to seeing that the CW mode remains active and continues to be used. The value of CW has been proved repeatedly over the years and newcomers can become part of that tradition. Our training at the basic and advanced levels are definitely contributing to the objective.

The September/October CW Academy classes are finished or just wrapping up. That means on the second Wednesday after the end of the semester we have three special QRS CWT sessions. The students have been informed by their advisers about it and encouraged to participate. Most of the students will likely be from Levels 2 and 3. Some exceptional Level 1 graduates may also be joining in. We need to be aware that the CWA students won't have the contest proficiencies that regular members have and that many will need your patience to complete an exchange. Our encouragement and support for their progress is important.

We have all heard and to some extent probably told students the ability to improve with CW comes from practice, practice and more practice. Some practice is done with on-air QSOs. Other forms of practice are done alone or with practice partners. The practice types need to include listening and sending. Maybe some of the members would like to write articles for this newsletter and give advice from training and experience for the benefit of others about practice methods. Some of our members have created YouTube videos that are educational. More would be good. This would apply to QSOs, traffic handling and contesting skills. It will be appreciated by many.

### **Giving Back**

As mentioned earlier, CW Academy has finished a semester of training on Levels 1, 2 and 3. These students need a place to go to operate CW frequently so they can sharpen their new skills. Rob, K6RB, wrote an article in the October issue of *SOLID COPY* entitled "Giving Back." The article describes a plan that will be implemented in January 2020 and [if you have not read it here is a link](#).

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We need lots of members to engage in this plan for the benefit especially of newly minted CW operators. Of course, you don't have to wait until January to start calling "CQ CWA....." at various times of day. Some former students have night shifts and would appreciate an opportunity to make contacts during daylight hours. There are students in Europe who have graduated from CW Academy and possibly 20 meters would be a good place to call CQ CWA from the US.

Cold weather is reminding us of how much fun we can have with our radios from the comfort of a CW oriented shack. Whether it's contesting, QTXing or Giving Back.

**73,**

**Mac NN4K**, President

## From the [Editor](#)

### FT8 Again

Considering that we are a club whose mission is to "celebrate the unique art form of Morse Code," we seem to spend a lot of time discussing and debating the merits of FT8. Person to person and on our listserve. And, in this newsletter. FT8 has been called a "disruptive technology" so maybe it's appropriate.

Case in point, I am in receipt of two separate "Point of View" essays written by two different CWops members which focus on FT8 in one aspect or another. This month I will yield my column space to Rob K6RB who asks if FT8 will kill ham radio, and next month I will yield to Steph F5NZY, who recently decided to take a listen and see what all the fuss is about. As Point of View articles, please remember that they represent the opinions of their authors and not CWops or me.



## Will FT8 Kill Ham Radio?

[\*\*Rob Brownstein K6RB\*\*](#)

I recently did an online search about FT8. I had been hearing about it from lots of folks at the Dayton Hamvention and decided to find out more about it the old-fashioned way – by researching and reading. That's when I ran into a bunch of emails on a blog that opined about FT8's influence on ham radio's future.

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The emails ran the gamut of “it’s great for ham radio because sunspots are flagging and the only way to work DX is using weak-signal tools” to “the computers are doing all the work so it takes the personal aspect out of ham radio all together.” A poll asking whether FT8 will be bad for ham radio came in at about 50/50. Other comments talked about how SSB was supposed to be the end of ham radio; CB was going to deliver the coup de grace; and the Internet tolled ham radio’s death knell.

Here’s my take, but I should first fully disclose that I have never tried FT8 or its weak-signal predecessors. I don’t think FT8 will kill ham radio. I think ham radio is destined to die when there are no more hams left. And, with a hobby that is ageing the way ours is ageing, that could be a lot sooner than later.

### **A Little History**

With ham radio now more than a century old, perhaps a look at its past may offer some clues to its future. In its early days, hams were experimenters who were smitten with the prospect of sending messages wirelessly. Virtually every transmitter and receiver during the first 25 years of ham history was “homebrew.” There were no E.F. Johnsons, Collins, Hallicrafters, Nationals, or Heathkits. It was roll-your-own time. I think it’s fair to say that most of the pioneers looked at Morse code as a means to an end, and the end was wireless communications. But, since they all had to learn it -- even before there were FRC and, later, FCC licensing tests that tested for it -- they bit the bullet and did it. Wireless communication was the goal, and Morse code was a facilitator.



**K6RB addresses the membership at the annual CWops Dayton dinner.**

With the advent of voice communications using amplitude-modulated transmitters some of the early pioneers moved to the new mode and put their keys in a drawer. Most kept a toe in both waters. And some diehards eschewed microphones all together.

Post World War II, with the advent of carrier-suppressed single-sideband voice communications, and all its power and bandwidth efficiencies vis a vis AM, the handwriting was on the wall for AM. But we still had essentially CW and phone modes, and people still did one, or the other, or both.

By the mid-1960s, the ageing trend began to change. The youngsters who flooded into ham radio during the mid-1950s to early 1960s were still active, by and large, but the number of teen-aged hams coming into the hobby began to wane. Some blamed it on the Morse Code requirements. Others blamed it on the up-or-out nature of the novice-class license. But, there’s no doubt that the numbers of new hams began to wane.

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Concomitantly, we began to see a change in the nature of the commercial ham equipment. Right up until the early 1960s, the stalwarts – Johnson, WRL, National, Hallicrafters, and Collins – were still cranking out the tube-type transmitters and receivers they began developing right after WWII. But new names began to appear – Heathkit, Swan and Drake. Collins began popularizing transceivers, albeit expensively, and Heath, Swan and Drake followed in its wake with lower-priced transceivers. This heralded a change in ham radio. We saw an increase in use of SSB with a concomitant reduction in use of CW. Especially during sunspot peaks, one could work the world with an inexpensive HW-100, without having to touch a key. European and Asian DX which had been primarily CW-oriented began shifting to SSB while having mostly sidestepped AM.

Hams were still mostly chasing DX and ragchewing while occasionally, if at all, participating in selected contests. But what had once been a largely CW milieu was now becoming a mostly SSB one. And what had been a huge influx of teenaged hams during the mid-1950s to early 1960s had become a trickle.

### **Other Factors**

Remember when virtually every house in your neighborhood had one of those two-element TV antennas strapped to its chimney? By the mid-1970s, these were being replaced very quickly by so-called “cable tv” services. Many new-construction houses were now being built by developers in planned communities having “covenants, conditions and restrictions” (CC&Rs) which often prohibited outside TV antennas along with other things. The home-owners associations (HOAs) that emerged once the community’s houses were sold had their own rules on top of the CC&Rs.

You want to put up a dipole between two trees in your backyard? No. You want to put a ground-mounted vertical in your backyard? Unh unh. You want to put up a tower and Yagis? You must be kidding! Thus, as more and more people bought houses in HOA planned communities, they and their children were essentially enjoined from putting up any kind of useful antenna. How’s that for a cold towel thrown in the face of ham radio?

### **Distractions**

By the late 1970s and early 1980s, hobbyist computers and video-game consoles were becoming a popular distraction for teenagers (and some of their parents). And, by 1995, with the advent of the Internet and its World Wide Web browsers, those computers were becoming portals to a vast network of servers and applications, creating a precursor to social-medium websites.

Look at young to middle-aged people today. How many are captive to those small “smartphones?” No, they are not chatting; they are surfing the “net” or texting someone. In other cases, they are looking up destinations and using GPS-based mapping programs to give them walking, driving, or mass-transit directions.

Ham radio? What’s that? Two-way wireless communication, you say, I already have that in my shirt pocket. It’s called an “iPhone.” Talking to people in foreign countries? I can do that with Skype, or Zoom, or WhatsApp. Why would I learn a bunch of techno stuff and take a test to use something that is less reliable than my trusty iPhone?

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## Conclusion

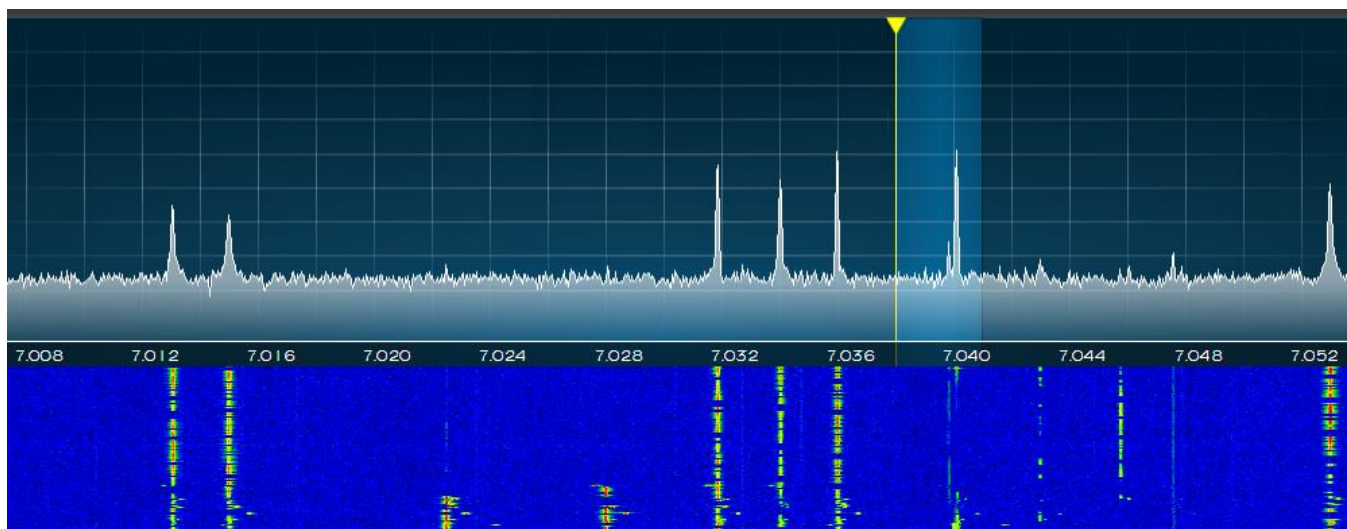
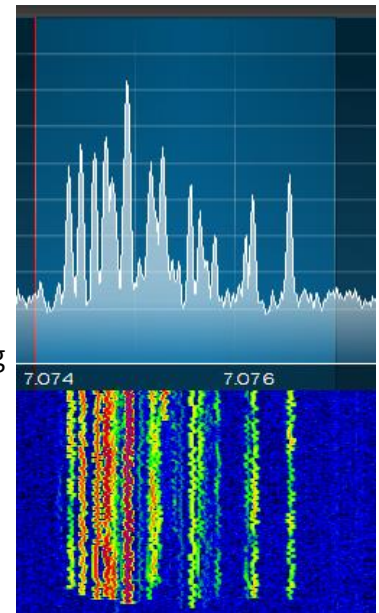
So, my take is “no.” FT8 will not kill ham radio. Ageing and dying will kill ham radio. Like any such activity, without an influx of younger participants, it is destined to go extinct. When I was a kid it was the magic of wireless communications that intrigued and interested me. I didn’t have an iPhone, then. It cost a lot of money to make a phone call out of your local area. I didn’t have Skype or Zoom or WhatsApp then. For me, as a teenager, ham radio and its participants were a group of people with common interests. I didn’t have Facebook, or blogs then.

Every day we hear about someone else we know becoming a “silent key.” Is there a young person queued up to take his/her place? Not now. Will that attrition ultimately bring ham radio to its knees? Numbers don’t lie.

So, rather than worry about the impact of FT8, I’m worried about the impact of HOAs, smartphones, the Internet, social media, Skype, and Facebook. The obstacles are formidable.

But I also see a ray of hope. Today’s young folks are intrigued with Morse code because it’s like texting but takes skill. So, unlike the early pioneers who were intrigued with wireless communications but saw Morse code as a means to an end; these kids see Morse code as intriguing and view wireless communications as a fun way to make use of their skill.

The distractions, however, are huge. Getting the message out to young folks is daunting in this world of relentless ads and news. But, like other things, if we can make a small dent, initially, and these youngsters have a positive experience, they will spread the word – it’s called “viral.” Then, our problem won’t be one of keeping ham radio alive; it will be one of helping a growing demand for Morse code training.



Top: The 3 kHz 40m FT8 sub band at 1400z on a Monday morning; Bottom: kHz of th 40m CW sub band at 1400z on the same Monday morning.

# CW Operators' Club Tenth Anniversary Celebration

[Bill Gilliland W0TG](#)



# 10 Years

## 2010 - 2020

January 2020 marks the 10th anniversary of the CW Operators' Club (CWops). In the ten years of promoting the use of CW in amateur radio communications, the club has grown to nearly 2000 members worldwide. To honour the members' devotion to CW and the efforts of many volunteers toward promoting its use and educating new devotees, CWops members are celebrating with a month-long on-air event in January 2020.

The following rules have been adopted for the event:

- All radio amateurs are welcome to participate
- Timeframe: 0000z 1 January 2020 to 2359z 31 January 2020
- Bands: 160m, 80m, 40m, 20m, 15m, 10m
- Exchange: Signal report. Participants are encouraged to send additional information at their discretion such as name, location and membership number for CWops members
- All QSOs must be made with CWops members using CW
- Special Club Calls will be activated as well as a number of unique Special Anniversary Celebratory Calls – e.g. K3CWO, GB10CWO or N5A. A complete list of special callsigns is available at <https://cwops.org/cwops-10th-anniversary-celebration/>
- Special club calls and members will call "CQ CALL/CWO" or "CQ CALL CWO"
- Scoring: 1 point for each unique member or Special Club Call worked per band
- Reporting: Logs should be emailed to [AnniversaryLogs@CWops.org](mailto:AnniversaryLogs@CWops.org)
- Details of the attractive awards and certificates available will be found on the website

Please see the website for further details, updates and latest news – <https://cwops.org/cwops-10th-anniversary-celebration/>

Celebration participants will be trying to work as many CWops members as possible and it is important that all CWops members identify themselves as members. This can be as simple as identifying as CALL/CWO or CALL CWO, but we urge you to use special callsigns as much as possible.

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Sixteen Mini Club callsigns are available to U.S. members. If you wish to use one of those callsigns during the Celebration go to <https://cwomc.org> and fill out the form. These are first come first served, but preference is given to members within the division represented by the callsign. Members outside the U.S. who have a Mini Club available to them should contact the club for information.

Also, for those in the U.S., special event 1x1 callsigns are available to every licensee and there's no better way to draw attention to our celebration than by using a 1x1 callsign during January. To apply for a special event 1x1 callsign, go to <http://www.1x1callsigns.org/>, read the documents there about applying for and using a callsign, and use the online form to apply. You can look in the One-By-One Database linked to the page to determine if your desired 1x1 callsign is available during the event timeframe. Once you apply, there will be no direct notification that use has been granted, and you'll need to return to the page to check. If you select ARRL as the coordinator it will take from one to three days for them to update the database. If you have any questions about the process, please contact W0TG (N5T) at [bill@bgilliland.com](mailto:bill@bgilliland.com) for help.

For those outside the U.S., please investigate the availability of special event callsigns in your country. Several non-U.S. members have applied for and been granted permission to use special callsigns, and there are pending applications for others. Please notify W0TG when you apply and when your application is approved so we can keep our list updated.

The CWops 10<sup>th</sup> Anniversary Celebration is shaping up to be an incredible event! To ensure that it is, we need as many of you as possible to be on the air in January using a CWops Mini Club callsign, a special event callsign, or just identifying yourself as a participating CWops member by appending CWO to your callsign as set forth in the rules. We look forward to seeing YOU participate in the celebration!

As of November 1, the following Special Event Callsigns will be participating:

|         |                                     |         |                           |
|---------|-------------------------------------|---------|---------------------------|
| EG4CWO  | EA4OR                               | N5A     | KT5CWO                    |
| G2CWO   | CW Operators' Club England          | N5T     | W0TG                      |
| GI2CWO  | CW Operators' Club Northern Ireland | N0CWO   | Midwest CWops Club        |
| GM2CWO  | CW Operators' Club Scotland         | OL10CWO | OK1RR, OK1TN              |
| GW2CWO  | CW Operators' Club Wales            | PG10CWO | PG4I                      |
| K1K     | K1EBY                               | SF10CWO | SM6CUK                    |
| K3CWO   | Atlantic CWops Club                 | VC3CWO  | VE3NNT                    |
| K4CWT   | Southeast CWops Club                | W1CWT   | New England CWops Club    |
| K8G     | KB8GAE                              | W4Y     | W7IY                      |
| KE2CWO  | Hudson CWops Club                   | W6CWO   | Pacific CWops Club        |
| KE6CWO  | Southwest CWops Club                | W7C     | W7SW                      |
| KK1CWO  | Cape Cod CWops Club                 | W7CWO   | Northwest CWops Club      |
| KN5CWO  | Delta CWops Club                    | W7F     | W7SW (Fun ARC)            |
| KN8CWO  | Great Lakes CWops Club              | W9CWO   | Central CWops Club        |
| KT5CWO  | West Gulf CWops Club                | W0CWO   | Dakota CWops Club         |
| KX4CWO  | Roanoke CWops Club                  | WY7CWO  | Rocky Mountain CWops Club |
| LZ10CWO | LZ1HW                               |         |                           |





# Election Notice

## [Don Greenbaum N1DG](#)

November is election season at CWops. For the first time in several years we have a contested election. The nominating committee is pleased to present the following slate:

|                             |                                |
|-----------------------------|--------------------------------|
| <i>Vice President :</i>     | Peter Butler, W1UU (incumbent) |
| <i>Director (Choose 1):</i> | Stew Rolfe, GW0ETF (incumbent) |
|                             | Riki Kline, K7NJ               |

You can vote here until November 30:

<https://cwops.org/officer-elections/>

Thanks for participating in the governance of our club.

**Don N1DG**

Chair, Nominating Committee

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## Time To Pay Your 2020 Dues

If your CWops membership is scheduled to expire at the end of 2019 please do the following to renew: [Log onto the CWops website](#) (the password is morse8). It's that easy. Well, you also have to submit payment, typically by PayPal. Please use the "pay friend" rather than "for product or services" option as this saves us a commission charge. Or send a check to K9CT (use QRZ.COM address).

If you are wondering whether you want to renew, consider that CWops is the only club that has a CW Academy and teaches nearly a thousand students Morse Code every year, plus it sponsors awards for CW achievement, issues recognition for ragchewing, and supports weekly CWT activity sessions (and annual CWO events). More than all of this, it is an international fraternity of CW enthusiasts unlike any other, so you have good reason to be proud of being a member.

We urge those who are renewing to do so for 5 years or, even better, lifetime membership. Why? Because it makes administration so much easier, and it removes the need for you to ever worry about renewal again. Besides, on an annual basis it's relatively inexpensive. In fact, we guarantee you will live long enough to make it a long-term bargain, or your money back! More seriously, the life membership option is good for both you and the club.

***Your Officers and Board***

# News and Notes

## [Jerry Weisskohl AC4BT](#)

**David, WD6T:** Please note that I have a new callsign. So K6DAJ is now WD6T

**Jim, N3JT:** Jim N3JT and John N3AM head to Florida for the winter via the Auto Train and expect to operate their stations remotely as in past years.

**Bud, AA3B:** I will be returning to Antigua and will be active between 16 and 26 November 2019 using callsign V26K. This includes a single op, all band, low power entry in CQ WW DX CW.

CW will be emphasized during this trip and I hope to work many club members.

**Ron, KU7Y:** Would anyone be interested in the hours I went through chatting with a fellow FTdx3000 owner helping me understand what all those SSB things are that can be set in the rig ... and how after close to 2 hours of setting it up I jumped into the CQWW DX SSB contest ... and after working hard for well over 4 hours all I managed to get was 7 QSOs? :-)

It's so much easier to understand CW!

**Duncan, G3WZD:** CWops at the RSGB 2019 Convention

Knowing that several UK members of CWops planned to attend the RSGB 2019 Convention over the weekend of 12<sup>th</sup>/13<sup>th</sup> October, a plan was hatched to meet up. Stew GW0ETF said he would be there with the CWops banner, so perfect for a group photo.

Dave Sumner, K1ZZ, CWops #2352, former CEO of the ARRL and Secretary of the IARU was the keynote speaker at the convention, so we were able to corral him for the photo too! Dave and his XYL, Linda KA1ZD, had only just returned from IARU business in Lima, Peru, before leaving for London!

The convention was once again held at Kents Hill Park, Milton Keynes. The centre is well suited for



**Figure 1 (L to R) Dick G3WRJ #2209, Ray G3XLG #1365, Phil G4NVR #1583, Mike G4DYC #2116, Dave K1ZZ #2352, Peter M0RYB #2061, Duncan G3WZD #1979, Roger G3LDI #1843, Stew GW0ETF #919 & Jim G3YLA #2015 (Photo courtesy of Chris, GM3WOJ.)**

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conventions with ample car-parking, plenty of meeting rooms for breakout sessions and the separate conference streams, on-site accommodation and catering. I've no doubt there will be reviews some of the major amateur radio publications, so I'll not dwell further on it here. Suffice to say that there was plenty of interesting content in the five separate streams (HF/DX, VHF, General, Contest University & AMSAT). I found the Contest University stream of particular interest.

Prior to the convention I had only met one other CWops member in person; Phil G4NVR when we both attended the National Hamfest at Newark few weeks earlier, so it was great to be able to put some faces to familiar callsigns and membership numbers!



**Also present at the convention, but absent for the group photo, was Rich G4FAD.**

Not pictured, but present at the convention, were Nigel G3TXF #166, John G4IRN #268 and Don G3XTT #1874. No, your eyes do not deceive you, the group is 'bookended' by twin brothers, Dick (left) and Jim (right) Bacon, G3WRJ and G3YLA respectively.

It was great fun to meet fellow CWops members for the first time and certainly look forward to more eyeball QSOs in the future.

With apologies to any other CWops members who may have been at the convention, but not mentioned!

**Wayne, N4FP:** CWops at the ARRL Florida State Convention, Melbourne, Oct 12, 2019

Chris, W4WF, CWops #2095, and President of the Florida Contest Group, offered me the opportunity to make a presentation about CWops to the FCG Forum, which I gladly did.



**L-R: KE1F Lou 769, W4GJ Bob 1077, AA4NP Jim 1954, N4FP Wayne 1090, W4WF Chris 2095, N4GL Marty 1644, K4NMR Tom 2298, N3EA Al 1438, K5KG George 970. Absent: W2TR Gary 2136.**

I presented an overview of CWops and the CW Academy, and it was well received. There was a total of 10 CWops members at the forum, and 9 of us got together for a group photo.

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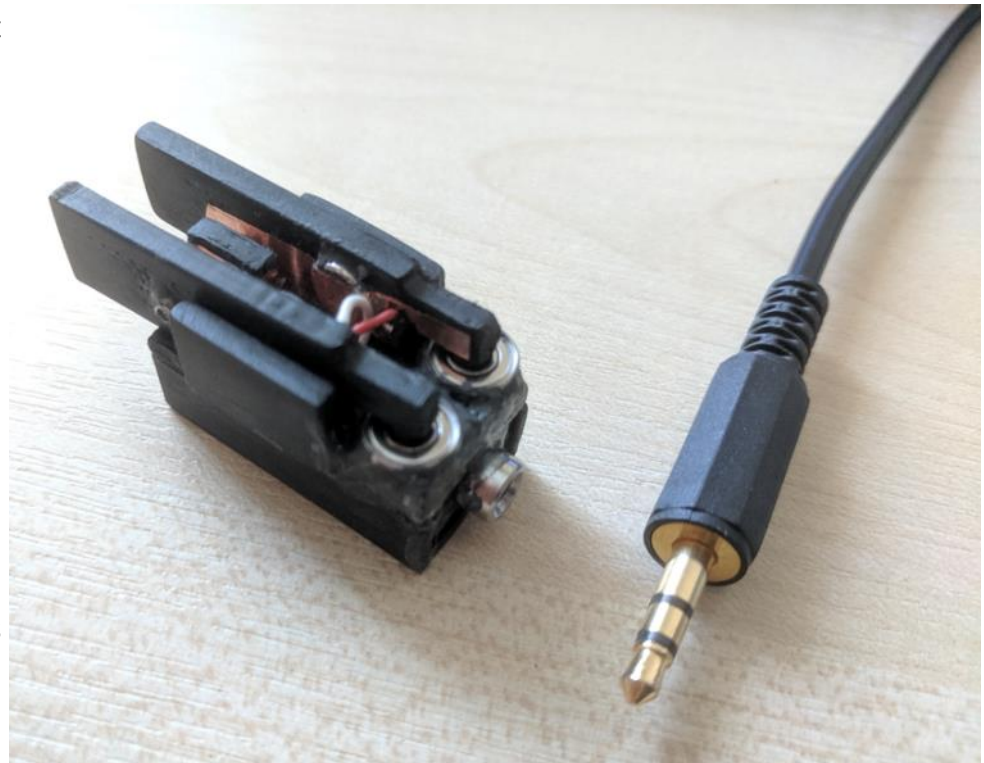


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**Peter, GM0EUL:** I've just finished my level 1 CWA class. As always it was a very rewarding experience and it's great to see such enthusiasm and commitment to learning CW.

I've also recently acquired a 3D printer and I'm teaching myself CAD. After a few experimental prints including a case for a QCX, a storage box for my portable Altoids tin ATU, some bits and pieces of portable antenna hardware and an enclosure for an SDR ham converter, I set about designing a

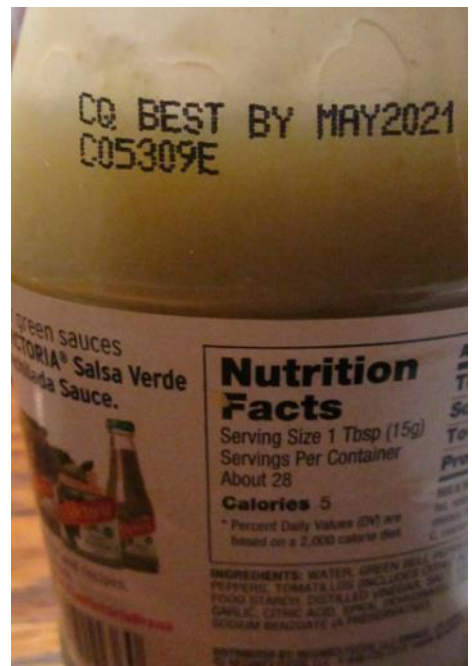
mini CWpaddle. The result has exceeded my wildest dreams. It took about four iterations to get it right and now it's a really great little key. I've made a few and put them up on eBay and on their own website ([www.umpp-cw.com](http://www.umpp-cw.com)).



Look for an in-depth report in a future issue of Solid Copy.

**John, N6HCN:** Apparently taco sauce manufacturers in California know something we don't about the new solar cycle and are predicting better DX ahead. (See the photo, right).

**Ed, W2LCQ:** I just acquired (below) this beautiful J.H. Bunnell & Co steel lever straight key. The key is circa 1924. The action is very smooth and easily sends at about 20 wpm.





# Results: 2019 CW Open

**Bruce Meier – N1LN**

The CW Open is now a few months behind us and it is time to publish the results! I hope every participant had as much fun with this year's CW Open as I did. Even with very poor propagation the participation was quite good but did not reach the outstanding numbers from 2018. Unfortunately, most metrics including: Log Submissions, QSOs and Multipliers were well below last year. On a good note, the QSOs per Log Submission was up by and outstanding 14.5% across all three sessions.

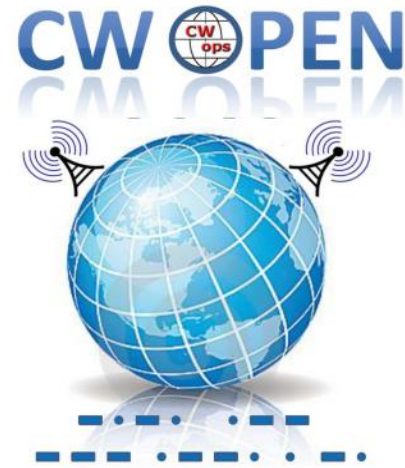
The CW Open is always held on the first weekend of September. This year the CW Open Session 1 started on September 7 at 0000Z. Session 2 started at 1200Z and Session 3 started at 2000Z. This flexible session schedule and format allows participants to operate in all sessions or any combination. The 100 QSO minimum to qualify for a trophy or plaque was eliminated this year in an attempt to encourage additional ITU Region 3 participation. Unfortunately, the Region 3 participation was at an all-time low, so stay tuned for future changes for the 2020 CW Open. 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.

We would like to once again recognize and thank ICOM America for providing the beautiful trophies and plaques to the CW Open winners. The CW Operators Club really appreciates ICOM's continuing support of our premier operating event. Please be sure to check out ICOM at: <http://www.icomamerica.com/en/amateur/>

So, let's take a look at the 2019 results and begin planning and strategizing for the upcoming 2020 CW Open starting on September 5, 2020 at 0000Z.

## **Session 1 – 0000Z to 0400Z**

Session 1 results are based on 201 logs received, down about 11.8% from last year. Only ITU Regions 1 and 2 submitted logs. The QSO totals decreased by 1.8% and the multipliers were down by 6%. An interesting metric is that the overall points / log increased by 9.2%. Even with fewer log submissions those that participated had higher QSO rates. Even with the higher rates, only one submission exceeded 100K points. Congrats to K3WW, Charles, for turning in an outstanding 101,040 points. You will read more about Charles farther down the writeup.



**CWops thanks ICOM for sponsoring trophies and plaques for the 2019 CW Open.**

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| Call   | Name   | QSOs | Mults | Score   | Power | Call   | Name   | QSOs | Mults | Score  | Power |
|--------|--------|------|-------|---------|-------|--------|--------|------|-------|--------|-------|
| K3WW   | CHAS   | 421  | 240   | 101,040 | HIGH  | N4YDU  | NATE   | 154  | 118   | 18,172 | HIGH  |
| K4RO   | KIRK   | 431  | 230   | 99,130  | HIGH  | K1ESE  | JOHN   | 133  | 132   | 17,556 | HIGH  |
| K9CT   | CRAIG  | 409  | 227   | 92,843  | HIGH  | WF9A   | ALEX   | 136  | 123   | 16,728 | HIGH  |
| K5OT   | LARRY  | 384  | 234   | 89,856  | HIGH  | W6TK   | DICK   | 143  | 116   | 16,588 | HIGH  |
| K0RF   | CHUCK  | 366  | 219   | 80,154  | HIGH  | NS8O   | GREG   | 147  | 110   | 16,170 | HIGH  |
| NT6Q   | MARKO  | 363  | 212   | 76,956  | HIGH  | WA3AAN | GRANT  | 129  | 110   | 14,190 | HIGH  |
| K5TU   | KIM    | 336  | 224   | 75,264  | HIGH  | K4HQK  | JOHN   | 137  | 102   | 13,974 | HIGH  |
| K9ZO   | AL     | 350  | 215   | 75,250  | HIGH  | K5GQ   | MARK   | 118  | 107   | 12,626 | HIGH  |
| N3QE   | TIM    | 346  | 211   | 73,006  | HIGH  | K3PP   | GLENN  | 123  | 95    | 11,685 | HIGH  |
| N1LN   | BRUCE  | 349  | 209   | 72,941  | HIGH  | NN4K   | MAC    | 116  | 97    | 11,252 | HIGH  |
| K3WJV  | BILL   | 343  | 205   | 70,315  | HIGH  | N5UM   | AL     | 106  | 98    | 10,388 | HIGH  |
| NA8V   | GREG   | 343  | 200   | 68,600  | HIGH  | K4WW   | BO     | 97   | 97    | 9,409  | HIGH  |
| K7RL   | MITCH  | 323  | 211   | 68,153  | HIGH  | GW2CWO | STEW   | 111  | 80    | 8,880  | HIGH  |
| K4BAI  | JOHN   | 340  | 198   | 67,320  | HIGH  | K0TC   | RON    | 100  | 88    | 8,800  | HIGH  |
| WT9U   | JIM    | 343  | 195   | 66,885  | HIGH  | W4NZ   | TED    | 98   | 85    | 8,330  | HIGH  |
| W5TM   | ED     | 327  | 200   | 65,400  | HIGH  | K2SG   | TONY   | 99   | 74    | 7,326  | HIGH  |
| N5RZ   | GATOR  | 311  | 205   | 63,755  | HIGH  | NG7A   | GEO    | 92   | 77    | 7,084  | HIGH  |
| NG7M   | MAX    | 299  | 212   | 63,388  | HIGH  | N7SU   | DAN    | 93   | 76    | 7,068  | HIGH  |
| K4RUM  | MIKE   | 297  | 192   | 57,024  | HIGH  | K0VXU  | RUSS   | 79   | 73    | 5,767  | HIGH  |
| NS0R   | MORGAN | 283  | 196   | 55,468  | HIGH  | AE1T   | PETER  | 73   | 73    | 5,329  | HIGH  |
| N8BJQ  | STEVE  | 315  | 172   | 54,180  | HIGH  | RK3ER  | ALEX   | 77   | 61    | 4,697  | HIGH  |
| K8JQ   | STEVE  | 273  | 195   | 53,235  | HIGH  | W1KM   | GREG   | 72   | 64    | 4,608  | HIGH  |
| N3RS   | SIG    | 285  | 186   | 53,010  | HIGH  | NS9I   | TOM    | 72   | 57    | 4,104  | HIGH  |
| K1IMI  | BERT   | 279  | 188   | 52,452  | HIGH  | WA6URY | DAN    | 69   | 59    | 4,071  | HIGH  |
| W4WF   | CHRIS  | 276  | 187   | 51,612  | HIGH  | K2NV   | TONY   | 65   | 61    | 3,965  | HIGH  |
| KU8E   | JEFF   | 291  | 176   | 51,216  | HIGH  | KC9EE  | GARY   | 63   | 62    | 3,906  | HIGH  |
| K5KG   | GEO    | 272  | 188   | 51,136  | HIGH  | N4ZR   | PETE   | 65   | 59    | 3,835  | HIGH  |
| K7QA   | TOM    | 271  | 188   | 50,948  | HIGH  | WA5LXS | DENNIS | 66   | 58    | 3,828  | HIGH  |
| K4QS   | CHUCK  | 273  | 186   | 50,778  | HIGH  | WA8KAN | DAVE   | 62   | 54    | 3,348  | HIGH  |
| W4AQL  | BRUCE  | 268  | 189   | 50,652  | HIGH  | G3XLG  | RAY    | 64   | 48    | 3,072  | HIGH  |
| N3AD   | ALAN   | 289  | 173   | 49,997  | HIGH  | VA2AGW | ANDY   | 50   | 50    | 2,500  | HIGH  |
| K8BZ   | STEVE  | 275  | 181   | 49,775  | HIGH  | M2D    | PHIL   | 61   | 40    | 2,440  | HIGH  |
| K5AX   | TOM    | 272  | 180   | 48,960  | HIGH  | SM5CIL | ARNE   | 54   | 38    | 2,052  | HIGH  |
| N6RK   | RICK   | 260  | 184   | 47,840  | HIGH  | LZ1ZJ  | SLAV   | 41   | 36    | 1,476  | HIGH  |
| K4GMH  | MIKE   | 246  | 187   | 46,002  | HIGH  | KM4HI  | JIM    | 38   | 38    | 1,444  | HIGH  |
| AB0S   | TIM    | 249  | 180   | 44,820  | HIGH  | G2CWO  | DUNCAN | 40   | 34    | 1,360  | HIGH  |
| W3FV   | BARRY  | 268  | 163   | 43,684  | HIGH  | DL6KVA | AXEL   | 42   | 29    | 1,218  | HIGH  |
| N9EP   | ED     | 252  | 173   | 43,596  | HIGH  | K6AR   | JIM    | 27   | 27    | 729    | HIGH  |
| NA4J   | JIM    | 239  | 170   | 40,630  | HIGH  | AA2AD  | PETE   | 24   | 24    | 576    | HIGH  |
| K5PI   | ROB    | 236  | 172   | 40,592  | HIGH  | SD1A   | ERIC   | 29   | 19    | 551    | HIGH  |
| N7NM   | DOUG   | 235  | 171   | 40,185  | HIGH  | KE5EN  | ERIC   | 20   | 20    | 400    | HIGH  |
| VE3NNT | LES    | 231  | 163   | 37,653  | HIGH  | WA3GM  | GREG   | 18   | 18    | 324    | HIGH  |
| N4BP   | BOB    | 200  | 185   | 37,000  | HIGH  |        |        |      |       |        |       |
| NN5O   | LARRY  | 224  | 165   | 36,960  | HIGH  | N4ZZ   | DON    | 367  | 205   | 75,235 | LOW   |
| VA2CZ  | PETE   | 221  | 167   | 36,907  | HIGH  | K7SV   | LAR    | 311  | 182   | 56,602 | LOW   |
| VE7KW  | KEITH  | 219  | 165   | 36,135  | HIGH  | AA4LS  | CHAS   | 285  | 184   | 52,440 | LOW   |
| K3WI   | BILL   | 210  | 161   | 33,810  | HIGH  | W0UA   | GEO    | 258  | 197   | 50,826 | LOW   |
| N3JT   | JIM    | 216  | 156   | 33,696  | HIGH  | KG5HVO | BRYANT | 266  | 180   | 47,880 | LOW   |
| NY3B   | STEVE  | 223  | 150   | 33,450  | HIGH  | KG9X   | FRED   | 285  | 160   | 45,600 | LOW   |
| K3SV   | BILL   | 207  | 161   | 33,327  | HIGH  | N8AA   | JOHN   | 271  | 162   | 43,902 | LOW   |
| K8PK   | PETER  | 206  | 154   | 31,724  | HIGH  | WJ9B   | WILL   | 250  | 164   | 41,000 | LOW   |
| K2AV   | GUY    | 217  | 146   | 31,682  | HIGH  | K0AV   | ALAN   | 219  | 180   | 39,420 | LOW   |
| N4FP   | WAYNE  | 211  | 147   | 31,017  | HIGH  | NW3Y   | CHICK  | 235  | 166   | 39,010 | LOW   |
| K1EBY  | FRANK  | 200  | 147   | 29,400  | HIGH  | KG5U   | DALE   | 225  | 160   | 36,000 | LOW   |
| K4NMR  | TOM    | 189  | 155   | 29,295  | HIGH  | KE8G   | JIM    | 212  | 163   | 34,556 | LOW   |
| WA4JUK | JOE    | 215  | 136   | 29,240  | HIGH  | K9WX   | TIM    | 211  | 160   | 33,760 | LOW   |
| DK9PY  | ARMIN  | 187  | 156   | 29,172  | HIGH  | K4OAQ  | FRITZ  | 207  | 155   | 32,085 | LOW   |
| N5AW   | MARV   | 189  | 143   | 27,027  | HIGH  | K1DW   | DALLAS | 211  | 150   | 31,650 | LOW   |
| VE2FK  | CLAUDE | 185  | 146   | 27,010  | HIGH  | W0UO   | JIM    | 219  | 142   | 31,098 | LOW   |
| W8FN   | RANDY  | 176  | 150   | 26,400  | HIGH  | N5JR   | JOEL   | 199  | 143   | 28,457 | LOW   |
| K3WA   | BILL   | 181  | 141   | 25,521  | HIGH  | KU7T   | ANDY   | 186  | 144   | 26,784 | LOW   |
| K4AFE  | JOHN   | 181  | 141   | 25,521  | HIGH  | NW0M   | MITCH  | 198  | 133   | 26,334 | LOW   |
| W6SX   | HANK   | 186  | 134   | 24,924  | HIGH  | N5TOO  | VAN    | 183  | 140   | 25,620 | LOW   |
| WN7S   | DICK   | 166  | 141   | 23,406  | HIGH  | K2ZR   | DICK   | 181  | 134   | 24,254 | LOW   |
| NG5E   | DAVE   | 173  | 129   | 22,317  | HIGH  | KJ4M   | GENE   | 177  | 136   | 24,072 | LOW   |
| VE5MX  | TODD   | 165  | 132   | 21,780  | HIGH  | N1DC   | RICK   | 186  | 126   | 23,436 | LOW   |
| AE6Y   | ANDY   | 158  | 134   | 21,172  | HIGH  | W1WBB  | BILL   | 162  | 123   | 19,926 | LOW   |
| VA2UR  | GUY    | 158  | 132   | 20,856  | HIGH  | W8OV   | DAVE   | 150  | 123   | 18,450 | LOW   |
| N2RC   | MIKE   | 150  | 125   | 18,750  | HIGH  | W9RE   | IN     | 153  | 118   | 18,054 | LOW   |

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| Call   | Name  | QSOs | Mults | Score  | Power | Call   | Name   | QSOs | Mults | Score | Power |
|--------|-------|------|-------|--------|-------|--------|--------|------|-------|-------|-------|
| K9KM   | HOWIE | 155  | 113   | 17,515 | LOW   | K3ZGA  | BOB    | 48   | 40    | 1,920 | LOW   |
| VE3MA  | AL    | 156  | 110   | 17,160 | LOW   | AE4Y   | KENT   | 38   | 38    | 1,444 | LOW   |
| N8FYL  | JOHN  | 143  | 114   | 16,302 | LOW   | K0INN  | TOM    | 38   | 38    | 1,444 | LOW   |
| K3DMG  | LEE   | 142  | 108   | 15,336 | LOW   | K6RB   | ROB    | 39   | 37    | 1,443 | LOW   |
| KV8Q   | TOM   | 134  | 114   | 15,276 | LOW   | N7ID   | MIKE   | 37   | 37    | 1,369 | LOW   |
| KB3AAY | RON   | 145  | 104   | 15,080 | LOW   | KC8J   | WALT   | 37   | 36    | 1,332 | LOW   |
| AF8A   | GARY  | 139  | 108   | 15,012 | LOW   | G3LDI  | ROGER  | 50   | 26    | 1,300 | LOW   |
| K5XU   | MIKE  | 142  | 105   | 14,910 | LOW   | M0RYB  | PETER  | 41   | 28    | 1,148 | LOW   |
| N3FZ   | BRYAN | 137  | 107   | 14,659 | LOW   | G3YLA  | JIM    | 44   | 26    | 1,144 | LOW   |
| WO9B   | MIKE  | 127  | 102   | 12,954 | LOW   | SM5IMO | DAN    | 47   | 24    | 1,128 | LOW   |
| N2UU   | BOB   | 120  | 96    | 11,520 | LOW   | M0DHP  | RAY    | 35   | 27    | 945   | LOW   |
| WA8Y   | STEVE | 123  | 91    | 11,193 | LOW   | VE2IR  | DON    | 31   | 30    | 930   | LOW   |
| KN4Y   | ED    | 110  | 101   | 11,110 | LOW   | W3TAS  | TOM    | 30   | 25    | 750   | LOW   |
| AA4NP  | JIM   | 114  | 94    | 10,716 | LOW   | KI6OY  | LEE    | 26   | 25    | 650   | LOW   |
| NF8M   | FRANK | 112  | 94    | 10,528 | LOW   | QQ9S   | ADAM   | 23   | 23    | 529   | LOW   |
| AC3BU  | DARYL | 104  | 93    | 9,672  | LOW   | VA7QCE | CAROLE | 24   | 22    | 528   | LOW   |
| K2QB   | JIM   | 96   | 92    | 8,832  | LOW   | SM0Y   | LARS   | 23   | 17    | 391   | LOW   |
| N2AN   | JEFF  | 98   | 83    | 8,134  | LOW   | GM2CWO | PETER  | 23   | 15    | 345   | LOW   |
| CM8NMN | NOE   | 105  | 77    | 8,085  | LOW   | W0RM   | RALPH  | 19   | 18    | 342   | LOW   |
| K5CI   | LEO   | 98   | 78    | 7,644  | LOW   | G4DYC  | MIKE   | 23   | 13    | 299   | LOW   |
| AB1BX  | ANDY  | 88   | 78    | 6,864  | LOW   | G4ILW  | JAMES  | 16   | 16    | 256   | LOW   |
| AD5TT  | JIM   | 91   | 75    | 6,825  | LOW   | VE3RUA | JACK   | 16   | 16    | 256   | LOW   |
| KB4DE  | BILL  | 83   | 80    | 6,640  | LOW   | VE6JF  | JIM    | 16   | 16    | 256   | LOW   |
| KY0Q   | RICK  | 83   | 72    | 5,976  | LOW   |        |        |      |       |       |       |
| KD2KW  | KEN   | 80   | 63    | 5,040  | LOW   | W2GD   | JOHN   | 92   | 77    | 7,084 | QRP   |
| K3HW   | BILL  | 68   | 62    | 4,216  | LOW   | W0PHX  | GEO    | 73   | 69    | 5,037 | QRP   |
| K4TZ   | TOM   | 63   | 63    | 3,969  | LOW   | N7RCS  | JIM    | 69   | 59    | 4,071 | QRP   |
| KY9I   | JAY   | 63   | 63    | 3,969  | LOW   | NS2N   | PAUL   | 50   | 48    | 2,400 | QRP   |
| W5LA   | JIM   | 68   | 53    | 3,604  | LOW   | W4ER   | JOHN   | 51   | 46    | 2,346 | QRP   |
| VE2NCG | NICK  | 55   | 50    | 2,750  | LOW   | AG4EA  | BILL   | 42   | 40    | 1,680 | QRP   |
| AC9EZ  | JIM   | 55   | 48    | 2,640  | LOW   | WB5BKL | NICK   | 39   | 38    | 1,482 | QRP   |
| AI6V   | WYATT | 51   | 48    | 2,448  | LOW   | KE4RG  | KEN    | 25   | 25    | 625   | QRP   |
| K1SX   | DAVE  | 46   | 42    | 1,932  | LOW   |        |        |      |       |       |       |

**Session 1 Analysis:** For Region 1 High Power, Armin (DK9PY) came in first with final numbers of 187 QSOs, 156 Multipliers and a score of 29,172. Stew (GW2CWO) came in second with a score of 8,880. The Region 2 winner was Chas (K3WW) with an outstanding QSO count of 421, 240 Mults and a score of 101,040. Kirk (K4RO) came in second place with a score of 99,130. Moving to low power, the rule change eliminating the 100 QSO minimum helped Region 1. Roger (G3LDI) placed first with a QSO total of 50. When combined with a mult total of 26, Roger turned in a score of 1300. Peter (M0RYB) placed second with a score of 1148. For Region 2 Don (N4ZZ) finished first with a QSO total of 367, mult total of 205 and a score of 75,235 points. Lar (K7SV) placed second with a QSO total of 311, a mult total of 182 and a score of 56,602. The new rule also helped in the QRP category this year. John (W2GD) finished first for Region 2 QRP with a QSO total of 92, 77 mults and a score of 7084. Geo (W0PHX) came in second with a score of 5037. Region 3 did not have any log submissions for Session 1.

## Session 2 – 1200 to 1600Z

Session 2 results are also based on 201 logs received, down 18.3% from last year. All three ITU Regions submitted logs for this session. The QSO totals decreased by 3.8% and the multipliers were down by 13.6%. Once again the overall points / log increased by a huge 11.7%. As in Session 1 there was one submission that exceeded 100K points. Congrats to K3WW, Charles, for turning in an outstanding 100330 points. Does anyone else see a pattern here?

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| Call   | Name   | QSOs | Mults | Score   | Power | Call   | Name    | QSOs | Mults | Score  | Power |
|--------|--------|------|-------|---------|-------|--------|---------|------|-------|--------|-------|
| K3WW   | CHAS   | 395  | 254   | 100,330 | HIGH  | W4NZ   | TED     | 98   | 83    | 8,134  | HIGH  |
| K0RF   | CHUCK  | 408  | 241   | 98,328  | HIGH  | K8PK   | PETER   | 86   | 86    | 7,396  | HIGH  |
| N5AW   | MARV   | 368  | 250   | 92,000  | HIGH  | RK3ER  | ALEX    | 85   | 82    | 6,970  | HIGH  |
| N4YDU  | NATE   | 364  | 241   | 87,724  | HIGH  | WA8KAN | DAVE    | 88   | 72    | 6,336  | HIGH  |
| N1LN   | BRUCE  | 360  | 235   | 84,600  | HIGH  | W1KM   | GREG    | 84   | 75    | 6,300  | HIGH  |
| NT6Q   | MARKO  | 360  | 228   | 82,080  | HIGH  | WA3AAN | GRANT   | 81   | 76    | 6,156  | HIGH  |
| K5OT   | LARRY  | 350  | 226   | 79,100  | HIGH  | SD6M   | PER     | 76   | 76    | 5,776  | HIGH  |
| NA8V   | GREG   | 330  | 219   | 72,270  | HIGH  | VA2AGW | ANDY    | 77   | 70    | 5,390  | HIGH  |
| K5TU   | KIM    | 304  | 227   | 69,008  | HIGH  | M2D    | PHIL    | 85   | 63    | 5,355  | HIGH  |
| N4BP   | BOB    | 298  | 225   | 67,050  | HIGH  | NC3Y   | TOM     | 79   | 63    | 4,977  | HIGH  |
| W4WF   | CHRIS  | 297  | 222   | 65,934  | HIGH  | K2SG   | TONY    | 73   | 65    | 4,745  | HIGH  |
| N3RS   | SIG    | 316  | 207   | 65,412  | HIGH  | K8JQ   | STEVE   | 69   | 68    | 4,692  | HIGH  |
| K9ZO   | AL     | 316  | 200   | 63,200  | HIGH  | K3WA   | BILL    | 70   | 64    | 4,480  | HIGH  |
| K6AR   | JIM    | 284  | 200   | 56,800  | HIGH  | K0TC   | RON     | 68   | 63    | 4,284  | HIGH  |
| N3QE   | TIM    | 295  | 190   | 56,050  | HIGH  | K1SM   | BILL    | 70   | 58    | 4,060  | HIGH  |
| K5AX   | TOM    | 293  | 190   | 55,670  | HIGH  | N7SU   | DAN     | 71   | 56    | 3,976  | HIGH  |
| K4BAI  | JOHN   | 289  | 190   | 54,910  | HIGH  | LZ1ZJ  | SLAV    | 60   | 60    | 3,600  | HIGH  |
| KU8E   | JEFF   | 296  | 185   | 54,760  | HIGH  | KI7Y   | JIM     | 67   | 53    | 3,551  | HIGH  |
| K7RL   | MITCH  | 286  | 191   | 54,626  | HIGH  | G2CWO  | DUNCAN  | 53   | 51    | 2,703  | HIGH  |
| K3WJV  | BILL   | 279  | 192   | 53,568  | HIGH  | WA5LXS | DENNIS  | 53   | 49    | 2,597  | HIGH  |
| N3AD   | ALAN   | 287  | 182   | 52,234  | HIGH  | SD1A   | ERIC    | 56   | 46    | 2,576  | HIGH  |
| NG7M   | MAX    | 272  | 179   | 48,688  | HIGH  | N5JR   | JOEL    | 51   | 50    | 2,550  | HIGH  |
| K1IMI  | BERT   | 247  | 194   | 47,918  | HIGH  | KM4HI  | JIM     | 55   | 46    | 2,530  | HIGH  |
| WT9U   | JIM    | 272  | 172   | 46,784  | HIGH  | K4WW   | BO      | 49   | 49    | 2,401  | HIGH  |
| VE3NNT | LES    | 249  | 185   | 46,065  | HIGH  | KJ9C   | MEL     | 51   | 45    | 2,295  | HIGH  |
| VA2CZ  | PETE   | 248  | 185   | 45,880  | HIGH  | G4HZV  | BOB     | 45   | 37    | 1,665  | HIGH  |
| K5PI   | ROB    | 254  | 179   | 45,466  | HIGH  | AA2AD  | PETE    | 39   | 36    | 1,404  | HIGH  |
| K4QS   | CHUCK  | 263  | 171   | 44,973  | HIGH  | W4TM   | ROY     | 38   | 33    | 1,254  | HIGH  |
| W5TM   | ED     | 263  | 163   | 42,869  | HIGH  | OK1RR  | MARTIN  | 32   | 29    | 928    | HIGH  |
| K8BZ   | STEVE  | 233  | 181   | 42,173  | HIGH  | AE1T   | PETER   | 29   | 28    | 812    | HIGH  |
| N8BJQ  | STEVE  | 251  | 162   | 40,662  | HIGH  | PF5X   | ENNO    | 28   | 28    | 784    | HIGH  |
| NS0R   | MORGAN | 238  | 168   | 39,984  | HIGH  | WA3GM  | GREG    | 29   | 27    | 783    | HIGH  |
| N9EP   | ED     | 238  | 162   | 38,556  | HIGH  | SA0BXV | CLAES   | 31   | 22    | 682    | HIGH  |
| W4AQL  | BRUCE  | 232  | 164   | 38,048  | HIGH  | LA8OM  | CHRIS   | 23   | 22    | 506    | HIGH  |
| K5KG   | GEO    | 227  | 163   | 37,001  | HIGH  | UX1HW  | ART     | 20   | 20    | 400    | HIGH  |
| K4RUM  | MIKE   | 218  | 161   | 35,098  | HIGH  | N7ID   | MIKE    | 18   | 18    | 324    | HIGH  |
| W3FV   | BARRY  | 219  | 156   | 34,164  | HIGH  | W4ATL  | SHERMAN | 18   | 18    | 324    | HIGH  |
| W0UA   | GEO    | 223  | 153   | 34,119  | HIGH  | VK7CW  | STEVE   | 16   | 16    | 256    | HIGH  |
| K7QA   | TOM    | 219  | 150   | 32,850  | HIGH  |        |         |      |       |        |       |
| NN5O   | LARRY  | 214  | 151   | 32,314  | HIGH  | N4ZZ   | DON     | 286  | 197   | 56,342 | LOW   |
| N3JT   | JIM    | 217  | 147   | 31,899  | HIGH  | KG5HVO | BRYANT  | 263  | 177   | 46,551 | LOW   |
| N4FP   | WAYNE  | 217  | 146   | 31,682  | HIGH  | WJ9B   | WILL    | 253  | 177   | 44,781 | LOW   |
| K3WI   | BILL   | 192  | 156   | 29,952  | HIGH  | K0AD   | AL      | 258  | 173   | 44,634 | LOW   |
| NA4J   | JIM    | 192  | 154   | 29,568  | HIGH  | K0AV   | ALAN    | 255  | 167   | 42,585 | LOW   |
| K2NV   | TONY   | 195  | 148   | 28,860  | HIGH  | W0UO   | JIM     | 248  | 169   | 41,912 | LOW   |
| K4GMH  | MIKE   | 184  | 150   | 27,600  | HIGH  | AA4LS  | CHAS    | 226  | 174   | 39,324 | LOW   |
| W6TK   | DICK   | 194  | 141   | 27,354  | HIGH  | K7SV   | LAR     | 239  | 162   | 38,718 | LOW   |
| K4AFE  | JOHN   | 196  | 137   | 26,852  | HIGH  | K9WX   | TIM     | 222  | 163   | 36,186 | LOW   |
| K1EBY  | FRANK  | 184  | 144   | 26,496  | HIGH  | NW3Y   | CHICK   | 221  | 162   | 35,802 | LOW   |
| NG5E   | DAVE   | 183  | 141   | 25,803  | HIGH  | N8AA   | JOHN    | 225  | 150   | 33,750 | LOW   |
| VE2FK  | CLAUDE | 171  | 149   | 25,479  | HIGH  | K4OAQ  | FRITZ   | 206  | 143   | 29,458 | LOW   |
| N7NM   | DOUG   | 178  | 138   | 24,564  | HIGH  | KG5U   | DALE    | 206  | 143   | 29,458 | LOW   |
| WA4JUK | JOE    | 173  | 132   | 22,836  | HIGH  | NW0M   | MITCH   | 197  | 134   | 26,398 | LOW   |
| IK0YVV | MARCO  | 148  | 144   | 21,312  | HIGH  | KE8G   | JIM     | 178  | 136   | 24,208 | LOW   |
| WN7S   | DICK   | 161  | 124   | 19,964  | HIGH  | KG9X   | FRED    | 190  | 125   | 23,750 | LOW   |
| N4ZR   | PETE   | 159  | 122   | 19,398  | HIGH  | KB3AAY | RON     | 178  | 130   | 23,140 | LOW   |
| VA2UR  | GUY    | 144  | 125   | 18,000  | HIGH  | K5XU   | MIKE    | 150  | 113   | 16,950 | LOW   |
| GW2CWO | STEW   | 142  | 121   | 17,182  | HIGH  | K5CI   | LEO     | 150  | 111   | 16,650 | LOW   |
| NY3B   | STEVE  | 157  | 107   | 16,799  | HIGH  | KB8GAE | RICH    | 140  | 118   | 16,520 | LOW   |
| W6SX   | HANK   | 128  | 107   | 13,696  | HIGH  | AF8A   | GARY    | 149  | 109   | 16,241 | LOW   |
| NN4K   | MAC    | 136  | 98    | 13,328  | HIGH  | K3DMG  | LEE     | 150  | 106   | 15,900 | LOW   |
| DL6KVA | AXEL   | 134  | 99    | 13,266  | HIGH  | K4NMR  | TOM     | 138  | 112   | 15,456 | LOW   |
| NS8O   | GREG   | 128  | 101   | 12,928  | HIGH  | KY0Q   | RICK    | 134  | 103   | 13,802 | LOW   |
| K3PP   | GLENN  | 122  | 90    | 10,980  | HIGH  | N8FYL  | JOHN    | 135  | 101   | 13,635 | LOW   |
| SM5CIL | ARNE   | 114  | 89    | 10,146  | HIGH  | KV8Q   | TOM     | 135  | 99    | 13,365 | LOW   |
| HB9ARF | PHIL   | 106  | 93    | 9,858   | HIGH  | W5LA   | JIM     | 128  | 98    | 12,544 | LOW   |
| G3XLG  | RAY    | 99   | 84    | 8,316   | HIGH  | N5TOO  | VAN     | 120  | 103   | 12,360 | LOW   |
| NG7A   | GEO    | 98   | 84    | 8,232   | HIGH  | AD5TT  | JIM     | 124  | 96    | 11,904 | LOW   |
| YL2PJ  | SIGI   | 99   | 83    | 8,217   | HIGH  | W1WBB  | BILL    | 121  | 95    | 11,495 | LOW   |

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| Call   | Name   | QSOs | Mults | Score  | Power | Call   | Name   | QSOs | Mults | Score  | Power |
|--------|--------|------|-------|--------|-------|--------|--------|------|-------|--------|-------|
| WA8Y   | STEVE  | 122  | 90    | 10,980 | LOW   | VE2NCG | NICK   | 43   | 41    | 1,763  | LOW   |
| SM5IMO | DAN    | 117  | 86    | 10,062 | LOW   | G4ILW  | JAMES  | 45   | 33    | 1,485  | LOW   |
| K1DW   | DALLAS | 111  | 90    | 9,990  | LOW   | KC8J   | WALT   | 39   | 38    | 1,482  | LOW   |
| AE4Y   | KENT   | 112  | 89    | 9,968  | LOW   | N4NSS  | KYLE   | 40   | 35    | 1,400  | LOW   |
| AA4NP  | JIM    | 102  | 88    | 8,976  | LOW   | KN4VV  | JOHN   | 38   | 36    | 1,368  | LOW   |
| KB4DE  | BILL   | 101  | 85    | 8,585  | LOW   | G3LDI  | ROGER  | 40   | 26    | 1,040  | LOW   |
| N2UU   | BOB    | 102  | 80    | 8,160  | LOW   | SM0Y   | LARS   | 37   | 28    | 1,036  | LOW   |
| K2QB   | JIM    | 98   | 77    | 7,546  | LOW   | DJ1OJ  | HEIJO  | 29   | 28    | 812    | LOW   |
| M0RYB  | PETER  | 95   | 77    | 7,315  | LOW   | AC0W   | BILL   | 28   | 27    | 756    | LOW   |
| KY9I   | JAY    | 88   | 75    | 6,600  | LOW   | G8VPE  | JOHN   | 30   | 23    | 690    | LOW   |
| NF8M   | FRANK  | 85   | 73    | 6,205  | LOW   | K3HW   | BILL   | 25   | 25    | 625    | LOW   |
| NM5M   | ERIC   | 82   | 67    | 5,494  | LOW   | W9RE   | IN     | 25   | 24    | 600    | LOW   |
| K0INN  | TOM    | 75   | 71    | 5,325  | LOW   | K6RB   | ROB    | 24   | 23    | 552    | LOW   |
| VE2IR  | DON    | 71   | 71    | 5,041  | LOW   | AC9EZ  | JIM    | 23   | 22    | 506    | LOW   |
| CM8NMN | NOE    | 75   | 58    | 4,350  | LOW   | VA7QCE | CAROLE | 22   | 22    | 484    | LOW   |
| SQ9S   | ADAM   | 82   | 51    | 4,182  | LOW   | WZ0W   | SCOTT  | 22   | 22    | 484    | LOW   |
| N5XE   | CARL   | 64   | 54    | 3,456  | LOW   | OH2MZA | ZABA   | 21   | 21    | 441    | LOW   |
| W8OV   | DAVE   | 56   | 53    | 2,968  | LOW   | G3WRJ  | DICK   | 22   | 20    | 440    | LOW   |
| G3YLA  | JIM    | 63   | 46    | 2,898  | LOW   | R3AQ   | SERGEY | 20   | 20    | 400    | LOW   |
| K7AZT  | PAUL   | 59   | 49    | 2,891  | LOW   | AB1BX  | ANDY   | 19   | 19    | 361    | LOW   |
| K3ZGA  | BOB    | 55   | 48    | 2,640  | LOW   | KJ4M   | GENE   | 18   | 17    | 306    | LOW   |
| AC3BU  | DARYL  | 50   | 50    | 2,500  | LOW   | GM2CWO | PETER  | 19   | 16    | 304    | LOW   |
| W3TAS  | TOM    | 53   | 47    | 2,491  | LOW   | KJ4YM  | MARK   | 17   | 17    | 289    | LOW   |
| KA5M   | MARSH  | 54   | 46    | 2,484  | LOW   | K1CTR  | DOUG   | 15   | 15    | 225    | LOW   |
| K9KM   | HOWIE  | 51   | 48    | 2,448  | LOW   |        |        |      |       |        |       |
| N3FZ   | BRYAN  | 51   | 46    | 2,346  | LOW   | W2GD   | JOHN   | 147  | 114   | 16,758 | QRP   |
| W8MET  | MET    | 51   | 46    | 2,346  | LOW   | N7RCS  | JIM    | 73   | 64    | 4,672  | QRP   |
| K2ZR   | DICK   | 52   | 45    | 2,340  | LOW   | AG4EA  | BILL   | 63   | 57    | 3,591  | QRP   |
| M0DHP  | RAY    | 50   | 46    | 2,300  | LOW   | NS2N   | PAUL   | 60   | 54    | 3,240  | QRP   |
| W09B   | MIKE   | 50   | 45    | 2,250  | LOW   | WB5BKL | NICK   | 50   | 43    | 2,150  | QRP   |
| K4TZ   | TOM    | 47   | 45    | 2,115  | LOW   | K8LBQ  | BAIN   | 48   | 41    | 1,968  | QRP   |
| K5IX   | DAVE   | 48   | 43    | 2,064  | LOW   | SD6F   | KLAS   | 41   | 29    | 1,189  | QRP   |
| SE5L   | BEN    | 47   | 40    | 1,880  | LOW   |        |        |      |       |        |       |

**Session 2 Analysis:** For Region 1 High Power, Marco (IK0YVV) came in first with final numbers of 148 QSOs, 144 Multipliers and a score of 21,312. Stew (GW2CWO) came in second with a score of 17,182. The Region 2 winner was Chas (K3WW) with an QSO count of 395, 254 Mults and a score of 100,330. Chuck (K0RF) came in second place with a score of 98,328. Session 2 had the only ITU Region 3 entry and, due to the elimination of the 100 QSO rule, our first ever Region 3 award winner. Congratulations to Steve (VK7CW) with a QSO total of 16, a mult count of 16 and a score of 256. Steve was also the only Region 3 log submission. Moving to low power, in Region 1 Dan (SM5IMO) placed first with a QSO total of 117. When combined with a mult total of 86, Dan turned in a score of 10,062. Peter (M0RYB) placed second with a score of 7,315. For Region 2 Don (N4ZZ) finished first with a QSO total of 286, mult total of 197 and a score of 56,342 points. Bryant (KG5HVO) placed second with a score of 46,651. Moving on to QRP Region 1, the winner was Klas (SD6F) with a QSO count of 41, a mult count of 29 and a final score of 1,189. For Region 2 John (W2GD) finished first with 147 Qs, 114 mults and a score of 16,758.

### Session 3 - 2000Z to 0000Z

Talk about consistency? Session 3 results, as for Session 1 and 2, are also based on 201 logs received. This time the log submissions were down about 18% from last year. Only ITU region 1 and 2 submitted logs. The QSO totals decreased by 3.4% and the multipliers were down by 14%. Once again, as in Session 1 and 2, the overall points per log increased and this time by 23.1%. This time there were 3 logs submitted that exceeded the 100K mark. Congrats to Nate, N4YDU, for turning in an outstanding 124,096 points. He was closely followed by Chuck, K3WW, at 119,436 points and yours truly, N1LN, at 116,960 points.

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| Call   | Name  | QSOs | Mults | Score   | Power | Call   | Name    | QSOs | Mults | Score  | Power |
|--------|-------|------|-------|---------|-------|--------|---------|------|-------|--------|-------|
| N4YDU  | NATE  | 448  | 277   | 124,096 | HIGH  | N5AW   | MARV    | 112  | 95    | 10,640 | HIGH  |
| K3WW   | CHAS  | 444  | 269   | 119,436 | HIGH  | M2D    | PHIL    | 120  | 88    | 10,560 | HIGH  |
| N1LN   | BRUCE | 430  | 272   | 116,960 | HIGH  | VE2FK  | CLAUDE  | 110  | 95    | 10,450 | HIGH  |
| N3RS   | SIG   | 382  | 242   | 92,444  | HIGH  | W1KM   | GREG    | 115  | 88    | 10,120 | HIGH  |
| NT6Q   | MARKO | 322  | 244   | 78,568  | HIGH  | W6TK   | DICK    | 102  | 96    | 9,792  | HIGH  |
| K9ZO   | AL    | 332  | 234   | 77,688  | HIGH  | K0TC   | RON     | 110  | 85    | 9,350  | HIGH  |
| DK9PY  | ARMIN | 314  | 243   | 76,302  | HIGH  | NS8O   | GREG    | 98   | 89    | 8,722  | HIGH  |
| K0RF   | CHUCK | 306  | 220   | 67,320  | HIGH  | G3XLG  | RAY     | 104  | 82    | 8,528  | HIGH  |
| K1IMI  | BERT  | 307  | 210   | 64,470  | HIGH  | K4WW   | BO      | 98   | 81    | 7,938  | HIGH  |
| N3AD   | ALAN  | 313  | 203   | 63,539  | HIGH  | K1SM   | BILL    | 94   | 79    | 7,426  | HIGH  |
| K6AR   | JIM   | 288  | 220   | 63,360  | HIGH  | WA6URY | DAN     | 88   | 81    | 7,128  | HIGH  |
| W4WF   | CHRIS | 282  | 222   | 62,604  | HIGH  | VA2AGW | ANDY    | 84   | 79    | 6,636  | HIGH  |
| K5TU   | KIM   | 289  | 212   | 61,268  | HIGH  | HB9ARF | PHIL    | 92   | 67    | 6,164  | HIGH  |
| WT9U   | JIM   | 298  | 205   | 61,090  | HIGH  | N7SU   | DAN     | 80   | 74    | 5,920  | HIGH  |
| K3WJV  | BILL  | 303  | 197   | 59,691  | HIGH  | N3RC   | ROGER   | 73   | 67    | 4,891  | HIGH  |
| K5KG   | GEO   | 293  | 197   | 57,721  | HIGH  | EA4OR  | IGNACIO | 69   | 65    | 4,485  | HIGH  |
| W5TM   | ED    | 291  | 197   | 57,327  | HIGH  | WA5LXS | DENNIS  | 69   | 62    | 4,278  | HIGH  |
| K4BAI  | JOHN  | 284  | 195   | 55,380  | HIGH  | G2CWO  | DUNCAN  | 68   | 56    | 3,808  | HIGH  |
| K4QS   | CHUCK | 272  | 192   | 52,224  | HIGH  | K1DW   | DALLAS  | 59   | 59    | 3,481  | HIGH  |
| K4RUM  | MIKE  | 282  | 182   | 51,324  | HIGH  | SM5CIL | ARNE    | 65   | 45    | 2,925  | HIGH  |
| N4ZR   | PETE  | 274  | 184   | 50,416  | HIGH  | NC3Y   | TOM     | 54   | 53    | 2,862  | HIGH  |
| VA2CZ  | PETE  | 271  | 186   | 50,406  | HIGH  | LZ1ZJ  | SLAV    | 53   | 53    | 2,809  | HIGH  |
| W4AQL  | BRUCE | 274  | 183   | 50,142  | HIGH  | N5UM   | AL      | 46   | 46    | 2,116  | HIGH  |
| K7RL   | MITCH | 246  | 198   | 48,708  | HIGH  | SD6M   | PER     | 48   | 44    | 2,112  | HIGH  |
| K5AX   | TOM   | 266  | 183   | 48,678  | HIGH  | WA8KAN | DAVE    | 47   | 39    | 1,833  | HIGH  |
| K2NV   | TONY  | 262  | 183   | 47,946  | HIGH  | DD7CW  | MARIO   | 39   | 39    | 1,521  | HIGH  |
| WF9A   | ALEX  | 255  | 181   | 46,155  | HIGH  | N3UA   | SEJO    | 37   | 37    | 1,369  | HIGH  |
| N8BJQ  | STEVE | 268  | 168   | 45,024  | HIGH  | SD1A   | ERIC    | 38   | 33    | 1,254  | HIGH  |
| K5PI   | ROB   | 243  | 185   | 44,955  | HIGH  | AA2AD  | PETE    | 33   | 33    | 1,089  | HIGH  |
| K3WI   | BILL  | 232  | 173   | 40,136  | HIGH  | I5ECW  | VANNI   | 30   | 30    | 900    | HIGH  |
| N4BP   | BOB   | 198  | 198   | 39,204  | HIGH  | KW1K   | JOE     | 26   | 26    | 676    | HIGH  |
| NA8V   | GREG  | 221  | 176   | 38,896  | HIGH  | PA5KT  | HENK    | 27   | 22    | 594    | HIGH  |
| WA4JUK | JOE   | 228  | 170   | 38,760  | HIGH  | WU6W   | RICK    | 23   | 22    | 506    | HIGH  |
| K9CT   | CRAIG | 216  | 173   | 37,368  | HIGH  | KJ9C   | MEL     | 20   | 20    | 400    | HIGH  |
| N4FP   | WAYNE | 229  | 163   | 37,327  | HIGH  | OK5M   | VIT     | 16   | 16    | 256    | HIGH  |
| NG5E   | DAVE  | 214  | 173   | 37,022  | HIGH  | OH2BN  | JARMO   | 13   | 13    | 169    | HIGH  |
| N3JT   | JIM   | 213  | 171   | 36,423  | HIGH  | KY7M   | LEE     | 13   | 13    | 169    | HIGH  |
| K4GMH  | MIKE  | 207  | 175   | 36,225  | HIGH  |        |         |      |       |        |       |
| W3FV   | BARRY | 237  | 151   | 35,787  | HIGH  | N4ZZ   | DON     | 345  | 222   | 76,590 | LOW   |
| K8JQ   | STEVE | 220  | 159   | 34,980  | HIGH  | NW3Y   | CHICK   | 263  | 178   | 46,814 | LOW   |
| K7QA   | TOM   | 218  | 160   | 34,880  | HIGH  | WJ9B   | WILL    | 216  | 193   | 41,688 | LOW   |
| NG7M   | MAX   | 214  | 160   | 34,240  | HIGH  | NM5M   | ERIC    | 221  | 187   | 41,327 | LOW   |
| VA2UR  | GUY   | 210  | 162   | 34,020  | HIGH  | N8AA   | JOHN    | 248  | 156   | 38,688 | LOW   |
| GW2CWO | STEW  | 203  | 161   | 32,683  | HIGH  | AA4LS  | CHAS    | 232  | 163   | 37,816 | LOW   |
| KE1B   | RICH  | 193  | 169   | 32,617  | HIGH  | K4OAQ  | FRITZ   | 227  | 161   | 36,547 | LOW   |
| K4AFE  | JOHN  | 212  | 148   | 31,376  | HIGH  | KG9X   | FRED    | 239  | 141   | 33,699 | LOW   |
| K3SV   | BILL  | 196  | 151   | 29,596  | HIGH  | KB3AAY | RON     | 210  | 143   | 30,030 | LOW   |
| K1EBY  | FRANK | 201  | 147   | 29,547  | HIGH  | W0UO   | JIM     | 199  | 147   | 29,253 | LOW   |
| WN7S   | DICK  | 196  | 149   | 29,204  | HIGH  | K7SV   | LAR     | 158  | 143   | 22,594 | LOW   |
| N3QE   | TIM   | 185  | 154   | 28,490  | HIGH  | KG5U   | DALE    | 177  | 125   | 22,125 | LOW   |
| K3WA   | BILL  | 186  | 153   | 28,458  | HIGH  | N8FYL  | JOHN    | 169  | 123   | 20,787 | LOW   |
| NN5O   | LARRY | 198  | 143   | 28,314  | HIGH  | AF8A   | GARY    | 167  | 120   | 20,040 | LOW   |
| N7NM   | DOUG  | 170  | 160   | 27,200  | HIGH  | K4NMR  | TOM     | 164  | 122   | 20,008 | LOW   |
| W9ILY  | JOHN  | 186  | 144   | 26,784  | HIGH  | AC3BU  | DARYL   | 160  | 119   | 19,040 | LOW   |
| NY3B   | STEVE | 183  | 140   | 25,620  | HIGH  | WA8Y   | STEVE   | 148  | 120   | 17,760 | LOW   |
| K8BZ   | STEVE | 170  | 141   | 23,970  | HIGH  | N2UU   | BOB     | 153  | 110   | 16,830 | LOW   |
| K3PP   | GLENN | 167  | 142   | 23,714  | HIGH  | K3DMG  | LEE     | 151  | 111   | 16,761 | LOW   |
| W4TM   | ROY   | 184  | 126   | 23,184  | HIGH  | KV8Q   | TOM     | 152  | 108   | 16,416 | LOW   |
| NG7A   | GEO   | 176  | 123   | 21,648  | HIGH  | N2YO   | CHIP    | 121  | 102   | 12,342 | LOW   |
| N9EP   | ED    | 165  | 131   | 21,615  | HIGH  | K9CW   | DREW    | 127  | 91    | 11,557 | LOW   |
| K5UV   | MIKE  | 166  | 130   | 21,580  | HIGH  | KE8G   | JIM     | 114  | 99    | 11,286 | LOW   |
| WT2P   | CJ    | 159  | 135   | 21,465  | HIGH  | KG5HVO | BRYANT  | 114  | 92    | 10,488 | LOW   |
| NN4K   | MAC   | 166  | 129   | 21,414  | HIGH  | K5XU   | MIKE    | 119  | 84    | 9,996  | LOW   |
| NS9I   | TOM   | 171  | 120   | 20,520  | HIGH  | N3FZ   | BRYAN   | 112  | 89    | 9,968  | LOW   |
| AE1T   | PETER | 146  | 119   | 17,374  | HIGH  | KB4DE  | BILL    | 104  | 87    | 9,048  | LOW   |
| W6SX   | HANK  | 133  | 116   | 15,428  | HIGH  | VE2IR  | DON     | 105  | 86    | 9,030  | LOW   |
| NA4J   | JIM   | 116  | 101   | 11,716  | HIGH  | W8OV   | DAVE    | 99   | 84    | 8,316  | LOW   |
| WA3AAN | GRANT | 114  | 100   | 11,400  | HIGH  | K4ORD  | RILEY   | 100  | 82    | 8,200  | LOW   |
| DL6KVA | AXEL  | 123  | 90    | 11,070  | HIGH  | NW0M   | MITCH   | 100  | 81    | 8,100  | LOW   |

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| Call   | Name   | QSOs | Mults | Score | Power | Call   | Name  | QSOs | Mults | Score | Power |
|--------|--------|------|-------|-------|-------|--------|-------|------|-------|-------|-------|
| CM8NMN | NOE    | 98   | 77    | 7,546 | LOW   | KN4VV  | JOHN  | 26   | 25    | 650   | LOW   |
| AB1BX  | ANDY   | 85   | 74    | 6,290 | LOW   | SE5L   | BEN   | 27   | 24    | 648   | LOW   |
| M0RYB  | PETER  | 86   | 69    | 5,934 | LOW   | KJ4YM  | MARK  | 25   | 25    | 625   | LOW   |
| W4EE   | JIM    | 84   | 70    | 5,880 | LOW   | KU7T   | ANDY  | 25   | 25    | 625   | LOW   |
| W3UL   | BILL   | 80   | 72    | 5,760 | LOW   | GM2CWO | PETER | 26   | 23    | 598   | LOW   |
| VE2NCG | NICK   | 81   | 70    | 5,670 | LOW   | AJ4F   | ROBIE | 24   | 24    | 576   | LOW   |
| N5TOO  | VAN    | 77   | 71    | 5,467 | LOW   | K3MR   | MATT  | 24   | 24    | 576   | LOW   |
| W9RE   | IN     | 74   | 65    | 4,810 | LOW   | WZ0W   | SCOTT | 25   | 23    | 575   | LOW   |
| G3YLA  | JIM    | 78   | 56    | 4,368 | LOW   | AI6V   | WYATT | 23   | 23    | 529   | LOW   |
| K2ZR   | DICK   | 69   | 61    | 4,209 | LOW   | K6RM   | BARRY | 23   | 22    | 506   | LOW   |
| G3LDI  | ROGER  | 75   | 47    | 3,525 | LOW   | OH1SIC | GI    | 23   | 21    | 483   | LOW   |
| SM5IMO | DAN    | 71   | 46    | 3,266 | LOW   | VE3EJ  | JOHN  | 23   | 21    | 483   | LOW   |
| K7AZT  | PAUL   | 58   | 56    | 3,248 | LOW   | K3ZGA  | BOB   | 21   | 21    | 441   | LOW   |
| SQ9S   | ADAM   | 62   | 51    | 3,162 | LOW   | K2QB   | JIM   | 20   | 20    | 400   | LOW   |
| W8MET  | MET    | 54   | 52    | 2,808 | LOW   | K6RB   | ROB   | 20   | 20    | 400   | LOW   |
| M0DHP  | RAY    | 58   | 46    | 2,668 | LOW   | 9A9CW  | RIF   | 19   | 19    | 361   | LOW   |
| NF8M   | FRANK  | 50   | 49    | 2,450 | LOW   | RA3XCZ | VLAD  | 19   | 18    | 342   | LOW   |
| K1CTR  | DOUG   | 48   | 46    | 2,208 | LOW   | AC0E   | JIM   | 18   | 18    | 324   | LOW   |
| DJ1OJ  | HEIJO  | 45   | 43    | 1,935 | LOW   | WA0LJM | DAVE  | 18   | 18    | 324   | LOW   |
| EA5IK  | ANDY   | 47   | 40    | 1,880 | LOW   | WT8P   | JIM   | 13   | 13    | 169   | LOW   |
| AJ1DM  | JOHN   | 45   | 41    | 1,845 | LOW   |        |       |      |       |       |       |
| N2JNR  | DAVE   | 42   | 41    | 1,722 | LOW   | W2GD   | JOHN  | 109  | 87    | 9,483 | QRP   |
| K4TZ   | TOM    | 41   | 40    | 1,640 | LOW   | N0UR   | JIM   | 96   | 81    | 7,776 | QRP   |
| W3TAS  | TOM    | 38   | 37    | 1,406 | LOW   | NS2N   | PAUL  | 85   | 70    | 5,950 | QRP   |
| N8MR   | MIKE   | 38   | 35    | 1,330 | LOW   | AG4EA  | BILL  | 75   | 64    | 4,800 | QRP   |
| KD2KW  | KEN    | 37   | 35    | 1,295 | LOW   | WB5BKL | NICK  | 49   | 45    | 2,205 | QRP   |
| N5XE   | CARL   | 35   | 33    | 1,155 | LOW   | K3HW   | BILL  | 33   | 32    | 1,056 | QRP   |
| N4NSS  | KYLE   | 31   | 30    | 930   | LOW   | UA6AK  | VAL   | 21   | 21    | 441   | QRP   |
| KI6OY  | LEE    | 30   | 30    | 900   | LOW   | W4ER   | JOHN  | 16   | 16    | 256   | QRP   |
| UX3I   | TOL    | 31   | 28    | 868   | LOW   | SD6F   | KLAS  | 15   | 15    | 225   | QRP   |
| KC8J   | WALT   | 29   | 28    | 812   | LOW   | KK7A   | JIM   | 14   | 13    | 182   | QRP   |
| K6DGW  | SKIP   | 28   | 28    | 784   | LOW   | K6UFO  | MORK  | 13   | 13    | 169   | QRP   |
| VA7QCE | CAROLE | 28   | 27    | 756   | LOW   |        |       |      |       |       |       |

**Session 3 Analysis:** For Region 1 High Power once again went to Armin (DK9PY) with a QSO count of 314, a mult count of 243 and a score of 76,302. Stew (GW2CWO) came in second place with a score of 32,683. In Region 2 Nate (N4YDU) won with a QSO count of 448, a mult count of 277 and a score of 124,096. Chuck (K3WW) moved down to second place with a score of 119,436. In Region 1 the low power category was won by Peter (M0RYB) with 86 QSOs, 69 mults and a score of 5,934 points. In Region 2 Don (N4ZZ) completed his clean sweep with a QSO count of 345, a mult count of 222 and a score of 76,590. Chick (NW3Y) finished in second place with 46,814 points. The QRP category Region 1 was won by Val (UA6AK) with a QSO count of 21, a mult count of 21 and a score of 441. For Region 2, John (W2GD) also completed his sweep with a QSO count of 109, a mult count of 87 and a score of 9,483 points.

## Team Results

### Team Scores

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 14 teams register. The team sizes ranged from only 3 members up to the maximum allowed of 10 members. We also had 2 Region 1 teams this year. One from the UK with 10 members and one from Sweden with 8 members!

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|                                    | Ses 1 | Ses 2 | Ses 3 | Total     |
|------------------------------------|-------|-------|-------|-----------|
| <b>1: DEEP DIXIE CC TEAM ELVIS</b> |       |       |       |           |
| NN5O                               | 43596 | 32314 | 28314 | 104224    |
| K0RF                               | 80154 | 98328 | 67320 | 245802    |
| K4OAO                              | 32085 | 29458 | 36547 | 98090     |
| KE8G                               | 34556 | 24208 | 11286 | 70050     |
| KG5HVO                             | 47880 | 46551 | 10488 | 104919    |
| N3JT                               | 33696 | 31899 | 36423 | 102018    |
| N8BJQ                              | 54180 | 40662 | 45024 | 139866    |
| NT6Q                               | 76959 | 82080 | 78568 | 237607    |
| W0UA                               | 50826 | 34119 | na    | 84945     |
| W5TM                               | 65400 | 42869 | 57327 | 165596    |
|                                    |       |       |       | 1,353,117 |

|                           |       |       |       |         |
|---------------------------|-------|-------|-------|---------|
| <b>3: DFWCG RED RIVER</b> |       |       |       |         |
| W0UO                      | 31098 | 41912 | 29253 | 102263  |
| N5RZ                      | 63755 | na    | 0     | 63755   |
| K1DW                      | 31650 | 9990  | 3841  | 45481   |
| K5AX                      | 48960 | 55670 | 48678 | 153308  |
| K5TU                      | 75264 | 69008 | 61268 | 205540  |
| K5OT                      | 89856 | 79100 | na    | 168956  |
| W8FN                      | 26400 | na    | na    | 26400   |
| KG5U                      | 36000 | na    | 22125 | 58125   |
| K5CI                      | 7644  | 16650 | na    | 24294   |
| WY6T                      | na    | na    | na    | 0       |
|                           |       |       |       | 848,122 |

|                    |       |       |       |         |
|--------------------|-------|-------|-------|---------|
| <b>5: TEAM SMC</b> |       |       |       |         |
| N9EP               | 43596 | 38556 | 21615 | 103767  |
| K9CT               | 92843 | na    | 37368 | 130211  |
| K9KM               | 17515 | 2448  | na    | 19963   |
| NS9I               | 4104  | na    | 20520 | 24624   |
| WT9U               | 66885 | 46784 | 61090 | 174759  |
| N5RP               | na    | na    | na    | 0       |
| K9ZO               | 75250 | 63200 | 77688 | 216138  |
| WT2P               | na    | na    | 21465 | 21465   |
| KY0Q               | 5976  | 13802 | na    | 19778   |
|                    |       |       |       | 710,705 |

|                                       |       |       |       |         |
|---------------------------------------|-------|-------|-------|---------|
| <b>7: DEEP DIXIE CC TEAM MAGNOLIA</b> |       |       |       |         |
| KF4FE                                 | na    | na    | na    | 0       |
| AB0S                                  | 44820 | na    | na    | 44820   |
| AD5TT                                 | 6825  | 11904 | na    | 18729   |
| K3DMG                                 | 15336 | 15900 | 16761 | 47997   |
| K5O                                   | na    | na    | na    | 0       |
| K5XU                                  | 14910 | 16950 | na    | 31860   |
| N5EE                                  | na    | na    | na    | 0       |
| N8AA                                  | 43902 | 33750 | 38688 | 116340  |
| K0AV                                  | 39420 | 42585 | na    | 82005   |
|                                       |       |       |       | 341,751 |

|                            |       |       |       |         |
|----------------------------|-------|-------|-------|---------|
| <b>9: CW RADIO RANGERS</b> |       |       |       |         |
| NS8O                       | 16170 | 12928 | 8722  | 37820   |
| KV8Q                       | 15276 | 13365 | 16416 | 45057   |
| K1EBY                      | 29400 | 26496 | 29547 | 85443   |
| NJ8V                       | na    | na    | na    | 0       |
|                            |       |       |       | 168,320 |

|                    |      |       |       |         |
|--------------------|------|-------|-------|---------|
| <b>11: Team UK</b> |      |       |       |         |
| G4ILW              | 256  | 1458  | na    | 1714    |
| G2CWO              | na   | 2703  | 3808  | 6511    |
| G3LDI              | 1300 | 1040  | 3525  | 5865    |
| G3XLG              | na   | 8316  | 8528  | 16844   |
| G3YLA              | 1144 | 2898  | 4368  | 8410    |
| GM2CWO             | 345  | 304   | 598   | 1247    |
| GW2CWO             | 8880 | 17182 | 32683 | 58745   |
| M0DHP              | 945  | 2300  | 2668  | 5913    |
| M0RYB              | 1148 | 7315  | 5934  | 14397   |
| M2D                | 2440 | 5355  | 10560 | 18355   |
|                    |      |       |       | 138,001 |

|                   | Ses 1 | Ses 2 | Ses 3  | Total     |
|-------------------|-------|-------|--------|-----------|
| <b>2: PVRC #1</b> |       |       |        |           |
| Bruce             | 72941 | 84600 | 116960 | 274501    |
| Pete              | 3835  | 19398 | 50416  | 73649     |
| Chas              | 52440 | 39324 | 37816  | 129580    |
| Nate              | 18172 | 87724 | 124096 | 229992    |
| N3QE              | 73006 | 56050 | 28490  | 157546    |
| K3WA              | 25521 | 4480  | 28458  | 58459     |
| K4GMH             | 46002 | 27600 | 36225  | 109827    |
|                   |       |       |        | 1,033,554 |

|                             |       |       |       |         |
|-----------------------------|-------|-------|-------|---------|
| <b>4: THE CODE BREAKERS</b> |       |       |       |         |
| WA8Y                        | 11193 | 10980 | 17760 | 39933   |
| K8BZ                        | 49775 | 42173 | 23970 | 115918  |
| NA8V                        | 68600 | 72270 | 38896 | 179766  |
| AF8A                        | 15012 | 16241 | 20040 | 51293   |
| NG7M                        | 63388 | 48688 | 34240 | 146316  |
| NF8M                        | 10528 | 6205  | 2450  | 19183   |
| SM5CIL                      | 2052  | 10146 | 2925  | 15123   |
| KU7T                        | 26784 | na    | 625   | 27409   |
| NN4K                        | 11252 | 13328 | 24141 | 48721   |
| K4BAI                       | 67320 | 54910 | 55380 | 177610  |
|                             |       |       |       | 821,272 |

|                                  |       |       |       |         |
|----------------------------------|-------|-------|-------|---------|
| <b>6: FLORIDA ORANGE JUICERS</b> |       |       |       |         |
| K5KG                             | 51136 | 37001 | 57721 | 145858  |
| KW1K                             | na    | na    | 676   | 676     |
| K4NMR                            | 29295 | 15456 | 20008 | 64759   |
| W4WFF                            | na    | 65934 | 62604 | 128538  |
| KN4Y                             | 11110 | na    | na    | 11110   |
| N4BP                             | 37000 | 67050 | 39204 | 143254  |
| KU8E                             | 51216 | 54760 | na    | 105976  |
| K3SV                             | 33327 | na    | 29596 | 62923   |
| KM4HI                            | 1444  | na    | na    | 1444    |
|                                  |       |       |       | 664,538 |

|                             |       |       |       |         |
|-----------------------------|-------|-------|-------|---------|
| <b>8: Quebec Code Force</b> |       |       |       |         |
| VA2CZ                       | 36907 | 45880 | 50406 | 133193  |
| VA2UR                       | 20856 | 18000 | 34020 | 72876   |
| VE2IR                       | 930   | 5041  | 9030  | 15001   |
| VA2AGW                      | 2500  | 5390  | 6636  | 14526   |
| VE2NCG                      | 2750  | 1763  | 5670  | 10183   |
|                             |       |       |       | 245,779 |

|                         |       |       |       |         |
|-------------------------|-------|-------|-------|---------|
| <b>10: DFWCG BRAZOS</b> |       |       |       |         |
| K0ZU                    | na    | na    | na    | 0       |
| W8OV                    | 18450 | 2968  | 8316  | 29734   |
| WA5TKS                  | na    | na    | na    | 0       |
| W0TG                    | na    | na    | na    | 0       |
| NG5E                    | 22317 | 25803 | 37022 | 85142   |
| KE5EN                   | 400   | na    | na    | 400     |
| KD2KW                   | 5040  | na    | 1295  | 6335    |
| N5JR                    | 28457 | 2550  | na    | 31007   |
|                         |       |       |       | 152,618 |

|  |       |       |      |        |
|--|-------|-------|------|--------|
| <b>12: CTRI CONTEST GROUP CW AFICIONADOS</b> |       |       |      |        |
| W1WBB  | 19926 | 11495 | na   | 31421  |
| AB1BX  | 6864  | 361   | 6290 | 13515  |
| AJ1DM  | na    | na    | 1845 | 1845   |
| K1SX   | 1932  | na    | na   | 1932   |
|  |       |       |      | 48,713 |

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|                                       | Ses 1 | Ses 2 | Ses 3 | Total  |
|---------------------------------------|-------|-------|-------|--------|
| <b>13: CW OPS GLOBAL SWEDISH TEAM</b> |       |       |       |        |
| SD1A                                  | 551   | 2576  | 1254  | 4381   |
| SM5IMO                                | 1128  | 10062 | 3266  | 14456  |
| SD6F                                  | na    | 1189  | 225   | 1414   |
| OH1SIC                                | na    | na    | 483   | 483    |
| SM0Y                                  | 391   | 1036  | na    | 1427   |
| SD6M                                  | na    | 5776  | 2112  | 7888   |
| SA0BXV                                | na    | 682   | na    | 682    |
| SE5L                                  | na    | 1880  | 648   | 2528   |
|                                       |       |       |       | 33,259 |

|                           | Ses 1 | Ses 2 | Ses 3 | Total   |
|---------------------------|-------|-------|-------|---------|
| <b>14: THE YOUNG GUNS</b> |       |       |       |         |
| W4AQL                     | 50652 | 38048 | 50142 | 138842  |
| AI6V                      | 2448  | na    | 529   | 2977    |
|                           |       |       |       | 141,819 |

## Team Analysis:

The top team this year was the 10-member team Deep Dixie CC Team Elvis. They moved up from a second-place finish in 2018, with a final score of 1,353,117. PVRC Team #1 came in second with 7 members and a score of 1,033,554.

## Trophies and Plaques:

Below is a listing of the 2019 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

501 QSOs, 399 Multipliers 105,474 points

##### Session 1, ITU Region 1, Winner

187 QSOs, 156 Multipliers 29,172 points

##### Session 3, ITU Region 1, Winner

314 QSOs, 243 Multipliers 76,302 points

#### Marco Pimpolari, IK0YVV

##### Session 2, ITU Region 1, Winner

148 QSOs, 144 Multipliers 21,312 points

#### Charles Fulp, K3WW

##### Combined Scores, ITU Region 2 Winner

1260 QSOs, 763 Multipliers 318,896 points

##### Session 1, ITU Region 2, Winner

421 QSOs, 240 Multipliers 101,040 points

##### Session 2, ITU Region 2 High Power Winner

395 QSOs, 254 Multipliers 100,330 points

#### Nate Moreschi, N4YDU

##### Session 3, ITU Region 2 High Power Winner

448 QSOs, 277 Multipliers 124,096 points

#### Steve Salvia, VK7CW

##### Session 2, ITU Region 3 High Power Winner

16 QSOs, 16 Multipliers 256 points

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

**High Power**

**Armin Sturm, DK9PY**

**Session 1, ITU Region 1, Winner**

187 QSOs, 156 Multipliers 29,172 points

**Session 3, ITU Region 1, Winner**

314 QSOs, 243 Multipliers 76,302 points

**Marco Pimpolari, IK0YVV**

**Session 2, ITU Region 1, Winner**

148 QSOs, 144 Multipliers 21,312 points

**Charles Fulp, K3WW**

**Session 1, ITU Region 2, High Power Winner**

421 QSOs, 240 Multipliers 101,040 points

**Session 2, ITU Region 2, High Power Winner**

395 QSOs, 254 Multipliers 100,330 points

**Nate Moreschi, N4YDU**

**Session 3, ITU Region 2, High Power Winner**

448 QSOs, 277 Multipliers 124,096 points

**Steve Salvia, VK7CW**

**Session 2, ITU Region 3, High Power Winner**

16 QSOs, 16 Multipliers 256 points

**Low Power**

**Roger Cooke, G3LDI**

**Session 1, ITU Region 1, Low Power Winner**

50 QSOs, 26 Multipliers 1,300 points

**Dan Hultgren, SM5IMO**

**Session 2, ITU Region 1, Low Power Winner**

117 QSOs, 86 Multipliers 10,062 points

**Peter Lock, M0RYB**

**Session 3, ITU Region 1, Low Power Winner**

86 QSOs, 69 Multipliers 5,934 points

**Don Binkley, N4ZZ**

**Session 1, ITU Region 2, Low Power Winner**

367 QSOs, 205 Multipliers 75,235 points

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**Session 2, ITU Region 2, Low Power Winner**

286 QSOs, 197 Multipliers 56,342 points

**Session 3, ITU Region 2, Low Power Winner**

345 QSOs, 222 Multipliers 76,590 points

**QRP**

**John Crovelli, W2GD**

**Session 1, ITU Region 2, QRP Winner**

92 QSOs, 77 Multipliers 7,084 points

**Session 2, ITU Region 2, QRP Winner**

147 QSOs, 114 Multipliers 16,758 points

**Session 3, ITU Region 2 QRP Winner**

109 QSOs, 87 Multipliers, 9,483 points

**Klas Reinholdson ,SD6F**

**Session 2, ITU Region 1, QRP Winner**

41 QSOs, 29 Multipliers 1,189 points

**Val Bury, UA6AK**

**Session 3, ITU Region 1, QRP Winner**

21 QSOs, 21 Multipliers 441 points

**In Summary:**

Congratulations to the winners of trophies and plaques in the 2019 CW Open. Thanks to EVERYONE that participated in the contest sessions to make them both fun and exciting. Thank you also to Rob, K6RB, for log processing and checking; and to Lar, K7SV, Dai, JF2IWL; Roger, G3LDI and Scott, VK7CW for their assistance in their respective regions to spread the word about the 2019 CW Open. Hopefully the propagation will improve for next year and that will bring us back to or above the record setting 2018 statistics.

Until then, as we enter another year for CWOps, I ask each member to look at their logbooks and think about nominating someone for membership. To be qualified the nominee only requires 2 QSOs with a CWO member within the last year at a 25 wpm or higher speed. For specifics refer to the CWO web page at: <https://cwops.org/nomination-form/>. From the CWOpen or weekly CWTs perspective, each new member represents one new multiplier and several more QSOs.

**73,**

**Bruce N1LN, CW Open Manager**



# Traveling with Ham Radio in Europe

[Jim Stockwell W6KC](#)

## 1971 – Mobile in Europe

In May 1971, I had worked in IT for a couple of years and was a recent MBA graduate. It seemed like it might be the best time in life, before settling down to a career and long-term commitments, to take an adventurous trip into the world. I decided that the adventure would be to buy a VW camper and travel in Europe. Of course, I wanted to add to the adventure by taking my ham radio gear with me, so that became part of the planning and trip logistics. My former call sign was WA6GDS and I applied for reciprocal licenses from all the countries that I thought I might operate from.



**In Monaco, my favorite radio QTH in 1971**

Other than picking up my camper at the VW factory in Germany, I had a very open ended itinerary with no return date. As it turned out, I traveled throughout Europe for five months and had a fantastic time including very special ham radio operations in Monaco (3A0FP), Andorra (C31EC) and Lichtenstein (HB0XTL)...back then you could get local call signs, so that added to the fun. My girlfriend, JoAnn (now XYL), travelled with me part of the time during her two months of summer vacation from college. Towards the end of my stay in Europe, I dropped my VW Camper off in Northern Germany to have it shipped to New York City. I spent a few more weeks in Europe and flew to NYC where I picked up the camper and started part two of my adventure. I drove up through New England and then across Canada before finally heading southwest back to Los Angeles. Not by coincidence, I returned home on JoAnn's 20<sup>th</sup> birthday on October 17, 1971.

## 2019 – Portable in Europe

Fast forward some 48 years. JoAnn (K6FBI) and I have been married since 1973 and have two adult sons. We both recently retired and, given that we have plenty of time now, we planned an almost three-month long trip to Europe. We focused less on the big cities and more on the smaller towns and unique places. Spending a lot of time in Italy and taking a portable ham radio rig was the general plan.

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## Preparing and Packing

I wanted to run 100 watts but keep the radio gear as light and compact as possible. I went with a Yaesu FT-991A transceiver and two antennas: an Alpha FMJ HF Vertical Antenna and a 36-foot end fed wire. Three lengths of coax (17ft, 25ft and 50ft) plus an arborist's throw weight and guy line proved very handy. I also purchased a 3D printed iambic paddle that weighted just 2 ounces. When I propped it under the radio it was pretty stable. I was able to fit the complete rig into one carry-on piece of luggage.



**The portable station is ready to go**

Our trip began and ended in Paris. The availability of low-cost direct flights from LAX to Charles de Gaulle Airport (CDG), as well as an excellent car lease program from Citron made Paris an easy choice. After arriving on March 25, we spent a few fun days in Paris then picked up our Citron C3 and headed towards the south of France. Along the way we visited castles in the Loire Valley and at Carcassonne, wineries in Saint-Émilion and took a canoe trip on the Dordogne River. Next, we spent a couple of days on the French Riviera and then headed for Italy.

## Citta' della Pieve

Upon arrival in Italy, we slowed things down a bit. On April 9, we checked into our apartment in Citta' della Pieve (CDP) for a 10-night stay. We also booked another 10-night stay in this same apartment beginning in mid-May. During and in between the two stays we traveled all over Italy.

CDP is a small walled medieval hill town located in central Italy midway between Florence and Rome. It is happily not on the tour-



**Both the vertical and end fed were deployed out of the second story window**

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ist path and is perfectly located for exploring the sights of Umbria and Tuscany.

I setup my portable station and made my first QSOs in Europe from our apartment in CDP. We did not have a balcony, so I needed to prop up my vertical from the second story window ledge of our building. I also, used my arborist throw weight to toss my end fed wire antenna out the same window to the roof of the garage below. The antennas had a clear shot to the northwest, and both performed reasonably well.

On April 10, I operated as I0/W6KC, in the 1300 and 1900 CWTs and was excited to make a total of 20 QSOs including 12 QSOs with North America (NA). And on April 17, I operated again in the 1300 and 1900 CWTs making a total of 17 QSOs (11 NA). From CDP we headed for Sorrento where I made 13 casual QSOs as I8/W6KC. In between hamming, we visited the Amalfi Coast and the ancient Roman city of Pompeii.

### **Magic in Matera**

From Sorrento, we moved on to the ancient city of Matera. The area of what is now Matera is a UNESCO World Heritage Site. It has been settled since the Paleolithic (10th millennium BC) which makes it potentially one of the oldest continually inhabited settlements in the world.

When we checked into our accommodations in Matera, our host showed us our unit and then he took us up to the roof terrace where we had an amazing view of the old city. He said that we could have access to that



**Matera is both an amazing city and radio QTH**

area as well. My eyes widened and I asked him if I could put up my shortwave antenna and he said OK. The 1900 CWT was at 9pm local time, so I started setting up about 7:30pm while there was still enough daylight to see. I put up my vertical antenna, hooked the rig up and made a couple of QSOs on 20m to check it out. In the CWT I ended up making 15 QSOs with 11 in EU and 4 in the US. I called CQ and even had a mini-pileup making four EU QSOs in two minutes. My best EU CWT results so far.

### **The Trulli**

Leaving Matera, we headed east across the “boot” part of Italy and visited the towns of Alberobel-

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lo and Castellana Grotte. This area of Italy is known for the trulli, a mid-14th century building technique that is still in use in this region. It features pyramidal domed roofs that are built up of corbelled limestone slabs.

### Castellana Grotte

In Castellana Grotte we stayed in building in a rural area with a trulli roof. There was room to setup my vertical on a flat section of the roof. I also ran the end fed wire from the roof to a nearby olive tree. The end fed seemed to work better vs. the vertical. Operating as I7/W6KC, I made 23 QSOs including four QSOs in the Florida QSO Party.

### San Marino

After a couple more stops driving north along the Adriatic Sea on the east coast of Italy, we arrived in the Republic of San Marino. I had booked a two night stay in a hotel with a balcony, thinking that it would be an opportunity to operate from T7. However, I later found out that San Marino does not participate in the European Conference of Postal & Telecommunications Administrations (CEPT) agreement and does not issue reciprocal licenses. It actually worked out fine,



**Trulli houses in Alberobello**



**Vertical on the roof in Castellana Grotte; End fed antenna from the roof to an olive tree in Castellana Grotte**

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San Marino was beautiful and we thoroughly enjoyed visiting this unique little country.

## **Verona**

In Verona, we were on the fourth floor of our building and we had a great view from the balcony looking towards the old part of the city. In the early evening, the sun would light up the tops of some of the buildings casting a golden glow on them above the city. Operating briefly as I3/W6KC, with my vertical clamped to the balcony railing, I made seven CW QSOs.

## **Bellagio**

When we checked into our apartment in Bellagio, all we could say was "wow." We had such a wonderful view of Lake Como and were just steps away from the cute little town and the ferry docks below. I put up my end fed antenna from the kitchen window of our second-floor unit down to a tree in the backyard. I was able to operate as I2/W6KC in the 1300 and 1900 CWTs on May 8 and made a respectable total of 37 QSOs.



**No QSOs possible, but for JoAnn and me San Marino was beautiful**



**A golden glow over Verona**



**Bellagio was beautiful, with good radio conditions too**

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## Levanto

From Bellagio, we drove to Levanto on Italy's beautiful northwest coast. We stayed in Levanto for the next five nights while we explored the nearby five old seaside villages that make up the area called the Cinque Terre. Even though our apartment was on the ground floor, I had access to the roof of our three-story building. I installed my end fed antenna across part of the roof and down to a tree in the yard below. Using my I1W6KC call, I made nine casual QSOs plus 33 QSOs in the CQ-M International DX Contest (CQM).

## Lucca

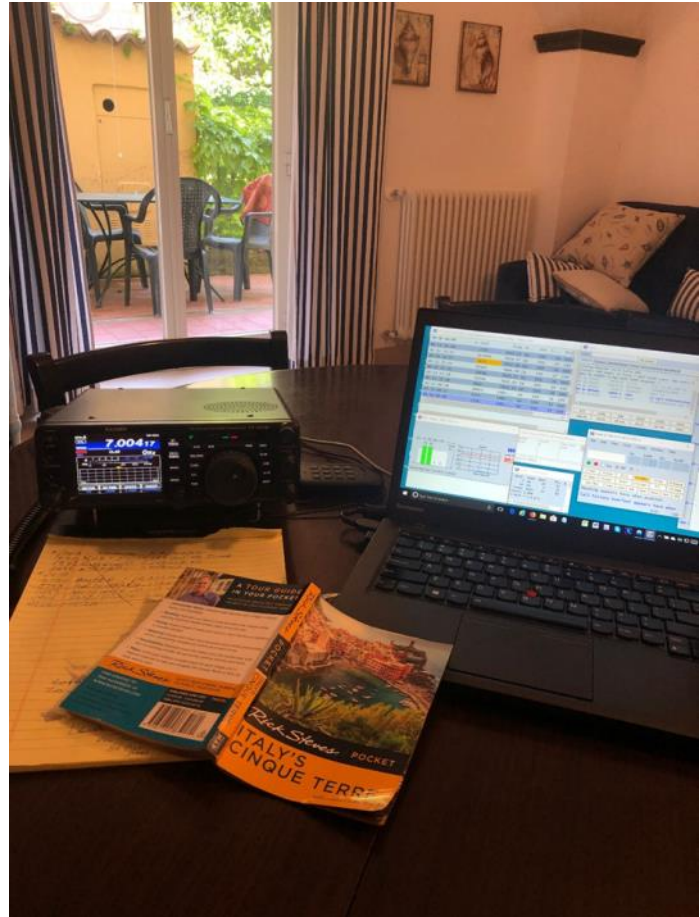
We stayed just one night in Lucca on our way back to our "base camp" in Citta' della Pieve. I was able to put up my end fed from our balcony to a tree in the backyard and make 10 quick QSOs in eight different EU countries.

## Back in Citta' della Pieve

It was good to be back in CDP for another 10-day stay. In addition to taking some amazing day trips to Assisi, Siena and wine tasting in Tuscany, I made a total of 56 QSOs in the 1300 and 1900 CWT sessions on both May 15 and May 22. Also, I participated in the King of Spain and WPX CW contests and added another 80 QSOs to the I0/W6KC log.

## The Home Stretch

After the end of our time in CDP we linked up with our two sons in Rome. The four of us spent the next two weeks making our way back to Paris. We travelled north through Italy making stops in Padua and Venice before arriving in Salzburg, Austria. Continuing on,



**Levanto was a great place for the radio and exploring the Cinque Terre too**



**In Lucca, a good view from the business end of the end fed antenna**

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we made a quick one-night stop in Imst, Austria, where I operated as OE/W6KC in the 1900 CWT and made eight QSOs, including one with Bert F6HKA. The next day we drove to Liechtenstein for another one-day stay where I made 21 HB0/W6KC QSOs including another one with F6HKA. From there it was on to Switzerland, Germany and finally Paris and the flight back home.



**Operating in Liechtenstein with a great view of the Alps**

### **The Experience**

This was a wonderful trip!

It's hard to compare it with five months of camping and hamming in Europe in 1971 during my youth, but still pretty adventurous for this point in life. We drove 8,600 km (5,300 miles), stayed in 30 cities and seven countries. We visited many amazing places including a dozen UNESCO World Heritage Sites.

I setup my rig in 14 cities and four countries and was able to make 384 CW and 37 SSB contacts for a total of 421 QSOs. One of the highlights was operating in 13 CWT sessions. It was fun getting familiar with many of the EU CWops call signs and making a total of 155 CWT QSOs including 37 "DX QSOs" with NA CWops. We are already planning the next adventure.

I have uploaded a variety of photos and a few videos from our travels to these two albums: [1971 Mobile in Europe](#) and [2019 W6KC Portable in Europe](#).

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## **Novice Rig Roundup – For CW**

### **Remembering the Past with a View to the Future**

**[Dan Sands N7SU](#)**

Many of us got our start in ham radio as a Novice class licensee. They were fun, exciting days – learning from an Elmer, studying theory to pass the exam, assembling a station and learning the Morse code. The FCC implemented the Novice class license on July 1, 1951. On April 15, 2000, the FCC restructured the Amateur Radio service licensing structure and stopped issuing Novice

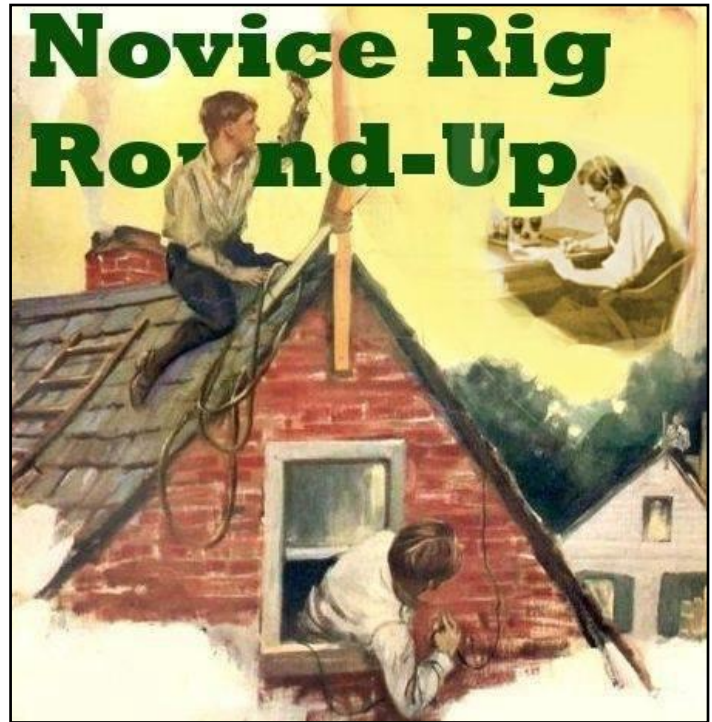
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class licenses. If you held a Novice class license, you could (and still can) renew it but no more Novice licenses were issued after that date.

In 1952, the ARRL started an annual contest for Novices called, *Novice Roundup*. It was intended to bring together experienced operators with the new Novices to encourage good operating practices and to give the newcomers some courage to make contacts. The CW aspect of the *Novice Roundup* was an integral part of the contest because all Novice class licensees were (hopefully) working toward mastering CW at 13 wpm for a General class license advancement. Forty-three years later, in 1995, the ARRL held the last Novice Roundup and published a sad goodbye in the June 1995 QST (pp 111-112). The ARRL cited a decline in participation and the rise of the Technician class license as reasons for “putting the Novice Roundup to sleep.”



In 2015, Bry Carling AF4K and Gary Johanson WD4NKA got together and started what they called the “Novice Rig Roundup”. Based loosely on what was enjoyed so many years before, the Novice Rig Roundup started as a week-long event where hams who enjoyed old Novice era rigs and CW got together and had a fun time making contacts. Held in February, the first Novice Rig Roundup was a resounding success. As it exists today, the Novice Rig Roundup is a week-long event bookended by two weekends where hams use Novice rigs from any period during the life of the license class from 1951 to 2000. A “Novice-1” contact is one where the operator uses a transmitter under crystal frequency control with a PA input power of 75 watts or less. For example, a contact using a Heathkit DX-40 under crystal frequency control. A “Novice-2” contact is one where the operator uses any other type of transmitter that would have been available to Novices after VFO frequency control was permitted starting in 1972 and input power was increased to 250 watts in 1977. For example, a contact using a Drake T4X-B transmitter would be classified as “Novice-2”. The “rules” are liberally interpreted. Receivers are not classified as a part of the scoring algorithm.

A Facebook page was started as an anchor location for interested hams and with the passage of a year, the 2016 Novice Rig Roundup was an even bigger success. By this time, an online logger for contacts had been assembled and the Novice Rig Roundup became a modern-day informal rebirth of the old Novice Roundup.

Not surprisingly, the event brings out all types of the old transmitters and receivers of the Novice days: Ameco AC-1, Heathkit DX-20, 35, 40, and 60, Johnson Adventurers and Challengers, Gonsets, Globe Scouts, Hallicrafters (HT-40), Drake (2-NT), Knight (T-60) and so on. Receivers are equally interesting: Hammarlund, National, Drake (2A, 2B, 2C), Heathkit, Hallicrafters, and many more. The Heathkit HW-16 is particularly popular NRR rig.

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What is interesting is the number of hams who still have, build and use old vacuum tube transmitters and receivers of the type found in the *ARRL Handbook*, *QST* and other publications of the day. Those who do find a welcome and attentive following in the Novice Rig Roundup group. On July 22, 2019 on what has become known as “Novice Rig Night,” I worked VE7SL who was using a single tube power oscillator transmitter using an RK-39 tube (Raytheon’s equivalent of an 807) at about 10 watts. I was using a Drake TX4-B and R4B. These kinds of contacts are the lifeblood of the Novice Rig Roundup experience.

### **And a CW focus...**

Without doubt, the attraction of the Novice Rig Roundup is related to the old gear. As it turns out, CW skills are right up there near the top, too, because all the contacts related to operating these Novice rigs rely on CW as the mode. CW is used, encouraged and nurtured in the Novice Rig Roundup group. Many who participate in the NRR are also members of other CW groups. We have good participation from the SKCC as well as some of the QRP groups like NAQCC and FISTS. There are CWops members who participate in the NRR.

Because CW is integral, it is what I referred to in the title as, “...a View to the Future.” We have plenty of NRR participants who are returning to CW to participate and some who are eager to learn CW skills to begin participating. We encourage interested hams to seek out the CW Academy of CWops. The NRR Facebook page and website contains CWA references and links. As the NRR continues to gain more members, there is a very real hope that the enjoyment of using and communicating with these old Novice rigs will stimulate and perpetuate interest in CW. It appears to be having that effect.

Earlier I mentioned “Novice Rig Night.” An informal gathering occurs on Monday, usually in the evenings, among a group of NRR aficionados who think a year is too long to wait for a “Novice Rig Roundup.” You can find most of the Monday night group on 40m between 7100 and 7125. There is also a group that hovers around 3579 on 80m. [There is also a “Sked Page.”](#) Its use is encouraged to facilitate Monday night contacts. It is also used extensively during the annual contest.

There is no formal organization for the Novice Rig Roundup. It started and continues as labor of love with several amateurs who maintain the necessary housekeeping functions. In 2017, AF4K and WD4NKA announced that they would no longer be able to devote the time to keeping the Novice Rig Roundup alive going forward and began seeking their replacements. I had participated in the Novice Rig Roundup that year and enjoyed it immensely. I offered to assume the management of the annual event and was joined by Doug Tombaugh N3PDT, and Paul Gochin KB3PUW. Paul is our programmer and maintains our modest online logger that we use each



**VE7SL RK-39 Power Oscillator**

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year for the week-long event. Doug and I share responsibilities for the various things that need to be done to give the event and group a semblance of organization.

My greatest joy is that it is all CW. Yes, Novices had some phone privileges, but they are, for the most part ignored or discounted by the group. We allow 2m phone contacts to count during the annual event, but we do not have any submitted. This is a CW crowd.

You might be interested to know that as I conclude writing this article at the end of July 2019, there are still 8,003 valid, active Novice class licenses on the FCC books.

The next Novice Rig Roundup will occur starting March 7, 2020 at 0000Z, and end on March 15, 2020 at 2359Z.

[You will find the Facebook group for Novice Rig Roundup here.](#) (If you decide to join the group, PLEASE answer the questions in the request. We use them to keep the group focused and we routinely reject group access for failure to answer the questions.)

There is an allied [Novice Rig Roundup group on Yahoo groups.](#)

You may find the Novice Rig Roundup web site at: [www.novicerigroundup.org](http://www.novicerigroundup.org)

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## Panadaptor for the TS590SG

**[Jim Leslie VE6JF](#)**

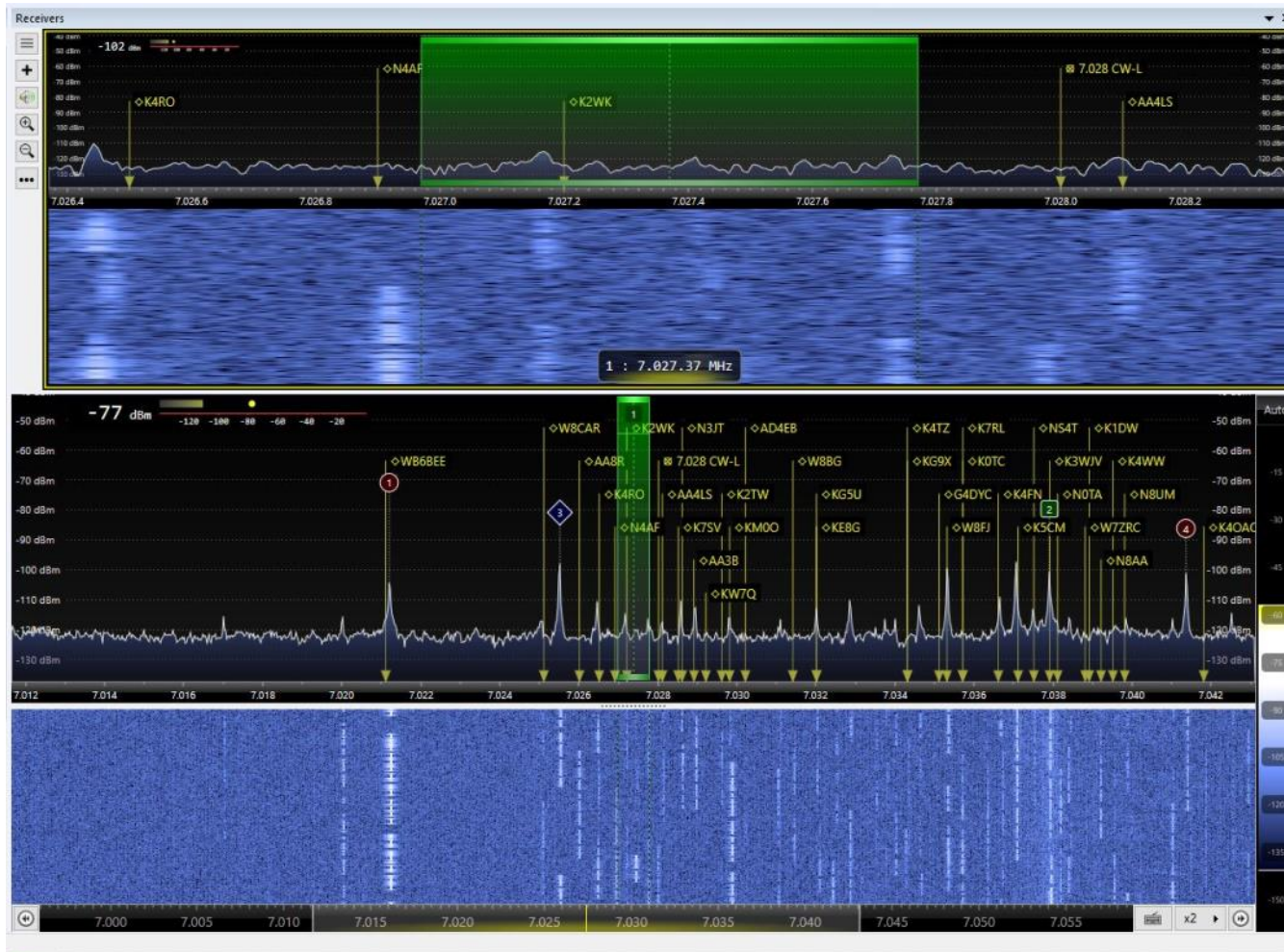
I am currently using a Kenwood TS590SG which is a very good radio. But it doesn't have a panadaptor or an IF output in order to connect an aftermarket one. A delay in my radio upgrade path prompted me to explore some other options of adding some sort of panadaptor. I quickly found that many hams used an SDR to achieve this and since I had an RSPduo, I decided to investigate this technique further. While this method applies to the TS590SG, the basic idea could be used with other radios.

An SDR requires an RF source from the antenna be connected during receive and to be disconnected from the antenna during transmit. A certain amount of isolation is also required to protect it from damage. The TS590SG has an RCA jack on the rear labelled "DRV". This connector is configurable via a menu setting to be either a "DRO" (Drive Output) which is 1mW of RF to drive an outboard exciter of some kind, or alternately become an antenna output terminal for an external receiver. When it is configured as an antenna output terminal, the main antenna input to the radio is split between the internal receive circuits and the "DRV" connector. There is a 3dB loss incurred as a result, but I have not found this to be an issue. Configuring the DRV jack as an

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antenna O/P is done with Menu 85 and when set correctly, an "\*" will appear on the display. If an SDR is now connected to the DRV connector, it will essentially be connected to the antenna by means of the internal 3dB splitter inside the radio. This configuration has appeared in at least two YouTube videos, but having some experience with relay isolation, I wanted to absolutely ensure the RF level that appeared at the SDR antenna terminal would not be enough to damage it. In order to take the front end protection level further, I included another circuit for insurance; a belts and suspenders approach.

The TS590SG has another connector which is used to switch an external amplifier into transmit mode. This is labeled "Remote Connector". Pin 2 is common and pin 7 is RL (goes to +12V on transmit). I configured this via a menu setting for a 10ms delay between the time the radio goes into transmit mode and when RF is actually transmitted. This pin 7 is connected to activate a transmit/receive relay circuit I added. The normally closed relay terminal is connected to the DRV terminal in receive mode. It then goes to a Mini-Circuits splitter to both RSPduo inputs. The two inputs now can display two different bands at the same time if desired. The RSPduo output is connected to the PC running SDR display software.

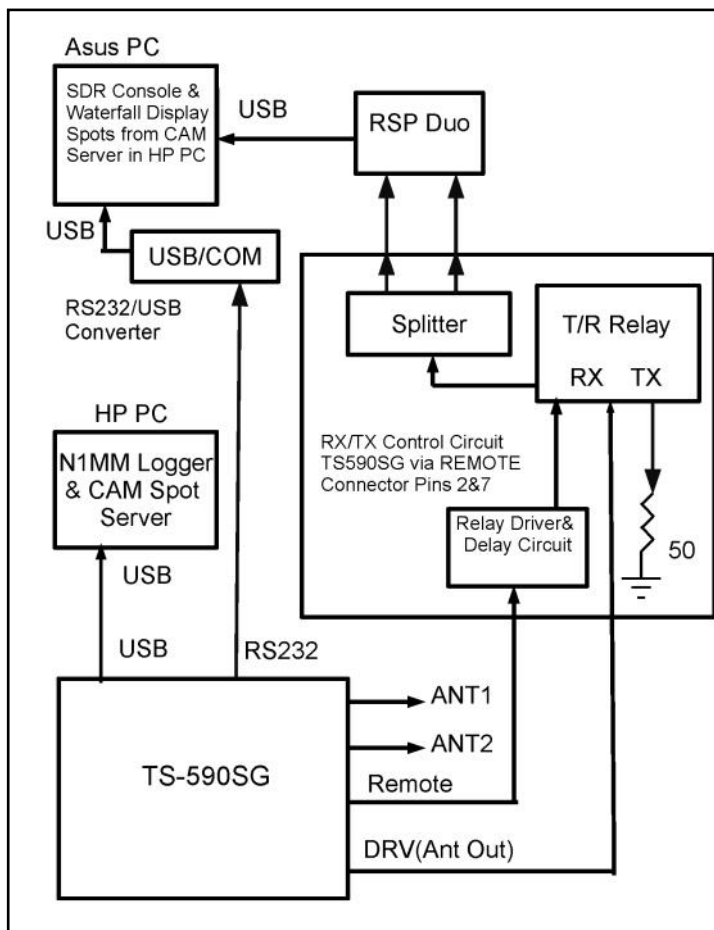
When the radio is keyed, pin 7 goes to +12V, the relay in my external controller is turned on, and

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the SDR antenna input is connected to a 50-ohm termination resistor to ground via the other terminal on the relay. The 10ms delay from transmit mode to power output gives enough time for the relay to close and shunt the SDR antenna to ground, thereby protecting it from excess RF levels. In my implementation, I used a 50-ohm SMA terminator. I typically see a residual signal of -60dBm or so on the waterfall when transmitting; a very safe RF level that will not damage the RSPduo. The added circuit (relay driver) also has a VOX type of delay where it remains in the transmit position for an adjustable period (shunted to a termination resistor) when transmission ceases. This is in the order of 100-200mS or so and the only reason is to prevent relay chatter if using QSK.

There are some configuration options to consider when adding a panadaptor display and I have tried each of the following. They all have advantages and disadvantages and in the end, it would become a matter of what works for you:



(1) Use the Steve London N2IC (CWops #1790) excellent "WaterFall BandMap" addition in N1MM. This method alone can be configured to add a spectrum display window to N1MM complete with spots. In addition, you can display another window showing a different version (horizontal) of a waterfall display also with spots. Note that this requires the EXTIO.dll for the SDR you are using.

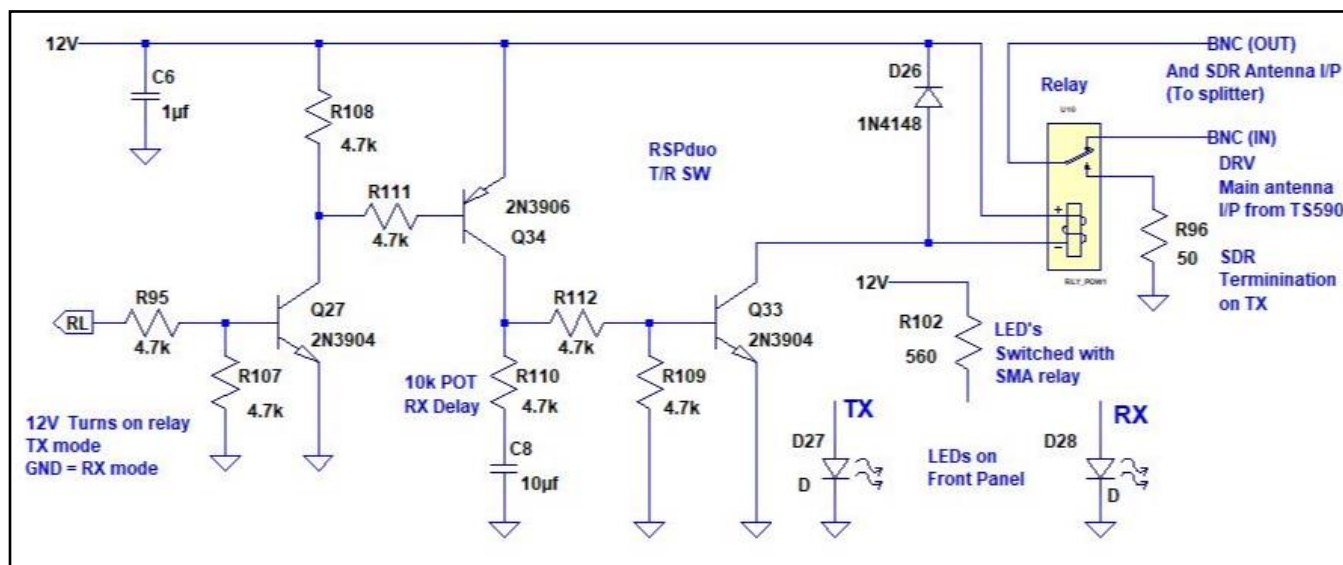
(2) Another approach is the use of SDRuno software. Since the SDR I have is the SDRduo, with the splitter arrangement on my external controller I can watch two bands at the same time. I cannot do this with the configuration in (1) above. The SDRuno s/w along with OmniRig also allows the ability of clicking on the SDRuno waterfall window and changes the TS590SG frequency and/or with one additional click, change bands too. My antennas are not very good, and I am not able to hear most bandmap spots. The SDRuno s/w allows me to see the waterfall on 2 bands but no spots on the waterfall. But I can operate 40m and watch for 20m to open in the morning CWT's. Switching from 40 to 20 and back is as easy as clicking on RSYN in the SDRuno window and the waterfall in SDRuno. With my antenna situation, the ability to do this helps substantially as I know right away when 20M opens.

(3) This is the method I finally settled on: Unlike (2) above, using SDR Console instead of SDRuno, I can only observe one band at a time. However, it allows for spots on the waterfall. The transceiver control is superb also. The switching between bands is seamless so I do not really miss the

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ability to have 2 bands visible at all times as I can in SDRuno. The transceiver follows SDR Console instantly. It has become a complete Windows interface for me. Point and click on signals provide both instant QSY or even a band change. I can tune with either the mouse or the radio. It has memories for CWT frequencies, the ability to instantly center a frequency in the bandmap, zooming, recording and more. It also provides two waterfall displays. The main one as well as a magnified version above it to provide additional signal detail.

On the block diagram you will see two separate computers in my setup. Of course everything can be done in a single computer and that was my first attempt which worked and is much simpler too. However, system load became an issue as my PC is rather old and slow. To improve performance, I off-loaded some of the tasks to yet another old computer thus dividing the load in half. They are connected across the network for passing data. Connecting them in this manner solved all my PC loading issues. If yours is more up to date, a single PC is a better method and



simpler to configure. The TS590SG has both a USB port as well as an RS232 COM port. A Keyspan USB/COM converter allows me to connect the second computer to the radio's RS232 port. Now one PC and monitor is used for N1MM and the other PC/monitor is used for the SDR Console application. The TS590SG frequency changes and tracks regardless of what is clicked on in SDR Console, or if I tune the radio directly, SDR Console follows. For spot display in this setup, I use CAM and its ability to act as a server. CAM can connect to up to 3 spot sources and source these out. N1MM is configured to get its spots for the bandmap from CAM. The cluster source in SDR Console also points to the CAM server, and spots will appear on both waterfalls.

I have been using this for many weeks and find it has enhanced my operating enjoyment. On an ongoing basis, I have been looking for ways to make it even better. My next step will be to incorporate one of the above configurations with another radio arriving soon that has a waterfall display built in. I suppose SO2R is inevitable at some point!



# New CWops Awards Tools Program Announced

## [Bill Gilliland W0TG](#)

As many of you know, we've had a committee working on a new Web based program to replace the N5RR CAM program that is no longer being maintained. Our thanks to Bill, N5RR, for creating the original CAM program and maintaining it for us for so many years.

Now, we are pleased to announce that the new CWops Awards Tools program is available for all to use. Our special thanks go to Fabian Kurz DJ1YFK, who did all the development for this amazing program. Based on our extensive testing, we believe this new tool will work well for all who use it.

In addition, Bob Rennard N7WY, has produced a Member Data file that is much more accurate than those used recently. This file is used in conjunction with CWops Awards Tools to provide a consistent, accurate result for all users.

CWops Awards Tools can be used to track your progress for each of the CWops awards, and is [available at Fabian's Website](#). It can be used on any computer with a connection to the internet.

Please click [this link to view a video](#) that Fabian created on how to use this new tool. It's easy to follow and will get you started very quickly.

You [should also read the FAQs](#). The FAQ list is continually updated and will contain answers to most questions. Users are encouraged to check the FAQ first, before reporting a problem. Should you encounter a problem that isn't covered in the intro video or the FAQ, [please report it by email](#) and we'll research your problem and get back to you. We'll also record the problem and solution in the FAQ so other users have access.

[The scores summary page shows overall standings](#). The information shown on this page is similar to the monthly report in Solid Copy but contains only results from CWops Awards Tools users who upload their files. If you submit your scores via the form on the CWops Website or direct to cwopscam@w0tg.com your score may not appear here.

As a first-time user, you will have to create a login and password as described in the instruction video. To do this, [connect to the new web page](#), enter your call and a password, and click the "Login or create new account" button. Remember your password for subsequent uses of the program. You will then be taken to the CWops Awards Tools page.

Use one of the following procedures to upload your data. The tool will allow you to import two different types of files:

1. Your current CAM data file that was created by the N5RR CAM program. If you have kept up with importing data and kept the member data current, you should use this process.
  - Import the data from your current CAM file. Click on the browse button and select the "yourcall".data file in the CWopsAwardManager/DataFiles folder.

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- Click upload and let the process run. Once completed, you will see values for each of the awards.
2. An ADI (ADIF) or Cabrillo file which virtually every logging program can export into.
- If you haven't been using CAM then you can export your log data from the software you use for logging. Remember to do it as an ADIF or Cabrillo file.
  - Click on the browse button to select the ADIF or Cabrillo file. Leave the box checked that says "Take DXCC, WAZ and WAS values from the database". This is very accurate, and you may find you pick up some new ones.
  - Click upload and let the process run. Once completed, you will see values for each of the awards.

Just to be sure you are getting credit for all your contacts, you may want to run both processes. The CWops award tool will ignore all duplicates and you may find you have some new ones that previously weren't counted.

To ensure consistency and accuracy of scores, we would like for all CWops Award Manager users to adopt the new CWops Awards Tools program as soon as possible. Those who have already started using the tool have found that it is quick, easy, and accurate and there have been almost no reports of problems. Should you find problems with your own use, please report them at [cwopscam@w0tg.com](mailto:cwopscam@w0tg.com). For the time being, we will continue accepting score reports [via the form on the members only page of the web site](#) or direct to [cwopscam@w0tg.com](mailto:cwopscam@w0tg.com).

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## CWops Tests

**[Rich Ferch VE3KI](#)**

As I write this, the ARRL CW Sweepstakes weekend is just past. As expected, a significant fraction of the stations encountered were CWops members – in my case I'd guess about 40%. You won't find my call sign in your logs, though, as I was helping out at a remotely operated multi-operator station using a different call sign.

I only encountered a couple of cases of what I would consider to be poor operating practice. One station did not send their own call sign as part of the exchange and sent their check as a single digit (post-2000). It took a couple of repeats to determine that what they sent was really what they meant to send and not faulty keying. Another station was sending the exchange elements out of order, and was repeating the check and section twice, probably in an effort to reduce the

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number of requests for repeats caused by the unexpected order. Nevertheless, most of the stations I encountered were doing a good job, which is an encouraging sign for the continued health of CW contesting.

November is a busy month for contesting, starting with the CW Sweepstakes and the Ukrainian DX contest the first weekend, then the OK/OM CW and Worked All Europe RTTY contests the next weekend, followed by the LZ DX contest and phone Sweepstakes, and finishing the month with the CQ WW CW contest. For us as CWTers, there is a bit of a breather in the middle of the month with our slow-speed CWTs on the second Wednesday.

The CWTs passed another milestone this October. While we do not issue awards for high scores, the score summaries posted at 3830scores.com do include the calculated score (number of QSOs times the number of multipliers). For the first time ever, we have had claimed scores above 50,000 points. The first such score was AA3B's score of 50,218 points in the 1300Z session on October 23, and exactly one week later, K3WW posted a score of 52,185 points. Chas's QSO count of 245 and his multiplier count of 213 both represent new highs as well. Most of the rest of us have less lofty goals. For myself, if my score exceeds 10,000 points, I feel that I have had a successful session. More often than not, I have to settle for less. Your own personal goals will probably be different, depending on your location, your station (especially your antennas) and your operating skills (or otherwise).

We all have different performance goals, whether it be aspiring to match Chas and Bud at the top of the list, to make it to the one QSO-per-minute mark, or just to achieve 10 QSOs in the hour using QRP or a "wet noodle" antenna. For some of us, performance-related goals are secondary to the thrill of breaking a pileup or managing to work a DX station on 80m despite difficult propagation conditions. Some of us get our kicks from recognizing and greeting friends, sometimes with just a "dit dit" as a hello so as not to interrupt the rhythm of the chase, or perhaps we enjoy encountering and welcoming new-to-us call signs of newcomers joining in. The important thing is for all of us to enjoy the experience, each in our own way.

We do the CWTs because they're fun; let's all make sure they continue to be fun for everyone.

**73,**

**Rich VE3KI**, CWT Manager

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## CW Academy

**[Kate Hutton K6HTN](#) and [Joe Fischer AA8TA](#)**

In the October *Solid Copy*, Joe AA8TA shared his CW biography. Now it's my (**Kate K6HTN**) turn.

The reasons operators take up CW are myriad. Some may feel the attraction of a high-speed contest ... DX ... SOTA, etc. Some may have a bit of nostalgia for the way ham radio used to be, when everyone started as Novices using CW. Some may have a Chelsea replica of a ship's radio room

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clock in their shack. Some may have a collection of old (or new) keys. Etc.

Personally, I managed to delay getting my ham license for decades, in spite of several excellent available Elmers, because (as a student, etc.) I didn't have the money for equipment or time to learn the code. It took the first Great California ShakeOut earthquake exercise (2008) to make it happen. As a seismologist at Caltech, I was pretty heavily involved. For this first annual exercise, we had "lights, camera, action!" with the local news media, including a bass amp for sound effects. After the "shaking" stopped, we got our assignments ... "You have some information for the public, but there are no phones and no internet. What will you do?" Pretty much on cue, two undergrads walked in with HT's and let it be known that they represented the Caltech Amateur Radio Club, and that "they could talk to any county EOC in southern California, what do you want to say?" My boss was preparing to eject them, but I saw the potential. I wrote down some basic info on a scrap of paper and the students relayed it to the campus shack, which was in a net that literally included all the EOCs in southern California. Bam! Introduction to both ham radio and formal message traffic! Three months later I had my Tech license, with the General following soon after.

I read the version-de-jour of the ARRL Operating Manual, to find out maybe what I wanted to do with my new privileges. Two aspects stuck in my mind. One was the part that I previously didn't have time for and was no longer required! Namely CW. I found LCWO.net online and just started bashing at it. Once I was up and running on HF, I made a somewhat disastrous first CW contact. It was not disastrous because of my code, but because I made the sked on the SKCC web page and neither of us was seasoned enough to understand propagation very well. All I really got was the other op's callsign and "EMAIL ME." By email, he gave my signal report: 119!

The other aspect that caught my attention was traffic handling, the NTS or National Traffic System. That wasn't quite as easy to find, except that I had joined FISTS, and they sent me a welcoming radiogram. The op who delivered the message by telephone said that he was unfamiliar with FISTS (Yeah, sure!) and what was it? When I answered that it was a CW club, he invited me to the local NTS net. That took some time, more code practice, and the addition of an 80-meter antenna, but it did happen.

Yes, message handling is still done, and some of it is still done via the daily CW nets.

My personal involvement with CW Ops came from this route. I found myself, after a few years on the local/section/state nets, starting to represent those nets on the Region (Sixth Region or RN6) and Area (Pacific Area or PAN) level nets. On the "long distance" nets, propagation conditions determine the prevailing speed and operators don't slow down otherwise. Actual traffic is passed at about 20 WPM, but the Net Control (NCS) may give QSY and other instructions at 25 to 30 WPM. Since, at the time, the only way I could copy CW was with a pen/paper, I had to write all that down, too. I often couldn't do it. Enter CW Academy Level 3 and Jack Ritter W0UCE, who taught me to copy in my head, more or less, and also to send a near perfect rendition of the Quick Brown Fox (QBF, should be a new official Q-sign, yes?).

After that I gradually gained proficiency on PAN (now called WAN, Western Area Net). I have made some forays into the AITN (or TCC, Transcontinental Corps) assignments, but space re-

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strictions at my QTH prevent me from running serious power, so I haven't succeeded.

Beginning in January, I may find myself morphing into the RN6 Net Manager. We have six regulars on RN6, plus a couple who fill in. We meet 7 evenings a week, twice (for outgoing and incoming traffic). Each session needs Net Control, a "to WAN" and a "from WAN" operator, a representative from Northern CA (NCN) and one from Southern CA (SCN). If one of us should go on a cruise or fall ill, there is a scramble. We need more good CW ops to keep the traffic tradition going.

NTS/RRI (Radio Relay International, which is now the "long distance carrier" for most radiogram traffic), does also exist in the digital age. Much traffic is carried via an automated Pactor network, and some via Winlink. Winlink even has a template that allows a rookie to easily fill out a correct radiogram form. There are also affiliated and independent SSB nets. Why, you may be asking? Well ...

- some operators like it
- live code practice
- we get to welcome new hams to the hobby, to a club, send seasonal greetings, etc. via a traditional, "steampunk" method
- the "when all else fails" mentality,
- etc

When was the last time all else failed? Actually, 2018, in Puerto Rico. Two PR hams managed to send several thousand "health and welfare" messages from the island in the wake of Hurricane Maria, to relatives in the mainland US, before their rig was stolen. For some reason, neither NTS or RRI stood up any formal nets to receive them, nor were the messages in anything resembling regulation radiogram format. But the mainland ops who took and delivered them were all experienced, ready and willing traffic handlers.

I started teaching Level 1 as a way to give back to the CW community. Because I'm not inspired to be much of a tester, I stick with teaching the "general purpose" Level 1. I know from experience that the students have to exert persistence to get through the learning process. There is nothing like the support/pressure of advisor and classmates to keep them going. I know that if I can just get them on the air, then the result will be whatever it should be for that particular student.

By the way, I am available online to coach any CW operators who are interested in trying their hand at message traffic.

In the last year, I have become part of the CW Academy administration, usually the first person the new signups receive email from. Interest in CW Academy has grown tremendously. In the last year, since I became involved, we have signed up more than 1,500 students. This includes many duplicates due to students taking more than one class, but it is still impressive, for an art that

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was thought to be dying out 10 years ago. It is a huge task that Joe AA8TA and I are doing, mostly with just Excel. Hopefully the next months will bring some much-needed new software to make it easier and less chaotic for all concerned.

73,

**Kate K6HTN** and **Joe AA8TA**, CW Academy Managers

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## 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   |
|-------|---------|-------|-------|---------|-------|-------|------------|--------|
| 2372  | WE5P*   | Bill  | 2380  | K6NR*   | Dana  | 2388  | K6ZY*      | Alan   |
| 2373  | AG4EA*  | Bill  | 2381  | 2E0OBO* | Bob   | 2389  | K4EES*     | Ken    |
| 2374  | NJ4Q    | Will  | 2382  | DL1REM  | Frank | 2390  | K6ZGW*     | Barry  |
| 2375  | W5XX*   | Mal   | 2383  | N9OL*   | John  | 2391  | AK4AT*     | John   |
| 2376  | DL5JQ*  | Hardy | 2384  | W2YH    | Carl  | 2392  | NW2Z*      | Robert |
| 2377  | SP9FOW  | Roman | 2385  | SM2CEW  | Peter | 2393  | LZ5DB/LZ5R | Milen  |
| 2378  | KG4CRJ* | Brian | 2386  | WF6F*   | Ken   |       |            |        |
| 2379  | G4RCG   | John  | 2387  | K7III*  | Jason |       |            |        |

\*Life Member

## Current Nominees

As of November 8, 2019

**Need Sponsors:** W4DMV, K1IG, AG5QX, NJ4V, N3SW

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](mailto:membership@cwops.org) so I can add it to the roster. Vice versa, if your callsign becomes inactive I can remove it, too. Then the roster will be accurate and current for our usage.

73,

**Trung W6TN**, Membership Secretary



# CWops Member Awards

## [Bill Gilliland W0TG](#)

The Annual Competition Award (ACA) is based on the number of members worked each calendar year. You get one point per member worked, once per year. It resets to zero at the beginning of each year. The Cumulative Member Award (CMA) is based on how many members you've worked since January 3, 2010 on each band and continues to grow in perpetuity. [Use the new online tool to submit your data](#). It's easy! (Watch the tutorial if you have not used the online tool before.)

This table is a composite of scores from the old system and the new. Anyone who submitted logs via the new web page will see those submitted scores here. Those who have not adopted the new process will see scores they reported via the old system. Anyone who see errors in their scores should report them to [cwopscam@w0tg.com](mailto:cwopscam@w0tg.com).

In the table below, members whose call sign is in **RED** have achieved a milestone: 100 DX entities, 40 WAE entities, 50 states (WAS).

| Call   | ACA  | CMA  | Call          | DX         | Call          | WAS       | Call          | WAE       | Call   | WAZ |
|--------|------|------|---------------|------------|---------------|-----------|---------------|-----------|--------|-----|
| AA3B   | 1302 | 8719 | <b>W1RM</b>   | <b>200</b> | <b>NA8V</b>   | <b>50</b> | <b>W1RM</b>   | <b>57</b> | W1RM   | 38  |
| NA8V   | 1074 | 4773 | <b>F6HKA</b>  | <b>178</b> | <b>N7US</b>   | <b>50</b> | <b>DL6KVA</b> | <b>55</b> | OK1RR  | 38  |
| K3WJV  | 1045 | 4356 | <b>W4VQ</b>   | <b>152</b> | <b>N5IR</b>   | <b>50</b> | <b>F6HKA</b>  | <b>53</b> | N8BJQ  | 38  |
| N5AW   | 1029 | 2510 | <b>DL6KVA</b> | <b>145</b> | <b>N2UU</b>   | <b>50</b> | <b>OK1RR</b>  | <b>49</b> | F6HKA  | 38  |
| K3WW   | 984  | 6498 | <b>N7WY</b>   | <b>143</b> | <b>N2RC</b>   | <b>50</b> | <b>G4BUE</b>  | <b>47</b> | AA3B   | 38  |
| W1RM   | 955  | 6102 | <b>G4BUE</b>  | <b>142</b> | <b>N1DC</b>   | <b>50</b> | <b>VE3KI</b>  | <b>46</b> | W4VQ   | 37  |
| N8BJQ  | 925  | 5817 | <b>OK1RR</b>  | <b>136</b> | <b>KU7Y</b>   | <b>50</b> | <b>N8BJQ</b>  | <b>45</b> | VE3KI  | 37  |
| F6HKA  | 869  | 5426 | <b>VE3KI</b>  | <b>123</b> | <b>K8JQ</b>   | <b>50</b> | <b>K3WW</b>   | <b>45</b> | G4BUE  | 37  |
| VE3KI  | 867  | 5221 | <b>N8BJQ</b>  | <b>121</b> | <b>K8AJS</b>  | <b>50</b> | <b>DJ1YFK</b> | <b>45</b> | N5PHT  | 36  |
| K1VUT  | 843  | 2417 | <b>AA3B</b>   | <b>119</b> | <b>K5CM</b>   | <b>50</b> | <b>IK0YVV</b> | <b>44</b> | K3WW   | 36  |
| K4WW   | 829  | 2205 | <b>K3WW</b>   | <b>118</b> | <b>K4GM</b>   | <b>50</b> | <b>AA3B</b>   | <b>44</b> | AC4CA  | 36  |
| K8JQ   | 801  | 3338 | <b>AC4CA</b>  | <b>118</b> | <b>K3WW</b>   | <b>50</b> | <b>W4VQ</b>   | <b>43</b> | N5RR   | 35  |
| N5PHT  | 781  | 3788 | <b>K1ESE</b>  | <b>116</b> | <b>K0MP</b>   | <b>50</b> | <b>SQ9S</b>   | <b>43</b> | W0VX   | 34  |
| K8AJS  | 770  | 2738 | <b>OH2BN</b>  | <b>112</b> | <b>IK0YVV</b> | <b>50</b> | <b>K1ESE</b>  | <b>43</b> | IK0YVV | 34  |
| KG9X   | 764  | 2469 | <b>EA8OM</b>  | <b>111</b> | <b>AE1T</b>   | <b>50</b> | <b>I5EFO</b>  | <b>43</b> | DL6KVA | 34  |
| K5CM   | 481  | 1390 | <b>K1SM</b>   | <b>110</b> | <b>AC4CA</b>  | <b>50</b> | <b>N5RR</b>   | <b>42</b> | 4X6GP  | 34  |
| WT9U   | 749  | 1896 | <b>N5RR</b>   | <b>105</b> | <b>N5RR</b>   | <b>50</b> | <b>N2UU</b>   | <b>42</b> | N5IR   | 33  |
| KE8G   | 742  | 2128 | <b>W0VX</b>   | <b>104</b> | <b>W1RM</b>   | <b>50</b> | <b>EA8OM</b>  | <b>42</b> | I5EFO  | 33  |
| DL6KVA | 737  | 3254 | <b>I5EFO</b>  | <b>103</b> | <b>W4VQ</b>   | <b>50</b> | <b>AC4CA</b>  | <b>42</b> | VK7CW  | 32  |
| NA4J   | 733  | 1470 | <b>N5PHT</b>  | <b>102</b> | <b>F6HKA</b>  | <b>50</b> | <b>NA8V</b>   | <b>41</b> | NA8V   | 32  |
| K9WX   | 715  | 2765 | <b>N5IR</b>   | <b>102</b> | <b>VE3KI</b>  | <b>50</b> | <b>K3WJV</b>  | <b>41</b> | N1EN   | 32  |
| W0VX   | 699  | 3789 | <b>4X6GP</b>  | <b>102</b> | <b>G4BUE</b>  | <b>50</b> | <b>K1SM</b>   | <b>41</b> | K1SM   | 32  |
| K1ESE  | 696  | 3853 | <b>IK0YVV</b> | <b>101</b> | <b>EA8OM</b>  | <b>50</b> | <b>4X6GP</b>  | <b>41</b> | K1ESE  | 32  |
| N2RC   | 692  | 3238 | <b>AE1T</b>   | <b>101</b> | <b>W0EJ</b>   | <b>50</b> | <b>OH2BN</b>  | <b>40</b> | I5IYJ  | 32  |
| K1DJ   | 690  | 2442 | EA1WX         | 99         | <b>F6JOE</b>  | <b>50</b> | <b>G4HZV</b>  | <b>40</b> | W9ILY  | 31  |
| AE1T   | 678  | 3206 | NA8V          | 97         | <b>W6KY</b>   | <b>50</b> | W9ILY         | 39        | NA6O   | 30  |
| K7QA   | 672  | 1950 | W9ILY         | 95         | <b>N1EN</b>   | <b>50</b> | HB9ARF        | 39        | N7US   | 30  |

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| Call   | ACA | CMA  | Call   | DX | Call  | WAS | Call   | WAE | Call   | WAZ |
|--------|-----|------|--------|----|-------|-----|--------|-----|--------|-----|
| N7US   | 671 | 3035 | N2UU   | 95 | N5PHT | 50  | AE1T   | 39  | N2RC   | 30  |
| IK0YVV | 670 | 2958 | SQ9S   | 92 | F5MNK | 50  | IT9VDQ | 38  | KR3E   | 30  |
| N2UU   | 664 | 3954 | N7US   | 91 | K5IX  | 50  | IT9MUO | 38  | RM2D   | 29  |
| AC4CA  | 654 | 4479 | IT9MUO | 90 | K3SEN | 50  | IN3FHE | 38  | IT9VDQ | 29  |
| NA6O   | 641 | 3117 | VK7CW  | 89 | AD1C  | 50  | G3LDI  | 38  | SQ9S   | 28  |
| N1DC   | 609 | 2570 | N2RC   | 87 | AA3B  | 50  | DK1WI  | 38  | N5AW   | 28  |
| W2NRA  | 600 | 1558 | F6JOE  | 87 | K5AX  | 50  | W0VX   | 37  | N2UU   | 28  |
| N2WK   | 587 | 2339 | N1EN   | 86 | I5EFO | 50  | KR3E   | 37  | K8AJS  | 27  |
| K4GM   | 580 | 2522 | KY7M   | 86 | VK7CW | 50  | K3MD   | 37  | K4GM   | 27  |
| W3WHK  | 569 | 1766 | KR3E   | 84 | K0TC  | 50  | G4ILW  | 37  | DJ1YFK | 27  |
| W4WF   | 569 | 1358 | K3WJV  | 84 | KY7M  | 50  | F6JOE  | 37  | W7GF   | 26  |
| W1UU   | 524 | 1023 | I5IYJ  | 83 | NA6O  | 50  | N5IR   | 36  | N1ZX   | 26  |
| WN7S   | 521 | 1573 | AD1C   | 83 | K1DJ  | 50  | EA1WX  | 36  | K4HQB  | 26  |
| K4QS   | 510 | 2069 | K4HQB  | 81 | N8BJQ | 50  | M0RYB  | 35  | K2QB   | 26  |
| N5IR   | 497 | 3373 | K8AJS  | 79 | K9WX  | 50  | G4NVR  | 35  | V31MA  | 25  |
| K4HQB  | 491 | 2193 | K5AX   | 79 | WT2P  | 50  | SM0HEV | 34  | DK1WI  | 25  |
| K1SM   | 478 | 2566 | DL8PG  | 79 | K1ESE | 50  | RM2D   | 34  | KU7Y   | 24  |
| W8OV   | 474 | 1112 | NA6O   | 77 | K3WJV | 50  | N5AW   | 34  | KT5V   | 24  |
| KB8GAE | 471 | 843  | N1ZX   | 77 | K4WW  | 50  | N1DC   | 34  | K9WX   | 24  |
| K0MP   | 463 | 1400 | IT9VDQ | 77 | K2QB  | 50  | MI0WWB | 34  | K5CM   | 24  |
| W2NO   | 462 | 961  | N1DC   | 75 | W7GF  | 50  | K4HQB  | 34  | K3WJV  | 24  |
| KJ4M   | 461 | 956  | DJ1YFK | 75 | WT9U  | 49  | DL4FDM | 34  | K1DJ   | 24  |
| G3LDI  | 457 | 1353 | K1DJ   | 74 | WN7S  | 49  | K8AJS  | 33  | DL4FDM | 24  |
| ON4VT  | 456 | 690  | RM2D   | 73 | WA3GM | 49  | ON4VT  | 32  | N2WK   | 22  |
| W0TG   | 437 | 1166 | K4GM   | 73 | W9ILY | 49  | N2WK   | 32  | N1DC   | 22  |
| K4HR   | 436 | 1698 | K2QB   | 73 | W4WF  | 49  | N2RC   | 32  | K8JQ   | 22  |
| K0TC   | 431 | 2358 | DK1WI  | 71 | W4ER  | 49  | N1EN   | 32  | HB9ARF | 22  |
| CM8NMN | 427 | 1163 | N5AW   | 70 | W2NRA | 49  | KY7M   | 32  | W2NRA  | 21  |
| K3SEN  | 423 | 1691 | K9WX   | 70 | W0VX  | 49  | K1DJ   | 32  | KE4S   | 21  |
| NU7Y   | 422 | 1250 | F5MNK  | 68 | ON4VT | 49  | I5IYJ  | 32  | K7QA   | 21  |
| KK0ECT | 422 | 573  | KE4S   | 67 | NU7Y  | 49  | F5MNK  | 32  | K6DGW  | 21  |
| NN4K   | 415 | 1923 | N2WK   | 66 | NA4J  | 49  | V31MA  | 31  | K3SEN  | 21  |
| AA8TA  | 402 | 1561 | G3LDI  | 66 | N5AW  | 49  | PG4I   | 31  | WT9U   | 20  |
| OK1RR  | 397 | 2513 | V31MA  | 65 | N2WK  | 49  | N1ZX   | 31  | WN7S   | 20  |
| WA3GM  | 394 | 1230 | HB9ARF | 64 | N1ZX  | 49  | M0DHP  | 31  | KE8G   | 20  |
| DJ1YFK | 392 | 1373 | G4HZV  | 64 | KG9X  | 49  | K5AX   | 31  | JF2IWL | 20  |
| KE4S   | 386 | 1925 | K3DMG  | 63 | KE8G  | 49  | F5IYJ  | 31  | G4HZV  | 20  |
| K2QB   | 382 | 2023 | KE8G   | 62 | KE4S  | 49  | DL8PG  | 31  | G3LDI  | 20  |
| K4AFE  | 377 | 1623 | WT9U   | 60 | K7QA  | 49  | N7US   | 30  | KG9X   | 19  |
| W2VM   | 375 | 1104 | DL4FDM | 60 | K6RB  | 49  | K4GM   | 30  | K4HR   | 19  |

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| Call   | ACA | CMA  | Call   | DX | Call   | WAS | Call   | WAE | Call   | WAZ |
|--------|-----|------|--------|----|--------|-----|--------|-----|--------|-----|
| W8DN   | 369 | 842  | ON4VT  | 58 | K4HR   | 49  | K1VUT  | 30  | F5IYJ  | 19  |
| W4VQ   | 368 | 2881 | K4QS   | 57 | K3MD   | 49  | KE4S   | 29  | WA3GM  | 18  |
| KT4XN  | 367 | 932  | K0TC   | 57 | K1VUT  | 49  | K4QS   | 29  | W4ER   | 18  |
| HB9ARF | 363 | 1347 | W7GF   | 56 | CM8NMN | 49  | K2QB   | 29  | W3WHK  | 18  |
| KE4RG  | 359 | 1007 | W6KY   | 56 | AA8TA  | 49  | SV2BBK | 28  | NU7Y   | 18  |
| N5RR   | 353 | 4223 | K8JQ   | 56 | AB7MP  | 49  | NA6O   | 28  | NN4K   | 18  |
| W4ER   | 351 | 1287 | K6RB   | 56 | DL6KVA | 49  | AD1C   | 28  | K4WW   | 18  |
| G4NVR  | 346 | 899  | K3SEN  | 56 | K6DGW  | 49  | VK7CW  | 27  | K4AFE  | 18  |
| N0PP   | 326 | 550  | F5IYJ  | 56 | W8OV   | 48  | N5PHT  | 27  | K1VUT  | 18  |
| AB7MP  | 321 | 1090 | W3WHK  | 55 | W3WHK  | 48  | KE8G   | 27  | CM8NMN | 18  |
| IT9MUO | 317 | 1946 | K1VUT  | 55 | NN4K   | 48  | G3WZD  | 27  | W1UU   | 17  |
| K6DGW  | 313 | 2122 | G4NVR  | 54 | KT5V   | 48  | W3WHK  | 26  | G4DRS  | 17  |
| KB4DE  | 311 | 579  | K5CM   | 52 | KE4RG  | 48  | K3DMG  | 26  | W0TG   | 16  |
| KF8O   | 310 | 470  | W2NRA  | 50 | K4QS   | 48  | G0MGM  | 26  | G4NVR  | 16  |
| G4BUE  | 295 | 3652 | K4HR   | 50 | K4HQB  | 48  | K4WW   | 25  | NA4J   | 15  |
| NG1R   | 295 | 424  | G4ILW  | 50 | K4AFE  | 48  | G0ELZ  | 25  | KB8GAE | 15  |
| N1ZX   | 274 | 1348 | WT2P   | 48 | K3DMG  | 48  | EA4OR  | 25  | K0MP   | 15  |
| K8RJW  | 274 | 413  | NN4K   | 47 | K1SM   | 48  | WT9U   | 24  | G4ILW  | 15  |
| VE6JF  | 273 | 564  | K4AFE  | 47 | IT9VDQ | 48  | W2NRA  | 24  | W2NO   | 14  |
| 4X6GP  | 272 | 1630 | KT5V   | 46 | EA1WX  | 48  | K8JQ   | 24  | N0PP   | 14  |
| G4HZV  | 270 | 947  | K7QA   | 46 | DL8PG  | 48  | K6RB   | 24  | KT4XN  | 14  |
| VK7CW  | 249 | 1670 | KU7Y   | 45 | 4X6GP  | 48  | K3SEN  | 24  | KE6K   | 14  |
| SQ9S   | 247 | 862  | KG9X   | 45 | W8DN   | 47  | K9WX   | 23  | AB7MP  | 14  |
| IN3FHE | 245 | 769  | K4WW   | 45 | W2VM   | 47  | G4DRS  | 23  | AA8TA  | 14  |
| AC3BU  | 238 | 340  | G0MGM  | 45 | W2NO   | 47  | NN4K   | 22  | W2VM   | 13  |
| M0RYB  | 234 | 464  | W1UU   | 44 | W0TG   | 47  | K7QA   | 21  | W8OV   | 12  |
| WE5P   | 234 | 296  | CM8NMN | 44 | VE1OP  | 47  | K5CM   | 21  | W8DN   | 12  |
| W0PHX  | 233 | 426  | M0RYB  | 42 | OK1RR  | 47  | JF2IWL | 21  | PG4I   | 12  |
| W7GF   | 232 | 1530 | WA3GM  | 41 | KT4XN  | 47  | F5PBL  | 21  | M0DHP  | 12  |
| F6JOE  | 230 | 3002 | W4ER   | 41 | KR3E   | 47  | W1UU   | 20  | G3WZD  | 12  |
| I5EFO  | 220 | 1330 | SM0HEV | 41 | KK0ECT | 47  | K4HR   | 20  | W4WF   | 11  |
| V31MA  | 218 | 1520 | K3MD   | 41 | KJ4M   | 47  | CM8NMN | 20  | W0PHX  | 11  |
| N7SU   | 214 | 300  | MI0WWB | 40 | KB4DE  | 47  | WN7S   | 19  | NR3Z   | 11  |
| F5IYJ  | 211 | 576  | WN7S   | 39 | IT9MUO | 47  | WT2P   | 18  | NG1R   | 11  |
| N7MU   | 206 | 308  | W2VM   | 39 | I5IYJ  | 47  | WA3GM  | 18  | MI0WWB | 11  |
| G4ILW  | 202 | 657  | PG4I   | 39 | HB9ARF | 47  | W6KY   | 18  | KJ4M   | 11  |
| N1EN   | 193 | 2129 | M0DHP  | 39 | DK1WI  | 47  | W2NO   | 18  | KE4RG  | 11  |
| KM4FO  | 186 | 813  | NA4J   | 38 | VE6JF  | 46  | VE1OP  | 18  | SM0HEV | 10  |
| SM0HEV | 173 | 307  | G4DRS  | 38 | V31MA  | 46  | K0TC   | 18  | N7MU   | 10  |
| DK1WI  | 167 | 908  | K6DGW  | 37 | N0PP   | 46  | G4RCG  | 18  | M0RYB  | 10  |

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| Call   | ACA | CMA  | Call   | DX | Call   | WAS | Call   | WAE | Call   | WAZ |
|--------|-----|------|--------|----|--------|-----|--------|-----|--------|-----|
| M0DHP  | 166 | 317  | W0EJ   | 36 | KE6K   | 46  | W2VM   | 17  | KB4DE  | 10  |
| G3WZD  | 166 | 308  | W2NO   | 35 | JF2IWL | 46  | NG1R   | 17  | G0ELZ  | 10  |
| PG4I   | 165 | 261  | W0TG   | 35 | W1UU   | 46  | NA4J   | 17  | AJ1DM  | 10  |
| EA4OR  | 164 | 209  | JF2IWL | 35 | W0PHX  | 45  | W7GF   | 16  | VE6JF  | 9   |
| N7ID   | 163 | 235  | IN3FHE | 35 | KM4FO  | 45  | KT5V   | 16  | SV2BBK | 9   |
| W9KM   | 160 | 236  | G3WZD  | 35 | G3LDI  | 45  | KG9X   | 16  | KM4FO  | 9   |
| MI0WWB | 156 | 318  | SV2BBK | 33 | RM2D   | 44  | K4AFE  | 16  | EA4OR  | 9   |
| EA1WX  | 138 | 1961 | AA8TA  | 33 | NG1R   | 44  | W4ER   | 15  | WE5P   | 8   |
| KR3E   | 130 | 1597 | VE1OP  | 32 | KB8GAE | 44  | W4WF   | 14  | KK0ECT | 8   |
| NR3Z   | 130 | 166  | NU7Y   | 29 | K8RJW  | 44  | KU7Y   | 14  | K8RJW  | 8   |
| G4RCG  | 129 | 131  | KT4XN  | 29 | G4HZV  | 44  | K6DGW  | 12  | G4RCG  | 8   |
| KU7Y   | 124 | 1539 | G0ELZ  | 29 | AJ1DM  | 44  | AJ1DM  | 12  | N7SU   | 7   |
| SV2BBK | 124 | 217  | F5PBL  | 29 | AC3BU  | 44  | W8OV   | 11  | N7ID   | 6   |
| AJ1DM  | 120 | 481  | EA4OR  | 29 | N7SU   | 43  | W8DN   | 11  | KF8O   | 6   |
| KE6K   | 111 | 722  | W8OV   | 28 | G4NVR  | 43  | W0TG   | 11  | AC3BU  | 6   |
| IT9VDQ | 90  | 1618 | W8DN   | 28 | F5IYJ  | 43  | K8RJW  | 11  | W9KM   | 5   |
| DL4FDM | 70  | 646  | KB8GAE | 27 | DJ1YFK | 43  | K0MP   | 11  | W6GMT  | 4   |
| W3RZ   | 69  | 267  | N0PP   | 26 | SQ9S   | 42  | AA8TA  | 11  |        |     |
| G0ELZ  | 69  | 143  | NG1R   | 25 | OH2BN  | 42  | W0EJ   | 10  |        |     |
| I5IYJ  | 64  | 837  | W4WF   | 24 | N7MU   | 42  | NR3Z   | 10  |        |     |
| G4DRS  | 61  | 410  | KE4RG  | 24 | KF8O   | 42  | KT4XN  | 10  |        |     |
| F5PBL  | 61  | 82   | K5IX   | 24 | W3RZ   | 41  | KE4RG  | 10  |        |     |
| KB8PGW | 55  | 277  | K0MP   | 23 | DL4FDM | 41  | KB4DE  | 9   |        |     |
| W6GMT  | 37  | 37   | AB7MP  | 23 | WE5P   | 40  | N0PP   | 8   |        |     |
| AF9W   | 35  | 59   | G4RCG  | 22 | N7ID   | 40  | KM4FO  | 8   |        |     |
| JF2IWL | 18  | 674  | AJ1DM  | 20 | G4DRS  | 40  | KB8GAE | 8   |        |     |
| W3RZ   | 6   | 6    | NR3Z   | 19 | W9KM   | 37  | K5IX   | 8   |        |     |
| K6RB   | 0   | 4032 | KM4FO  | 18 | KB8PGW | 37  | KJ4M   | 6   |        |     |
| K5AX   | 0   | 3634 | W0PHX  | 17 | NR3Z   | 35  | NU7Y   | 5   |        |     |
| KY7M   | 0   | 3252 | KB4DE  | 17 | G0MGM  | 35  | KK0ECT | 5   |        |     |
| W9ILY  | 0   | 2865 | W3RZ   | 16 | G3WZD  | 34  | KF8O   | 5   |        |     |
| EA8OM  | 0   | 2758 | KJ4M   | 16 | MI0WWB | 31  | AB7MP  | 5   |        |     |
| AD1C   | 0   | 2101 | K8RJW  | 16 | M0RYB  | 30  | W3RZ   | 4   |        |     |
| W6KY   | 0   | 2088 | KE6K   | 14 | G4ILW  | 30  | VE6JF  | 4   |        |     |
| WT2P   | 0   | 1925 | KK0ECT | 11 | G4RCG  | 28  | AC3BU  | 4   |        |     |
| N7WY   | 0   | 1838 | VE6JF  | 10 | M0DHP  | 27  | WE5P   | 3   |        |     |
| DL8PG  | 0   | 1789 | WE5P   | 9  | EA4OR  | 24  | W0PHX  | 3   |        |     |
| K3DMG  | 0   | 1773 | N7MU   | 9  | PG4I   | 23  | N7MU   | 2   |        |     |
| K3MD   | 0   | 1734 | KF8O   | 8  | AF9W   | 23  | N7ID   | 2   |        |     |
| RM2D   | 0   | 1182 | AC3BU  | 7  | IN3FHE | 20  | KB8PGW | 2   |        |     |

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| Call  | ACA | CMA  | Call   | DX | Call   | WAS | Call  | WAE | Call | WAZ |
|-------|-----|------|--------|----|--------|-----|-------|-----|------|-----|
| KT5V  | 0   | 1152 | N7SU   | 6  | W6GMT  | 19  | W9KM  | 1   |      |     |
| F5MNM | 0   | 1111 | N7ID   | 6  | SM0HEV | 19  | W6GMT | 1   |      |     |
| K5IX  | 0   | 892  | KB8PGW | 5  | SV2BBK | 18  | N7SU  | 1   |      |     |
| VE1OP | 0   | 768  | W9KM   | 4  | G0ELZ  | 18  | KE6K  | 1   |      |     |
| W0EJ  | 0   | 754  | W6GMT  | 3  | F5PBL  | 8   |       |     |      |     |
| G0MGM | 0   | 495  | W3RZ   | 3  | W3RZ   | 4   |       |     |      |     |
|       |     |      | AF9W   | 2  |        |     |       |     |      |     |

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## QTX Report

### Enjoying the Art of Conversational CW

[Bruce Murdock K8UDH](#)

What did you do when you first got on the air as a new CW operator? You were probably nervous and a little bit unsure about what to do. I certainly was, even though I had listened to many CW QSOs and had a good idea what to say and what to expect. Back then, in the early 1960s, the bands were crowded and many times it was difficult to complete the QSO with the equipment we had before QSB or QRM caused the contact to end. Most everyone wanted to talk and exchange QSL cards, but I didn't have a copy of the coveted Ham Radio Callbook so exchanging address info on the air was crucial.

Every contact I made was a ragchew QSO if it lasted as long as I wanted it to. As a young Novice, I wasn't a contest operator. It's probably no surprise to say that I think ragchew CW QSOs are not only fun but also very nostalgic. What kind of experiences did you have in your early CW days?

#### Comments from QTX submissions

**MI0WWB:** Need to try harder ;-)

**G3WZD:** Had a most enjoyable QSO with Brad, N9EL, which resulted in a very interesting email exchange and direct QSLs.

**W9EBE:** My longest QSO this month (53 minutes) was with fellow CWops member Stu/NV3N on 30 meters. Thanks, Stu!

**N6HCN:** Epic hour-plus chews with Glen NN6T, Rob N6KIX, and Bing K6YUF, wordlessly projecting thoughts through space and time using two fingers, harnessing the ionosphere as a whispering

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gallery. It's heady stuff.

**WB6TOU:** And the SFI hit a record low. If they think it is quiet in Lake Woebegon, they have not been on HF in October.

**K8UDH:** Had a really fun QSO with Joe W0SU. It was his first contact in 15 years. I enjoyed the opportunity to welcome him back on the air.

**K2KRG:** It was fun to catch Gary, N5PHT from the truck on my way home from shopping. Mobil CW makes any trip go by faster.

**GM0EUL:** Missed reporting last month so this is for Sept and Oct. A couple of interesting calls were with SP4RKZ/MM, Witek, who is working on a ferry in the Baltic Sea. I've just realised his call reads "sparkz" great call for a ship's electronics officer! The other was a practice ragchew with my CWA level 1 student Richard, M0RJC. He has the makings of a great op. Keep an ear out for him.

## Medals for 2019

Medals are awarded at the end of the year for three different levels in QTX.

Gold – 400 QTX QSOs

Silver Medal – 300 QTX QSOs

Bronze – 200 QTX QSOs

At the end of October, we had four Gold earners: N5IR (462), K2KRG (434), N5PHT (432), and N8AI (424). There are also two Silver earners so far: W9EBE (331) and KC0VKN (302). We also have four Bronze medal earners: I5EFO (281), K1ESE (279), KB6NU (217), K8CIT (213). Congratulations to all.

## QTX for October 2019

| Call  | QTX | Call  | QTX | Call   | QTX | Call   | QTX |
|-------|-----|-------|-----|--------|-----|--------|-----|
| K8CIT | 107 | F5IYJ | 29  | K5YQF  | 7   | GM0EUL | 1   |
| N5PHT | 82  | K1ESE | 23  | N3FZ   | 4   | MI0WWB | 1   |
| N5IR  | 52  | KB6NU | 22  | WB6TOU | 4   | SV2BBK | 1   |
| W9EBE | 39  | N6HCN | 18  | KB8GAE | 3   |        |     |
| K2KRG | 33  | K4AHO | 11  | N5LB   | 3   |        |     |
| I5EFO | 30  | K8UDH | 8   | G3WZD  | 1   |        |     |

## MQTX for October 2019

| Call   | MQTX | Call  | MQTX | Call   | MQTX | Call   | MQTX |
|--------|------|-------|------|--------|------|--------|------|
| N5PHT  | 36   | W9EBE | 19   | G3WZD  | 6    | KB8GAE | 2    |
| K2KRG  | 27   | K1ESE | 18   | GM0EUL | 6    | N3FZ   | 1    |
| K8CIT  | 22   | K4AHO | 15   | MI0WWB | 5    | WB6TOU | 1    |
| SV2BBK | 19   | I5EFO | 10   | N6HCN  | 3    |        |      |

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### 2019 Totals for QTX:

| Call   | QTX | Call   | QTX | Call   | QTX | Call   | QTX |
|--------|-----|--------|-----|--------|-----|--------|-----|
| N5IR   | 462 | N6HCN  | 141 | KB8GAE | 34  | W5LA   | 5   |
| K2KRG  | 434 | K4AHO  | 117 | K0DTJ  | 29  | WN7S   | 5   |
| N5PHT  | 432 | K5YQF  | 69  | SV2BBK | 26  | WA8IWK | 4   |
| N8AI   | 424 | W0ITT  | 59  | N4PIR  | 24  | G3WZD  | 3   |
| W9EBE  | 331 | K8UDH  | 55  | DL5DBY | 21  | KG4Q   | 3   |
| KC0VKN | 302 | WB6TOU | 54  | GM0EUL | 16  | N7MQ   | 3   |
| I5EFO  | 281 | N4DT   | 50  | W3PNM  | 15  | AB7MP  | 2   |
| K1ESE  | 279 | K6DGW  | 44  | N3FZ   | 12  | K3GHH  | 1   |
| KB6NU  | 217 | HB9CVQ | 39  | M0WWB  | 7   | K3WJV  | 1   |
| K8CIT  | 213 | W3WHK  | 37  | N9SE   | 7   |        |     |
| F5IYJ  | 199 | AJ1DM  | 36  | N5LB   | 5   |        |     |

### 2019 Totals for MQTX:

| Call   | MQTX | Call   | MQTX | Call   | MQTX | Call   | MQTX |
|--------|------|--------|------|--------|------|--------|------|
| N8AI   | 488  | K4AHO  | 67   | K8CIT  | 40   | N9SE   | 6    |
| K2KRG  | 374  | W0ITT  | 65   | K8UDH  | 35   | AJ1DM  | 4    |
| W9EBE  | 280  | GM0EUL | 59   | W3WHK  | 25   | KG4Q   | 3    |
| SV2BBK | 217  | HB9CVQ | 55   | WB6TOU | 21   | N7MQ   | 3    |
| M0WWB  | 198  | DL5DBY | 52   | N3FZ   | 15   | W5LA   | 3    |
| I5EFO  | 196  | N4PIR  | 44   | K5YQF  | 12   | N5LB   | 2    |
| N5PHT  | 192  | KB8GAE | 43   | G3WZD  | 11   | WA8IWK | 2    |
| K1ESE  | 153  | N6HCN  | 42   | AB7MP  | 10   | K3WJV  | 1    |
| K6DGW  | 91   | KB6NU  | 42   | W3PNM  | 10   |        |      |

I encourage you to get on the air with the purpose of talking to someone for a while, just for the fun of it. Then submit your ragchew QSO info via the QTX area of the CWops website. While you're there you can also comment about your longest or most interesting QSO, tell us about what you did when you first got on the air as a new CW operator, or anything else you would like to say about CW ragchewing.

73,

**Bruce K8UDH**, QTX Manager



# My Story: New Member Biographies

## John Muzyka G4RCG/M2G

Thanks to all my sponsors for making it possible to join CWops. I am looking forward to meeting you all on the air.

My interest in radio started when I was a very young teenager when we had pirate radios stations in the UK who used ships off the coast of the UK (they operated outside the 3 mile limit so they were in international waters and couldn't be prosecuted) My brother who worked in the Merchant Navy brought me a transistor radio when he was on one of his working trips to some exotic place and I can still remember vividly going to bed and getting the radio out and under the bed covers listening to these Pirate Pop Radio stations for many hours until I fell asleep.

I was first licenced in 1982 after a short spell on CB which didn't do anything for me, I passed both parts of the "RAE" at the first try and got my "B" class license with the call G6LCP (my wife Trish now has this call). This was just a VHF/UHF license and in those days, you had to pass a 12 wpm Morse

test to get your "A" class license which gave you HF access, so I went all out to learn CW. It took me all of 6 weeks after which had to go for a Morse Code Test at a GPO Coastal Station; I passed first go and got the call G4RCG and never looked back. In June 2010 I applied and received my contest call M2G which I use in all the major contests that I take part in.

My Interest in radio is just HF and LF, I don't bother much with VHF/UHF and all CW or RTTY and PSK63 (I only use Data in contests). I have absolutely nil interest in FT8! I have a good antenna farm with 2 towers and antennas for 160-6m; if you would like to see them go to my QRZ.COM page and have a look at the Drone Video I have of the QTH and antennas. My radio is a Kenwood TS990S which I have had for 5 years now, great contest radio. I have an Acom 2000a as the main

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amp with an Acom 1000 as a backup.

I have been retired now for 5 years, I was the Managing Director of a Security Business which specialised in wireless Intruder alarm and CCTV, we sold out to a big player in the security game and never looked back, I love retirement as it gives me the time when I want, to get on the radio to take part in my first passion which is CW!!

## John Van Vorst N9OL

My interest in ham radio started as a high school freshman. My home-room teacher was a ham and got me into some local classes including a CW class offered by the local radio club. However, I could not achieve the 5 wpm code. The biggest problem was the distractions for a high school boy: cars and girls. Those distractions won out for a few years until, while attending Indiana University, I began working on campus for a ham who shared the hobby with me and let me operate his station. I got hooked again. This time I tackled code and won, getting my novice ticket in 1983 and becoming KA9RLT.



I had a blast that first year with my Century 21 transceiver and random wire antenna. A year later I upgraded to Advanced Class and became KD9JZ, traded the rig in on a Ten Tec Omni D and got to know a microphone. But CW was always my main mode. A few years later as the date approached where the 20 wpm code requirement would be dropped I made it a goal to upgrade to Extra Class and pass that 20 wpm test. I did it! Soon after that I traded that 2X2 call for N9OL!

I have always operated mostly CW and still do. My favorite key is a Lightning Bug, and I enjoy rag-chewing. But until this past year I never seemed to improve my proficiency in CW above the 18-21 WPM. Then I found CW Academy. I took a level 2 course led by Mark K5GQ and Van N5TOO and they shared tips, techniques, and tools to help me improve my CW skills and increase my speed of copy. I still have work to do and intend to keep working on becoming a more skilled operator.

I have worked for 30 years as a manager of computer systems and networks at an energy company. My wife Kim and I reside in Evansville, Indiana and have 2 grown sons and 2 spoiled pups. I have a modest station based on the Kenwood TS-590SG, and I also like to operate portable and mobile, and some QRP.

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## **Bob Blackman 2E0OBO**

Let me first thank Roger G3LDI for nominating me and Jim G3YLA, Tom AB6Z, and Emil I5EFO for sponsoring me.

Having taken part in a CWT a few weeks ago, my first impression was the speed with which QSOs were conducted! Getting up to 30wpm will be a challenge and I hope Roger's faith in me has not been misplaced!

Joined the Royal Navy at fifteen as a communications rating and spent the last fifty-seven years meandering through life's rich tapestry, finally retiring at sixty five, having spent the last six years and probably the most rewarding, as a class room assistant caring for children with special needs.

It would be fair to say that I am no master of radio theory and my pleasure in amateur radio is almost entirely in operating. This may sound like heresy but let him without sin cast the first stone.

Only joking! Apart from general DX work, I take part in the RSGB's 80m contests where we are forced to use SSB and RTTY/PSK....I know, horror of horrors. Then there's FT8, I can hear the intake of breath as I typed FT8, oh! no! Actually, I have dabbled in the dark side but in my defence, it was only for academic research.

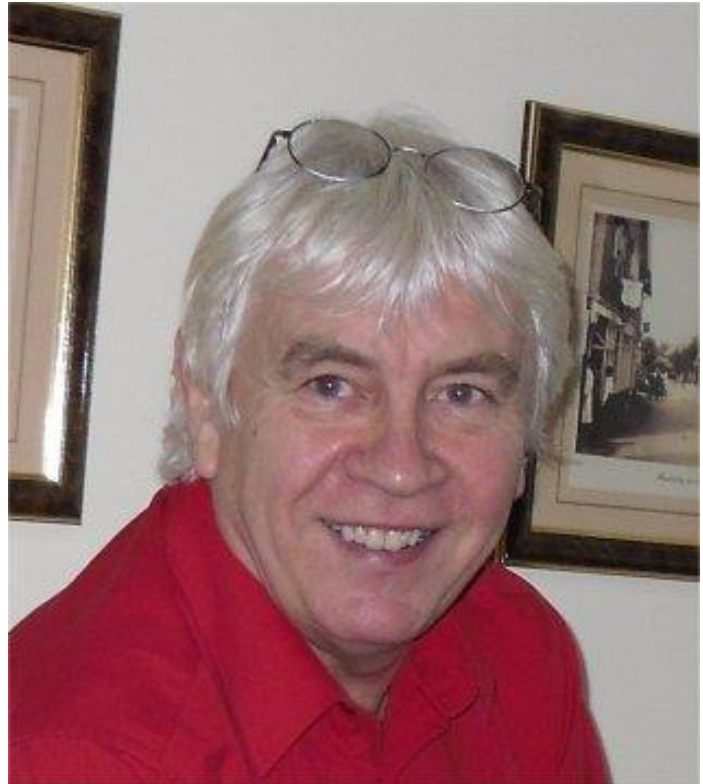
What I really enjoy is portable or mobile. My favourite spot is Walcott Beach, just five minutes from me and the other is a pub car park just down the road, right on the sea front. Had good results on 10w. That nice saltwater makes all the difference or is it the beer? Well, it's fun whichever way.

Amateur radio is fun and when it isn't, I'll stop. Looking forward to meeting you all on the airwaves at some point and remember, QRS to 25wpm.

2E0OBO . . . . . Sooooooooooooo many dah's.....now, which dah was I on?

## **Will Smiley NJ4Q**

As a new member of CWOPS I feel I should say hello to all the accomplished CW operators that make this realm of Amateur radio another joy. I was first licensed in 1982 as WD4GCE and became interested in wire antennas and CW. A good mix, I think.



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Around 1984 I updated to Amateur Extra but let Amateur radio go for the next thirty-five years to pursue business interests and raise a family. That's a pretty long time off the air.

In 2014 I retired and looked around for my old Ten Tec Omni D and realized that things had changed considerably in those 35 years with computer control and other niceties to make operating more of a joy. My friend, rural neighbor and mentor Bill, KC4D, a CWOPS Ambassador, arranged for me to purchase from him another CW machine, a Ten Tec Omni VII and enter into a new realm. With N1MM loaded and my interest in CW back in force I took Bill's advice to attend the CW Academy. Slow rural internet speeds made that impossible so entering every CW contest I could raised my speed up considerably.

And now, as a CWOP #2374, I have had the pleasure to meet truly proficient ops that are welcoming in the CWT sessions. I really enjoy having the opportunity to improve my skills and ear.

Our Potomac Valley Radio Club meets on Wednesday mornings which makes the 1300z session out of reach. It's the 1900z session that I usually join in and look forward to each Wednesday PM.

My best to all and 73.

## **Ken Tucker WF6F**

It sure took a long time to get over the sweaty palms on CW. I guess this is why so many years ago I gravitated to DXing where the contacts were short and sweet - just repeated call signs and 599's. Never ran a frequency though because I'd actually have to decode call signs on the fly. That was impossible!

But now, thanks to Buz AC6AC and his great advisors there's no more sweaty palms and there's also been a few "almost ragchew" QSO's.

He's been a real confidence-builder and I am truly indebted to Buz. After almost 35 years of ham radio, I can actually do some real "head copy" now. I get a little giddy and excited when I hear code now, so thank you CW Ops!!

Years ago, my next-door neighbor and long-time Elmer was Earle, K6WS (SK). Back in the 50's Earle was a paid CW op in Alaska. He was the only ham I ever met that could carry a full-on conversation with you while at the same time he was copying 25+ code on his old "mill" typewriter. Earle gave me my novice code test and passed me on the condition that I actually learn something besides e, t, s and o. So, I went from novice to extra over the next year under his guidance.

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Before I knew it there were antenna wires strung back and forth through each of our back yards. Winter evenings were always quiet time on my radio because that's when Earle was on 40 or 80 ragchewing; QRMing my neighbor was just not a cool thing to do.

I think I learned more about electronics from Earle and his ham radio escapades than I ever did in school. He would explain how things worked without ever mentioning Maxwell's equations!

He loved his hobby, made several careers out of it, yet he found time to mentor newbies and share his enthusiasm for CW. He made it easy to understand how important it is to give something back to our hobby that we all love so much.

Buz and Earle have a lot in common with their unselfish sharing of wisdom - and CW Ops is very fortunate to have such an outstanding CW teacher as Buz. I know I am very thankful.

Very best 73 to all and I'm looking forward to some "almost ragchew" QSO's with you soon.

## **Erhard Engfer DL5JQ**

Born in May 1949, I´m retired now some 5 Years ago. I have been a Key Accountant in Cable-TV Business during the last 13 Years.

Started amateur-radio with my first Callsign DG3JK - on VHF-Bands only - but changed License-Class very soon and gained my Callsign DL5JQ.

Since 1981 I´m a member of the Radio Telegraphy High Speed Club, HSC, since 1983 in Very High Speed Club, VHSC, as well.

I like to take part in contests, have been a member in several (smaller) Dxpeditions, so I´ve found a lot of friends in the world during the years.

Well, 99% of my ham life is characterised with Dits and Dahs ...

I´m very proud to be a member in this group of excellent CW-Operators.

Looking forward to seeing you on the bands.

## **Will Roberts AA4NC**

I have been a CW enthusiast for years, but never joined CWOps until now when I started operating CWTs. Thanks to K7SV, N3JT, AA3B, K3WW and others for inviting me to join.



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My introduction to amateur radio came very early via the SWL route around age 8. My Dad had a portable shortwave radio and I discovered that I could hear European broadcasts as well as cool big city AM broadcast stations when the sun went down. For a farmer's son from rural North Carolina, this was when my eyes were opened to a great big world out there. I was fascinated by the "magic" of radio, and still am over 40 years later!

Besides listening to radio, I was learning to play guitar and playing with garage bands. I didn't have a teacher, rather learning from Beatles and Rolling Stones records. There were also no local ham teachers, but while in junior high school, I took a Novice class from a local club (Cape Fear ARS) about 30 miles away in Fayetteville, NC. Six weeks later, I was WN4PSL and hooked on CW. I always felt my musical experience made learning CW easier. Advanced class WA4PSL came several months later, then a year later in 1977, I passed my Extra and was AA4NC. I have always been interested in DXing and contesting from the beginning. While in college, a trip to operate VP2E gave me a lifelong addiction to running DX pileups from the "other side". We set a record and won #1 World Multi-Single, and I was also addicted to amateur radio contesting. This group included well known testers K8MR, AA4GA, WB6SHD (NH6V), K8ND, KU8E and KW8N that have been life-long friends.



My radio interests led to an electrical engineering degree from N.C. State (Go Wolfpack!) and Professional Engineer licensing. After college, I started a 33-year telecommunications career in the electric power industry, retiring with the country's largest utility, Duke Energy. In 1984, I became a private, then commercial rated airplane pilot. I have owned several planes since then, currently a Mooney M20J. I have been able to combine amateur radio and airplanes by flying my plane to several DXpedition locations.

Living near Raleigh, NC, I built a two-tower station that saw many single op and multi-single contest operations from 1986-2015. Hosting great guys like N4YDU, K4MA, K4QPL, KI7WX, N4CW, W4TMO, K4OV, K9PG, OZ1AA, NT4D (SK), and many others was the highlight of this period. I was a part-time DXer, reaching DXCC Honor Roll and 9BDXCC. I was a competitor at the first WRTC 1990 in Seattle as well as being a judge at WRTC 2018 in Germany. I have attended the Dayton Hamvention over 30 times. The friendships formed on the air and at these events are by far the best aspects of amateur radio to me.

In 1992, I went on my first "real" DXpedition to Navassa Island as AA4NC/KP1 with WA4DAN, AA4VK, and N0TG. Another radio addiction was born! This team is still active today and has oper-

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ated from CY0, KP5, CY9C, PJ5, PJ6, PJ7, HK0S, PY0F, T8, KH0, KH2, VK9M, CT3, 5W, UA0, V31, VP5, YS, YN, HH, HP, HR, 3DA0, ZS and many other DXCC entities. I have also been fortunate to be part of great teams such as K3LR, W4MR, W1AW/4, N4C, VP5M, N1LN and clubs such as PVRC. My life "bucket list" includes traveling to and operating from 100 countries. I am almost 70% there, operating with groups and as a single op. Even though I operate all modes, CW has always been my favorite!

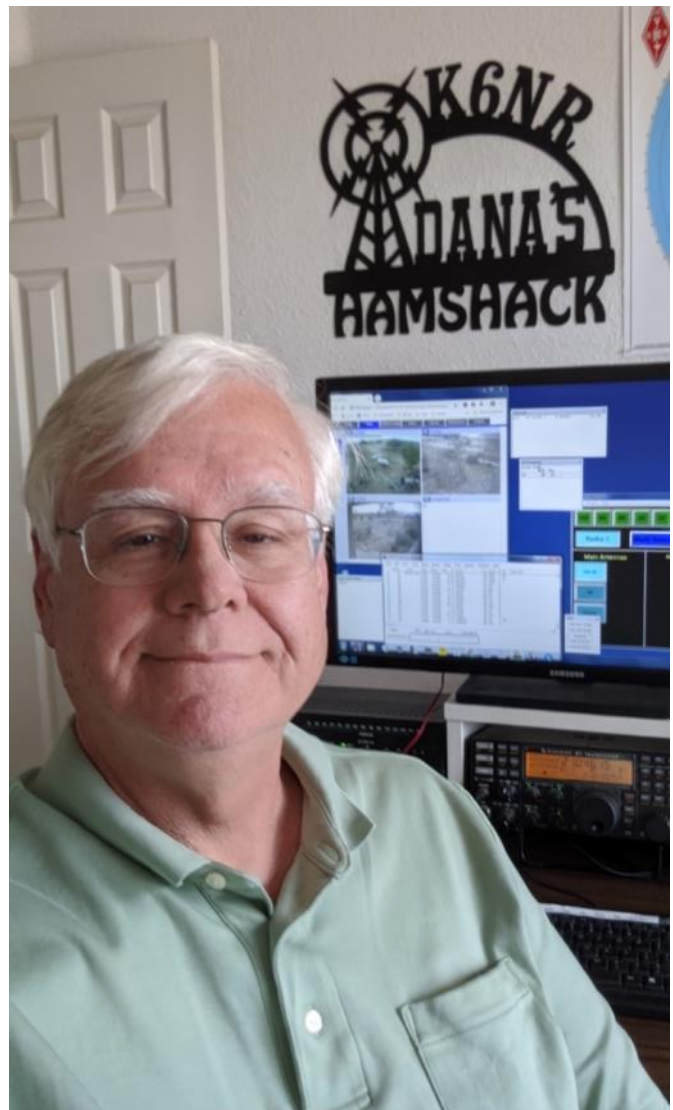
After retiring in 2016, I moved to Topsail Island, a barrier island on the southeast coast of North Carolina. I have a small station here with a K3/100 and an 80m OCF dipole where I casually participate in contests and CWTs. For major contests, I can usually be found on the air from a DX location or a multi-op. I have also come full circle back to my garage band roots as a guitarist/singer/songwriter, playing in North Carolina, South Carolina and in the Florida Keys. I have also enjoyed playing guitar with several N0AX-led ham radio bands at Dayton, WRTC and W4DXCC events. I make ends meet as an equities and real estate investor. In February/March 2020, I will be going on a DXpedition to the South Pacific with stops at 3D2, P29, YJ0, H44, TX7, VK9N, VK4, ZL. See you on the air!

## **Dana Roode K6NR**

I am very pleased to be a part of CWops; many thanks to my sponsors. CW has always been my primary mode.

My father was a ham, and I have been interested in radio for as long I can remember. When I was 13 years old, I learned the code listening to 40m on a Heathkit HR20. I was licensed in 1969 as WN5YMV in Richardson, Texas. Dad (W5EQ SK) administered the novice test for me, and others including N5RZ (WN5AAR) and K5NZ (WN5AAS). We were part of an active ham community, centered on the Richardson Wireless Klub. Dad worked for Texas Instruments, who had a very well-equipped club station at the time. Carol, K5DMM (SK), drove me to the FCC in Dallas to take my General and Advanced tests and I became WA5YMV.

Not too long after, my family moved to Cincinnati where I was WB8HQD. I operated on 6 meters with a Heathkit Sixer; we had a house on a hill and I worked lots with those 5 watts of AM. I built an 80m vertical and was on CW with a Viking Valiant transmitter and a military command receiver.



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The family moved to Irvine, California, in 1972, where I became WA6NGO and Dad K6VO. Joy of joys, we were in a tract with CC&Rs, but found ways to put up antennas. Dad had a vertical he'd put up in the backyard; when they complained he'd take it down for a few weeks then put it back up. I had attic dipoles, and a 40m wire vertical that snaked up the house to the second story roof.

I graduated with a Computer Science degree from the University of California Irvine in 1977 and went to work as a systems programmer at the UCI Computing Facility. My wife and I bought a house in Irvine that did not have CC&Rs, and I was on the air with verticals and the like. Our four kids kept us pretty busy in the 80s and 90s; I always had a station on the air but was not terribly active. I became K6NR when the vanity callsign gates opened in 1996.

In 1999 I had the great pleasure of visiting another old Richardson friend, Steve, K5MR. Steve had an impressive multi-tower station; turns out stacks of 20m Yagis work better than a vertical (who knew?). The experience lit the fire for me to do something more than I could do on my 1/8th acre in Irvine. Later that year, my brothers and I bought a house in the California high desert on 2.5 acres. I setup modest antennas and operated remotely from Irvine using a Kachina transceiver and dial-up modems. My station progressed over the years to include Yagis and better technology (see [www.qsl.net/k6nr/remote](http://www.qsl.net/k6nr/remote)).

I retired from UC Irvine this past summer after 41 years; I spent my last 10 years as UCI's Chief Information Officer. It was a joy to see technology and its uses progress over that long timespan. Retirement has been great so far, catching up on deferred maintenance, taking a few trips, and the like. I hope to join a DXpedition sometime, and/or contribute to other multi-operator efforts (let me know if you need an op!). My wife will be retiring in the near future, and that will open the door for more travel as well.

I am enjoying more time on the air and delighted to discover CWops and its resources. Thanks again for bringing me into the fold.

## **John Webb AK4AT**

On my way to becoming a member, I completed Levels 1, 2, and 3 of the CWOPS CW Academy program with advisors Paul Nelson/K4JAZ, Bill DeVore/W3PNM, and Joe Spencer/KK5NA.

I am located in Floyd County, Virginia in the Blue Ridge Mountains, on a farm situated on top of a 3,100 feet elevation ridge, with a 2,200 ft. longwire stretched across it in two legs.

I am a retired aircraft technician/flight line mechanic and real estate broker. I still oper-



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ate a general printing business (see QSLpostcards.com for QSL card printing!), and I am a pilot.

I enjoy all types of operating, including CW, Phone, Digital, Weak Signal Propagation, and the SO-TA program. Other interests and hobbies are flying, antique clock restoration, weather & instruments, antiques, and mountain hiking.

Many thanks to Dan, K4FN for the nomination and for the sponsors who supported my nomination.

## **Bill Weaver WE5P**

I'm a retired engineer from the medical device industry and live in Richmond, Ky.

I grew up in Westmoreland County, Pa about 45 miles Southeast of Pittsburgh. With the help of my Elmer, Roy W3QCP (SK), support from my parents and much study, I passed my novice test in May of 1968 at the age of 13 and received WN3KMA in June of that year.

With a Globe Scout Deluxe, an old NC-125 of my father's and a hand full of crystals, I was off and running. About a year later I passed the general test at the Federal Building in Pittsburgh. At the next quarterly test session in the fall I flunked the advanced test, or so the examiner informed me. I had a difficult time with that test and didn't have too much trouble believing that I had failed. Six weeks or so later my ticket arrived in the mail. The test was apparently misgraded by the examiner or a clerical mixup in Washington? I'll never know and didn't ask!



I had an on and off history in ham radio after high school starting with a 12 year stretch of living in college housing and rentals as a young engineer in Houston, Tx. I finally bought a home in 1985 South of Houston and I got serious. I upgraded to Extra that year and received the call WE5P. A few years before that I met Dave, W5PWG (SK) a colleague at my new place of employment. Through Dave's association with Bill, K4LTA I received an invitation to make a trip to J6L for the upcoming 1988 ARRL DX CW. This was followed by consecutive trips to J8 and J3 the following years. This was no doubt the highlight of my ham radio "career". I was active on the Gulf coast until the mid 90's when, due to heavy workload (and truthfully, job burnout) I entered another down time.

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Following a 2010 move to Kentucky I finally got bitten by the bug again and at the end of 2018 I bought a rural property in Richmond, Ky. With renewed vigor I have been building my station unencumbered by HOAs and neighborhood RFI (mostly!). Lots of work remains but I will get there with a lot of help from friends.

While still operating from a temporary setup and new K3S running barefoot, I have been enjoying participation in the CWT, contests and chasing DX while trying to shake off the rust of 20 years and adapt to the progression of age.

## **Peter Sundberg SM2CEW**

I live in a small village north of the city of Lulea in Sweden. Lulea is located at latitude 65.4N so I live just a few miles south of the Arctic Circle. But as far as radio propagation is concerned, I am well within the Polar Cap with all that follows regarding propagation disturbances.

I retired two years ago after 40+ years with the Swedish Police where I've upheld a number of different positions and leading ranks.



At all times since I became licensed in 1971 I have done my best to follow the radio amateurs code of ethics and suggested operating procedures. Even though, or maybe I should say because, pretty much of the detailed regulation regarding amateur radio is now gone, I find it important that we uphold high standards and strong ethics in our hobby. If we don't, our status as highly skilled radio operators and technicians will diminish and eventually fade out completely. Such a scenario would indeed drain the hobby of all special legislation and rules that now give us a unique status compared to other users of the radio spectrum.

In my opinion CW is the most valuable core of amateur radio. And I would say, that with very few exceptions, learning how to master CW well is an excellent way to become a really good and dedicated ham radio operator. All of this might just sound like a lot of fine words from me, but I think you understand by now how my love for CW and good operating habits is rooted in me. All this since deciding to become a "ham" – a radio amateur.

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It all started in 1969 when I visited a colleague of my father who was a ham (SM2BPE) and for the first time saw his station, an HRO 7 receiver and a Harvey & Wells TBS-50 transmitter.

Seeing him communicating, using a Vibroplex CW key, with a ham on the other side of the Atlantic Ocean, while at the same time translating CW to spoken words for me, had me flabbergasted. I decided then and there that I was going to learn CW and become a ham myself. This is my thing!

My father bought me a surplus BC-312 receiver for Christmas that year. And as it turned out, our national society was just starting up a new ham recruitment project by transmitting CW classes on 80m and 40m on weekends. So, I spent many months trying to learn CW via the airwaves, fighting QRM, QRN and bad propagation on the crowded bands. Remember the QRM on 40m in those days?

CW filters were non-existent in the BC-312 so I had to use the filter in my ears instead. I actually think that this has been helpful to me all along my ham career. Many times I find myself listening to CW in wide bandwidth rather than through a very narrow filter when digging out marginal signals from the noise.

A bunch of hams at our local radio club were also helpful and introduced CW classes so I eventually passed the novice class exam and became SM2CEW in June 1971. Operating at first was restricted to CW, XTAL control and maximum 10w input.

I had a ball, made new friends every day on the bands and I must admit that I skipped school now and then just to play radio. A bit later I passed the mid class exam, allowing me to use a VFO and 75w input, still no phone on the HF bands. My CW proficiency increased dramatically as I was now able to look up stations and call them on their own frequency. The increased power also helped. More stations in the log and my CW speed increased exponentially.

Passing the highest-class exam in 1974 was no problem. Now allowing me to operate on all bands, all modes with a maximum for 500w DC input power. At the time, Swedish license classes were restricted by minimum age, therefore I could not take the exam for the highest class until I was 18 years old.

I started to enter contest regularly from the very beginning in 1971 and got hooked. Contesting has been a major interest throughout my whole ham career, entering both as single op and from various club stations as part of a multi op operations.

In my opinion, the very best years in contesting were all prior to the development and availability of DX clusters. I won't mention any calls here, but there are a lot of contest operators out there that I admire for their skills. Many of them were regularly among the top 10 in the listings, whichever contest they entered. Some of them are still active and I now find them in CWTs on Wednesdays! Impressive.

For a couple of years during the mid-70's I had the best possible mentor and CW proficiency tutor in Bob W9KNI. At the time Bob lived in Chicago and we had regular very high-speed CW QSOs

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just as Bob came home from work in the afternoon. Bob was already then a fantastic CW operator and was “secretly” developing his Bencher paddle, a concept he tried to explain to me over the air but I never quite grasped how it worked and what it looked like. Until I finally saw some pictures when it was advertised. If I remember correctly, the Curtis one chip CW keyer was also part of Bobs developing work at the time.

Bob is, as we all know, the perfect DXer! During this period, I was fortunate enough to learn so many things on how to steadily build up my DXCC count. I listened and learned from Bob and his experiences, and still to this day make use of what he told me. And his advice was not just limited on how to work DX, it was also about how to behave on the ham bands to earn respect and to be a good colleague. I am ever so thankful for this.

Jumping forward some 40+ years I am still active daily on CW. The first thing I do in the morning is to turn on my radios. And the last thing I do at night is turn them off to get some hours of sleep. CW takes me all around the globe, on any band from 1.8 MHz to 10 GHz.

From 144 MHz and up I bounce signals off the moon surface to work CW DX. My antennas for this are rather big by comparison. I have even made a rather unique CW moonbounce QSO on 28 MHz using my stacked Yagis looking at the moon on the horizon.

On HF a multitude of antennas help me work DX. Now that the high bands, where I use stacked Yagis, are closed due to lack of sunspots, my verticals for 160/80/40m allows me to make use of a more quiet ionosphere to enjoy great propagation on the low bands. At times even the polar path opens up on 160m to the western part of North America and to the Pacific.

But I don't limit myself to operating from home with high power and big antennas. Operating / portable with low power and a wire antenna is equally fun. Every contact that goes into the log-book under such conditions feels like a big achievement to me. I even do contesting this way, especially during the Scandinavian Field Day contest in spring and fall.

More info about myself and my station can be [found on my webpage](#)

There are also sound files on the website that might give you an insight to what Top Band sounds like when conditions are really good up here. CW at it's best.

To wrap it up, a good friend of mine, Jim SM2EKM, used to preach that we all need to call CQ more. We all can't just listen all the time as we cannot hear each other's receivers to find out who is out there. I think this is a very good suggestion and I try to follow Jim's advice every day. On a band of preference depending on conditions and what my target is. And believe me, it works!

Many thanks to Lar K7SV for nominating me and to the people sponsoring me for membership in the CWops group. I am now proud a member #2385.

## **Robert Krasowski NW2Z**

First, I would like to thank Mike K4GMH, for nominating me, Joe N3HEE, who was my CW Acade-

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my instructor, and all of you that QSO with me. I know you had to suffer with my horrible code, incorrect spacing, changing speed, and spelling mistakes. Thanks to all of you, I became a member of CWOps.

I am Polish, I grew up in a Communist country with a lot of restrictions. Since I can remember I was fascinated by radios. I remember my grandfather sitting in front of the old vacuum tube receiver and listening to Free Europe Radio. It seemed incredible to me that you can hear people from the other side of the Iron Curtain. When I was 11, I joined a local ham radio club. We did not have much equipment to work with then. We only had an old military radio, RBM1, only 1 watt and AM. My mentor at that time was a physics professor Ryszard SP4CJA. Eventually I purchased an old WWII receiver from a Russian tank (RS20). I spent hours listening to it. I discovered that people from the "other side" were nice and not monsters like they were pictured in the Communist propaganda. In December of 1981, the Polish Government introduced Martial Law. As a consequence, my receiver was confiscated by the police. I have never seen it again. It was very difficult to get a ham radio license in Poland. In 1990 I came to the USA. Very quickly I realised that becoming a licensed ham radio operator was much easier here. Within a year I became KB2PNM with a Novice class license. I can say that my CW adventure started here, but this is not exactly true. I learned 5 wpm from Gordon West book and tapes. Now, I know that this was the wrong way to learn CW. Two years later I upgraded to a General Class License. That required 13 wpm. I miraculously passed, and it was more pure luck than skill. I did not like CW. I did maybe 5 QSOs on that mode sweating and suffering. It simply was not my "thing".



I have been an active ham radio operator for all these years. You could find me on SSB, all digital modes. I ran Pactor mailbox, PSK Mail server, I experimented with WSPR (I did tracking with Ultimate 3s transmitter while sailing from Tonga to Fiji), and I've worked a few satellites. My "speciality" was communicating with and helping sailors. I've helped close to 100 sailors over a period of 30 years. But still, no Morse code.

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About 1.5 years ago, I went to our ham radio club meeting. We met in LNR Precision shop. I saw a Mountain Topper that was produced there, and something clicked. I realized that I can go on my sailing trips with a small radio that can fit in my pocket. However, there was one obstacle. Mountain Topper has only CW mode. Therefore, I started to practice. It is much easier now since there is a lot of software available on iPhones and computers. I quickly relearned all the characters and became quite proficient with paper copy. I was able to manage up to 20 WPM. I became a SKCC

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club member, my member being 15533, and I was doing "standard" QSO on the SKCC part of the band. However, I wasn't satisfied. Sometimes I tuned into the CWOps side of the band and I was amazed at how people can do that. I realized that the only way to improve my speed was to do head copy. What a shock. When I stopped using the pencil and paper, I couldn't copy anything. I was able to catch some words at 8 WPM. At that time I had already signed up for the CW Academy level II. I waited a few months and in September I joined a group of four hams like me who wanted to improve the speed of their code. Joe, N3HEE, became my instructor and I admire him for his patience and incredible ability of copying my code with my many, many mistakes and spelling errors.

I enjoyed the Academy tremendously. It is free, but I joke that it was very expensive to me. I purchased a Begali HST (great key), Flex 6600 and KPA 1500. When my wife asked me how much all of it cost, I told her a thousand (I left "s" at the end of the word silent so please do not tell her). CW Academy was the best thing I did for my CW. It built up my confidence and showed me that it was possible to copy in my head. Since that time, I do at least one QSO a day on CW. I met John, K3WWP, who became an inspiration for me. So, now I do QSO daily. Every Thursday I talk to Mike, K4GMH. His code is as perfect as it can get. I am not much of a contest guy, but I did a few CWTs and I'm ready to do more. You can hear me on 80 or 40 every day, but please be aware, when you call me, it is not going to be 599 Robert NC, we will rag chew.

I am a cardiologist by profession, so my life is very busy. CW allows me to relax from my sometimes stressful work life. Also, meeting all of you is fascinating.

Thank you to all of you that helped me become the member of CWOps. I'm looking forward to many more QSOs, so see you on the air!

