

Solid Copy

The CW Operators Club Newsletter

June 2019 — Issue 113



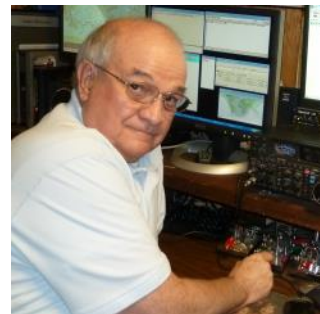
Cold War CW



Joop PG4I shares his memories while serving in the Dutch army. [See story page 13.](#)

President's Message

The Dayton/Xenia Hamvention was the center of attention and activity in May. This year the weather was warm and nice without any storms. The Greene County Fair Grounds were in great condition and the crowd was huge. If you missed going this year, put it on your calendar for next year. At the CWops Booth we had a sign-in sheet for members and I'm sure we missed a few but the overall number of member sign-ins were 107. We also conducted the CWops Call Sign Copy Competition in the back



(Continued on page 2)

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 June 12-13, 2019

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](#)

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of the booth. Many of our members were scoring in the 40s, 50s and 60wpm range. We had a tie for first place with Bryant KG5VHO and Jim N3JT topping out at 64 wpm. Congratulations, well done.

Among those members signing in was Bert F6HKA. Everyone enjoyed meeting the man behind the call sign who is so regular in participating in the CWops activities. There may have been other DX CWops members there, but we missed seeing them.

There was a special, unexpected event that happened to CWops at the Hamvention. I was approached by Jack Gerbs WB8SCT, CWops #1709, a member of the Dayton Amateur Radio Association (DARA) and this year's Chairman of Hamvention and asked to appear with other members of our club at the DARA Awards Booth at a specific time. I asked Jim Talens, Secretary, Peter Butler, Vice-President of CWops and Rob Brownstein of CW Academy to join me. We didn't have any idea what to expect. We observed others having their picture taken and a piece of paper given to them. Our

turn brought us on deck and one of the DARA officers spoke, saying that CWops truly represents what the DARA Campaign is doing: MENTORING THE NEXT GENERATION. Along with the compliments to our club we were presented with a check for \$1,000 as an award and encouragement to continue with our mission. Congratulations to all CWops members for making this happen and contributing in so many ways. Thank you, DARA.

To kick off the Hamvention weekend the CWops Awards Dinner was successfully staged at the Spaghetti Warehouse. We had a full house attending the dinner. Over 100 members and family were seated in the dining area with a few others in the adjacent dining car. Thanks to Bill KC4D and all that he does to prepare, arrange and follow through on the details to make this smooth and successful. Next year Dave K8CMO will take over some of Bill's responsibilities. Dave lives closer to the meeting site and he will also be looking for some improvements in the public address system so the speaker can be heard better. Bill has been lugging the portable system we have used back and forth from his home QTH.

The Annual Award for ADVANCING THE ART OF CW was given to two organizations this year. Riki Kline K7NJ made the presentations as Chairman of the Committee who evaluates and determines the annual winners. The first organization is FISTS CW Club. It was founded in 1987 with the mission of A) Further the use of CW (Morse Code), B) Engender friendships among members and C)

CWops CALL SIGN COPY COMPETITION			
35 WPM & Up		Call Sign	WPM Score
N4HAI	48	11459	AC4BT 42
AD4EB	49	10717	K3MD 40
			KGRB 50
			NMJC 44
			KG5HYO 64
			N3JT 64
			W2JU 58
			NM5M 52
			P44W 45
			AD5A 45
			KØVBØU46
			KIBG 47
			NFBM 34
			KTØF 56
			KCØVKØ 49
			NIMM 40
			W1UJ 54
			NB1U 43
			NX9G 35
25 - 34.9 WPM			
W4ALF	29	3060	
W1BA	30		
15 - 24.9 WPM			
KØVXU	19	1718	
5 - 14.9 WPM			

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Encourage newcomers to use CW. More information can be found at [www.Facebook.com/FistsCwClub](https://www.facebook.com/FistsCwClub). Larry Fridley KA8HFN represented FISTS and accepted the award for them. The second Award was presented to Hans Summers G0UPL, CEO of QRP Labs. Hans designed the products his company produces, and many are familiar with the technically advanced CW transceiver products called QCX series. They are single band units and are purchased in kit form. QRP-Labs has sold thousands of these worldwide and is continuing to research, design and manufacture more transceivers and receivers for hams. The QCX units sell for less than \$50 and can be a gateway for new CW enthusiasts to get started on the air. Congratulations to FISTS and QRP-Labs for their work to advance the art of CW.

CWops also held a drawing for other prizes. Random numbered tickets were drawn from the hat and the winners had to be present. The prizes were furnished by N3ZN and AB6Z and W7RF aka RadioDan. A top-of-the-line ZN-9 iambic paddle was furnished by Tony N3ZN, owner of N3ZN Keys, LLC. You can see Tony's products at www.n3znkeys.com. An Acrylic cover for the ZN-9 key was furnished by Tom Kelly AB6Z. Additionally, Tom AB6Z furnished a picture of the laser engraved finger pieces he has designed. He supplied three claim certificates for the winners to specify the specific dimensions of their paddle finger pieces and hole placements. He will craft the pieces with their call sign, CWops number and the CWops logo. Tom said these are just gifts for the drawing and he doesn't intend to offer them for sale. Very nice and CWops appreciates all that you folks do for us. Dan Magro W7RF's company call RadioDan.com and Hamgadgets.com provided a few of his Ultra Pico Keyers. Some happy winners took them home. They are loaded with features, small and light weight which would be ideal for home or travel/outdoor activity.

Other awards were for those who won gold, silver or bronze medals for their 2018 participation in the CWT's and QTX activity. Rob K6RB handed those out to members at the dinner location and over the weekend at the booth. Some members had opted out of the medal awards and those not attending were going to receive theirs in the mail.

If you missed going to the Dayton Hamvention, consider putting it on your bucket list for next year. CWops has a great time and we keep up the fun that CW allows.

CW Forever!

73,

Mac NN4K, President



From the [Editor](#)

Field Day

I yield my column space this month to Hank W6SX who writes to share some of his earliest Field Day memories along with some suggestions based on his more recent experiences.

Many readers will think of the [ARRL Field Day](#) when they hear the words “Field Day” and that event is certainly a big draw. But [DARC also sponsors a Field Day for IARU Region 1](#) (actually two events, one for CW and one for SSB) and the [RSGB Field Day contests](#) coincide with DARC’s. There is also a [Winter Field Day](#) in North America for those folks whose idea of fun is to be sitting outdoors for long stretches in mid-winter. Whatever. Are there other FDs?

Hank makes an excellent point about using an event like Field Day as a way to grow our hobby. And, as always, he does it exuberantly.



Field Day: Looking Back and Looking Ahead

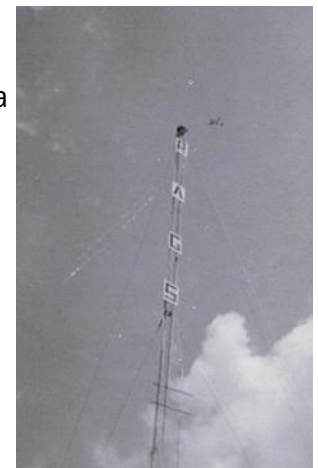
[Hank Garretson W6SX](#)

Field Day 1961. Radio Amateurs of Greater Syracuse, New York. 0200 local. I’m struggling to make perhaps 25 contacts per hour. K2KIR, now W2RU, shows up and takes over. Bang! Rate jumps to 50 and Bud maintains it for a three-hour shift. Lesson learned: If something isn’t working, change something.

Field Day 1967. Three buddies and I team to take first place overall in Class 1A. I’m still very good friends with two of my teammates; the third was a too-early SK.

Field Day 2011. My 3830 report says, “My own doing, but I haven’t enjoyed FD for many years because I haven’t been with a group and because of the relatively low operating standard. This year I made a real effort to be mel-low. I took the operators as they came, tried to encourage and help, and tried to set a good example. It was fun hearing so many people enjoying themselves. Field Day is a ham-radio celebration. I had a blast. Yee Haw!”

So, what is Field Day? Field Day is not a contest. Field Day is a contest. Field Day is camaraderie. Field Day is emergency preparedness. Field Day is public outreach. Field Day is barbecue and beer. Field Day is rain and mosquitoes. Field Day is fun. Field Day is all of the above, and more.



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For CW aficionados, Field Day is an opportunity to show others how much fun CW can be, to infect them with CW fever. Make some contacts. Explain how it works. QRS if it helps. Maybe have a CW reader. Let them take the chair. Mentor, encourage, compliment. Invite them over to your shack for a CW contest. RAC Canada Day Contest (1 July zulu) would be perfect—low-key, very friendly. Tell them about CW Academy. Infect them with CW spirit.

And, an extra bonus. For dyed-in-the-wool traditionalists, Field Day is an opportunity to observe and perhaps make a few FT8 contacts. We can always learn something new and, in the process, have fun and perhaps return the favor by encouraging FT8ers to try CW.

Celebrate Field Day everyone!



News and Notes

[Jerry Weisskohl AC4BT](#)

Dan, KB6NU: Dan has published an updated version of his No-Nonsense General Class License Study Guide. The study guide is available in PDF, Kindle, and print versions. He is also working on an audio version and a flash card version.

Shelby, K4WW: On May 11, N9TAK performed major rehab of my antenna system. He repaired (replaced 20+ year old balun and coax on C3S), hung a new, full size inverted vee, for 80 meters, and replaced coax (some 20+ years old) on all other antennas. All, in-the-shack, jumpers were also replaced.

Prior to joining CWops, most of my CW operation was S/P. Contest operation is 99.9% of my operating. I have participated in both 1300, and 1900 sessions, since joining. My CW copy is not where I would like it to be, but the weekly practice has not only improved my copy but has given me the confidence to go from 99.9% S/P, to mostly calling CQ. I feel that gives me better practice, and I also feel an obligation to the calling station(s) to do it efficiently, so we can both move on.

The “friendly” competition with KE4KY, and K4FN keeps my BIC (butt in chair). I seldom compare my scores with others, unless I know the exact configuration of their station. My basic goal is to improve, from one session to another. Band conditions, and activity play a great part in every-

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one's score, and I'm grateful for all that take the time to call me. To keep my ego in check, I have to constantly remind myself, when I get less than 90-100, in each session, that it wasn't too long ago that I was very content with 50-60, per session.

CW did not come easy for me, and after I passed the 13-wpm test, administered by FCC, I vowed to never do CW again. I should have never said never. As always, 20/20 hindsight is great, but I wish I had not spent 15+ years on SSB. I always get a smile, during CW contests, other than CWT/CW Open, when a familiar call sign calls me!

Giu, IT9VDQ: Great fun with a group of Friends for the WPX CW @ IB9T! 48 hours of good propagation with 10m open several hours a day. Multi / Single Low Power.

L to R: IK2WAD and IT9CLN, VDQ, GAC, ZMX, EJW, BLB, RZU. Many, many and many calls from Amici CWOps! In the background, below the clock you can see the plate of our "Elmer", Piero IT9ZGY, now SK"



Bob, WR7Q: To help foster on-air CW skills the Utah DX Association is hosting weekly QRS get-togethers over the summer as follows:

Time: Tuesday nights at 8:00 pm Mountain Time (0600 UTC Wednesdays)

Frequency: 3.555 MHz +/-

There is no check in list. After the QRZ simply send your call sign for Net Control to acknowledge. You will later be called with PLS QTC after which you can send DE {your call sign} and a brief phrase. Participants are encouraged to copy call signs and the brief phrases.

For further information please visit www.udxa.org

Joe, AA8TA: I was not really in the market for anything at Hamvention this year, but the call of N3ZN's keys kept drawing me over to his booth. I spent time on both Friday and Saturday looking over each the keys that he had on display and trying each of them out. I don't remember seeing a key maker provide keys with different pitches between the paddles, but Tony has a few different widths available.

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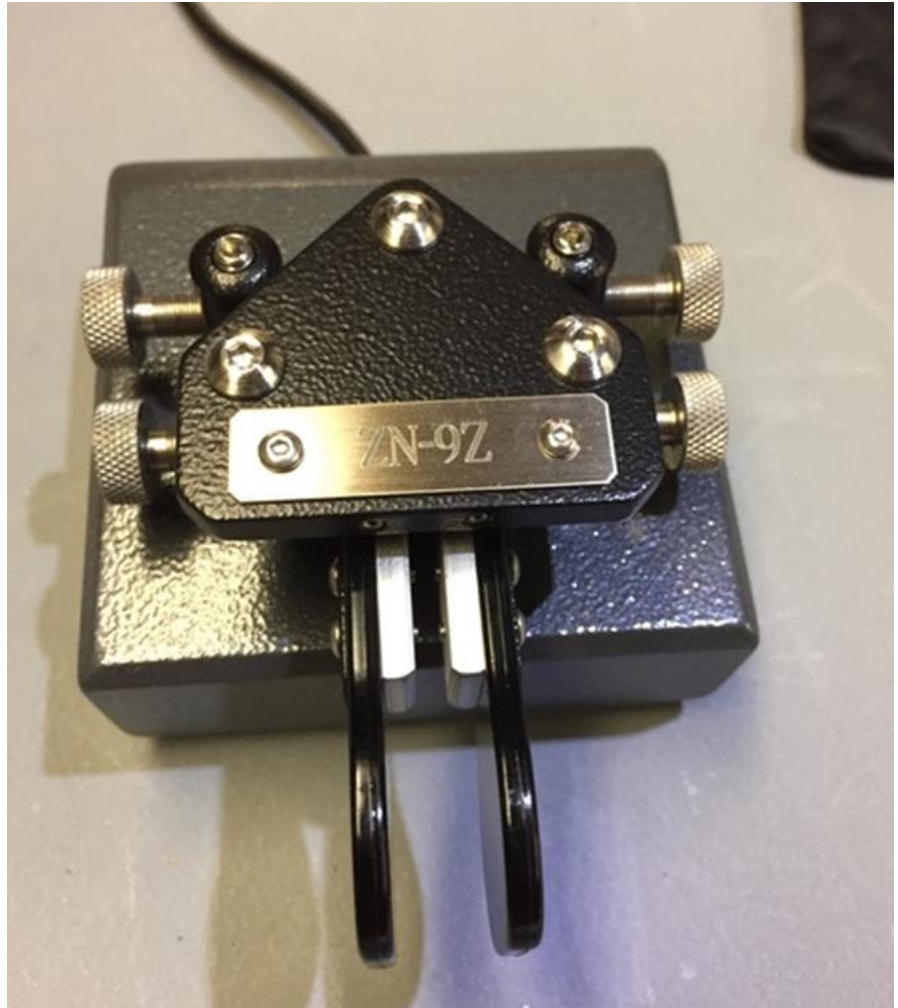
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Just for completeness, I tried some other vendor's keys but kept coming back to Tony's booth. After a long discussion with him, I finally took the plunge. I have heard a lot of good things about Tony's keys.

The one I bought is the same type that he donated as a prize for the CWops dinner at the Spaghetti Warehouse. It is mostly set up at my QTH and is very smooth; much better than a Code Warrior Jr that will probably be looking for a new home. I think the clincher was his support of the dinner giveaways.

Too bad I didn't win any of the paddle finger pieces that were given away, but I had no idea that I would be buying a new key.

So now I will have some fun during the summer!



Stew, GW0ETF/GW4J: A 'No Grunt' Method of Raising a Push-Up Mast

Recently I've been thinking I should do something about replacing my 20 meter Inverted Vee dipole for something with some gain to W/VE/Caribbean in the west and a lot of attenuation to Europe in the east. Most of the contests I get involved in rely heavily on North America for raw points and in the big events like CQWW and ARRL DX I commonly get hammered by those 'Beast from the East' end-stopping Eastern European signals. Even a selective antenna fixed to the West should be an improvement, I could always put up a vertical to fill in the gaps was my thinking.

Compared to many, I count myself as lucky when it comes to radio. I live in a RF quiet location with a decent take off in all directions and no neighbour issues. Our small cottage garden is the pride and joy of my XYL but is surrounded by fields grazed by sheep. Since moving in nearly 40 years ago our amenable farmer has been happy for me to use his trees for wires and his land close to our garden for portable masts, and this has helped maintain marital harmony over the years!

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Photo 1 – Moxon catching the sun with the 20m $\frac{1}{4}$ wave vertical visible to the right. Centre foreground is the 80m dipole with the 40m vertical on the left

All my HF antennas are sited on the steeply rising far corner of the field about 65 metres from the garden shack and colonised by 3 large mature oaks and other trees; the 10m HD aluminium Spiderbeam mast is sited at its highest point and supports the 20m dipole since a Cobweb antenna disintegrated some years ago. The ground below the mast slopes steeply to the west so is an ideal location for a fixed 'North American' antenna until such time as I can put my 6m reach professional tree pruner to good use to engineer some turning space...(see photos 1 and 2)

Oaks aren't particularly 'ham friendly' trees. They don't grow straight up nice and high but instead spread huge branches outwards that get in the way. I spent some time cogitating on what I could get into what free space was available and eventually decided a Moxon was a natural choice; it would fit, at least broadside E/W, has a broad forward lobe and the best f/b performance of any 2 element Yagi type antenna. I ordered one from Justin G0KSC at Innovantennas and soon had it aloft atop the Spiderbeam mast. My first CWT using it yielded by far my best haul of 93 and the improvement has continued since so it seems to have been a decent choice.

I said "...soon had it aloft.." which doesn't tell the whole story. Raising these masts involves slackening each clamp in turn starting at the top, pushing up that segment until the warning signs to go no further are visible and then tightening the clamp. Single handed this can be quite a struggle even with a lightweight 20m Moxon, particularly when you get to the lower sections and are pushing up the bulk of the mast as well as the antenna on top; and when it's a struggle it's easy to forget to check for foliage snagging the antenna and guys or more importantly to keep a careful eye out for those warning marks – don't ask me how I know that's important but let's just say that's why the Cobweb disintegrated all those years ago. A lane runs alongside that part of the

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field and the thought of lowering and raising each time there were high winds forecast or I was away for any length of time was a worry and I wondered how I'd cope as I progressed further into dotage.

The Spiderbeam people say it's easier to pull than push and I began thinking of some sort of stage I could set up around the base that I could use to give myself some height, or perhaps some sort of derrick and rope pulley system. It was all getting a bit complicated but then totally out of the blue I stumbled across the [website of W5FCX](#) in which he describes how he handles his Spiderbeam supported on top of a 14.5m push up Al mast. In it Rick details a really neat and easy method for raising the mast and I realised this could be the solution to my concerns.

Rick describes how he uses a device called a linear actuator in which a reversible polarity DC motor extends and retracts a rod within a tubular housing and I decided I could easily adapt this idea to my situation. A picture is worth a good few dozen words so check out the photo and you'll see clearly how it works (Photo 3).

Linear actuators are available off eBay etc. but for the modest increase in price I bought this 500mm one from a professional robotics company in the UK for around £110. For £8 I did avail eBay for a 10A 12v power supply, and a momentary 2 pole 2 way switch for reversing polarity completes the electrics.

Using a 10mm bolt, the base is swiveled on one of the lugs of a standard 4-way guy bracket clamped to the lowest mast section at a height that meant I could just reach the top of the extended rod without ladders. The whole thing is kept loosely upright with some rubber coated plant ties and a length of 4mm Mastrant guy rope is fixed to a long bolt passed through the eye on the top of the extending rod.



Photo 2 – Moxon nestled amongst the trees with the 20m vertical on the right. Steep slope on the left towards the west. The up-turned bucket is protecting the remote antenna switch.

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In use, this rope is wrapped around the particular mast section 4 or 5 times and tied off on the bolt with a clove hitch. The rod is then extended until the rope begins to grip the mast under tension, then the relevant clamp is loosened (look twice, loosen once...!) and the rod extended to push up the section. When the actuator reaches it's limit or the section is at maximum extension release the switch and tighten the clamp. Press the reverse switch and the rod will retract bringing the rope loops with it after perhaps a nudge with the finger tips, and then repeat as necessary. Every couple or so cycles it's necessary to untie the rope and re-fix on the next section below the next clamp but doesn't take long.

When raising the lower mast sections the body of the actuator will jam against the rotatable guy rings unless a spacer is used – hence the short length of 2 by 1 timber in the picture.

So, thanks to W5FCX the previous grunt and curse routine has become a relaxed button pushing exercise which allows me to watch exactly what's happening with everything under control and the physical exertion is limited to carrying my Honda suitcase generator up to the top of the field. Problem sorted...

.... and just to add, I'll be using the call GB19CW (and perhaps occasionally GB19CGW) as part of the [Cricket World Cup Marathon run by the RSGB](#) between May 30th - July 14th.



Photo 3 – Linear actuator ready to extend (see text)

Not really any great interest in cricket but a good excuse for a few pile-ups hopefully..;-)

Walt, KC8J: After 56 years of having the call sign WA8KBU, I applied for and was granted a vanity call. My new call sign is: KC8J. I first used this new call sign during the 1300Z and 1900Z CWTs on May 22, 2019. I think it caused a little confusion when a few of the ops realized that the call sign did not match the name and CWops number they were used to!

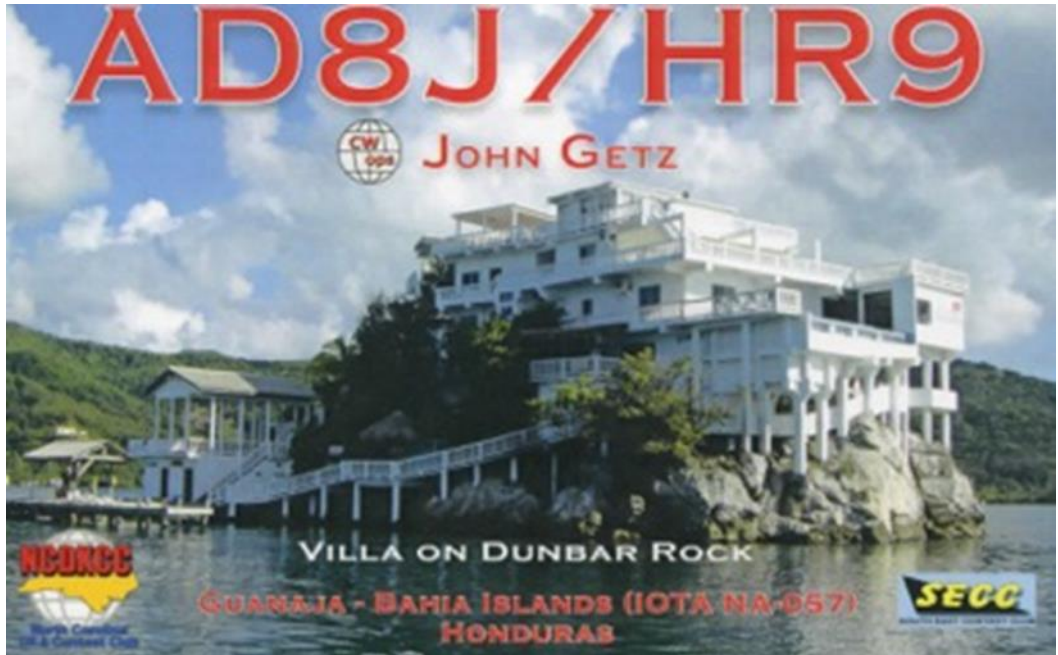
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John, AD8J: I will be returning to Guanaja, Bay Islands (HR9), Honduras from June 22 until July 6. This will be another of my SCU-BA and radio trips and my third time at this QTH.

If you are collecting Grid Squares, Guanaja is not in the same Grid as Roatan but is in rare grid EK76. I'll be operating mostly CW with

a second radio running FT-8. If I'm on during the CWT's, I'll hang around 7025 and 14025. Antennas will be dipoles sloping towards the salt water. All QSO's will be uploaded to LOTW at the end of each week.



Rick, N6XI: Had fun at the 2019 International DX Convention in April. Here is a photo of some of the gang at the CW Breakfast at Visalia Waffles (formerly "Country Waffles," aka the CW Restaurant). Again, we filled the back-dining room with good fellowship, a bunch of CW operators talking in person.



Next year the ever-petulant SCDXC gang plan to return the convention to the old Holiday Inn, now a Wyndham but still totally inadequate. It appears that the only way to teach them how awful the place is will be to vote with our feet and stay

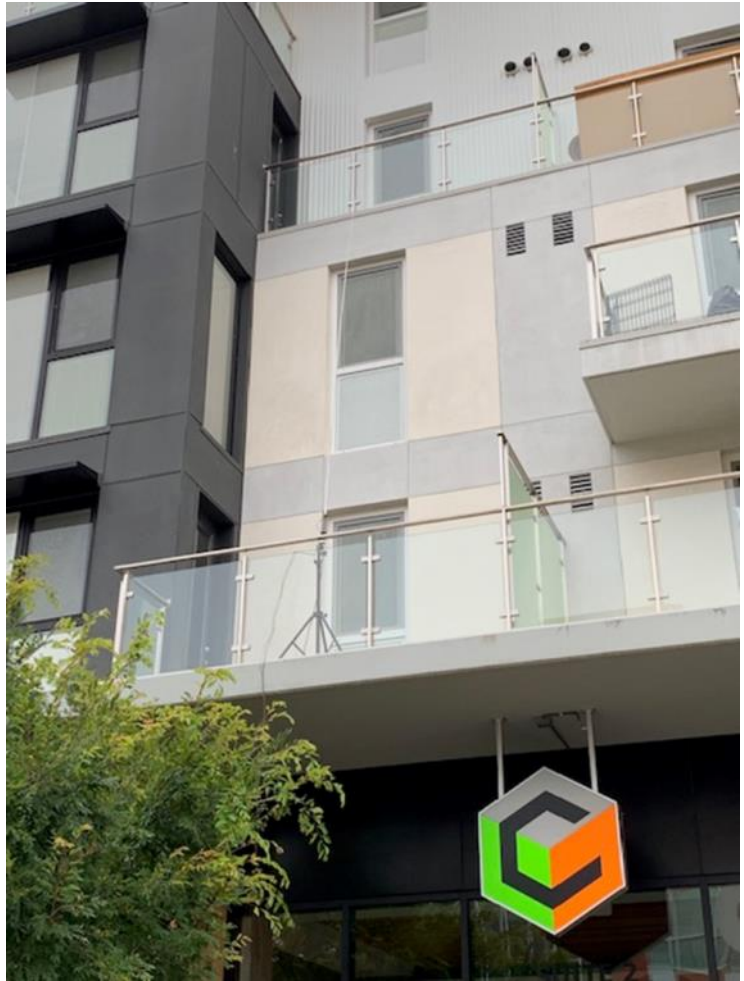
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away. Thus, I don't plan to attend in 2020. If someone agrees to organize it, maybe I'll come down just for the breakfast and the fun flight. Fortunately, the more realistic NCDXC folks agree that the downtown Convention Center and attached Marriott are an order of magnitude better and have booked them for 2021 and 2023.

Rob, K6RB: Here's a photo (right) of my current antenna system. It is a YCWA portable antenna, on my balcony. The wall behind it is facing North. The photo was taken from the south. It is a pipeline to Tijuana!

Dick, WN7S: On the DX front, I just seen where Monk Apollo SV2ASP/A passed away from his bout with cancer. Boy, for the foreseeable future that will make Mount Athos more DXCC difficult. I recently worked him (and received his QSL) from my QTH in Centreville, Va. However, I spent 4 years in Athens and never heard him on the air. That does not mean that he wasn't on the air.... it meant that the wife and I did lots of sightseeing in Greece, Egypt and scuba diving in the Red Sea.



The current K6RB antenna.

On the CWT awards front, you will see that my name has dropped quite a bit from the ACA list. I previously recorded a number of 673.... however, I was reading the wrong block on the CAM software: the actual correct number should have been recorded as 419. I was reading the bottom left hand block of the BBCyber form instead of the column with the year 2019. My number has been corrected. As a last resort, one should read the instructions that were provided. I get lost where there are no pictures...

Dayton/Xenia: Another great year! Lotsa DX dinners and it was sure great to see all the CW Ops guys out there. I probably hold an award for attending the most Hamfests and never winning a prize... not even winning a bottle of "antenna signal wax". Oh, it felt odd not having it rain, except for the very early shower on Friday morning. Oh, The Begali guys did not have the 60th anniversary key this year.... Even though this would have been their 61st year... they still intended to have them... however, they were a hot item and they went fast... Will they make more? Maybe....

CW Ops DC Weekend: Another great event. Don, Jim and the guys did a great job keeping everybody "chowed down" and feeling welcome.... That's a lot of work... Sure appreciate it..... Lotsa eyeball QSOs... Its nice seeing what's behind the key(er)...

Morse Code During the Cold War

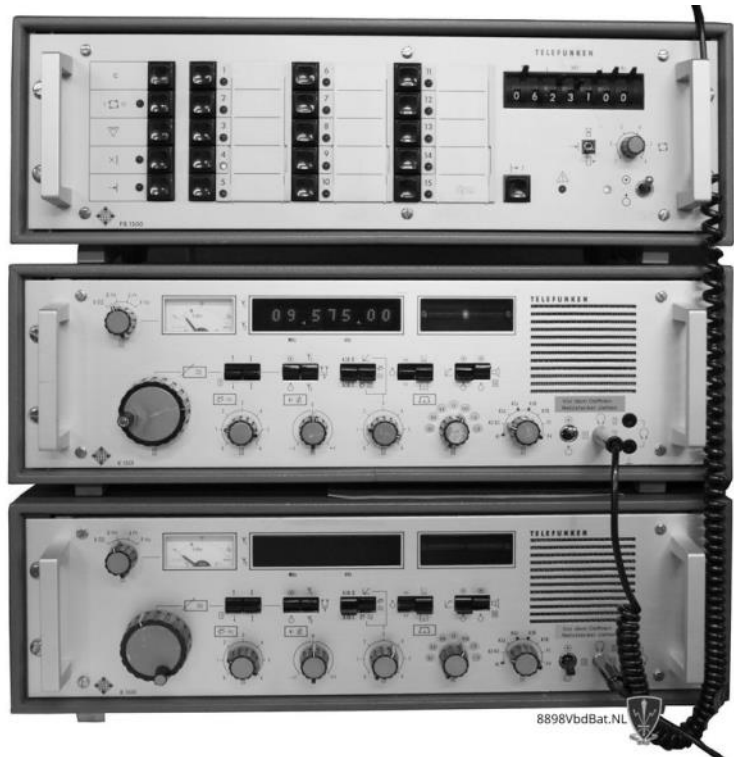
[Joop Stakenborg PG4I](#)

I must have been around eighteen years old when I was tested for the Dutch army. At the time every adult in the Netherlands had to serve 16 months in the military after finishing education. One of the tests involved Morse code with a limited number of characters at increasing speed. I made this test without any errors; the officer was quite shocked. But of course, I already knew Morse code because I had passed my amateur radio exams.

A few years later, it was now 1980, I was drafted into the army. There was a 4-month training period which involved military skills and learning Morse code. They soon found out this did not make sense since I would start correcting the teaching officer in class. So, my training period was reduced to 2 months and I was moved to the 898 Communication Battalion near the German border.

This was a small army base with a radio listening post within walking distance. The listening post was manned 24 hours a day in four shifts with soldiers who all had learned Morse code. Each shift would be manned with 15 soldiers, about 5 staff officers and a couple of civilians. There were also 3 off-duty staff members who could be called on duty at any time.

The soldier would be assigned a place in a small radio room with 4 radio receivers. They were mostly tube receivers: the famous RACAL RA-117, but some rooms also had a modern Telefunken E1501 which included a scanner. Later on, all RACAL receivers would be replaced by the Telefunken ones. The goal was to listen to military radio communication in Eastern Germany on shortwave. Next to the listening post the antenna was located, a 20-element log-periodic wire antenna pointing eastward at an angle of about 45 degrees.



Telefunken receivers

Transmissions from Eastern Germany were done in encoded messages consisting of 5-letter groups. The NVA (Nationale Volks Armee, the East German army) would use mixed mode characters or numbers, the Red Army would also include some Cyrillic characters. With the Russians, messages of more than 300 groups were no exception. The soldier's duty was to identify the radio station, pinpoint the location and write everything down which was transmitted. At speeds sometimes going up to 25 words per minute or more this could be quite a challenge!

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Pinpointing was done with the help of 3 direction finding posts, one in the north of Western Germany called Sierra, one in the south (Delta) and one close by called Alfa. The soldier could directly communicate with these posts using an intercom system. The resulting triangulation would give the location of the observed radio station, the surface of the triangle would give the accuracy. This was done with the help of an Adcock antenna; you can find an [interesting article on this antenna on Wikipedia](#).

A transmitting radio station would change its callsign and frequency every day to confuse the enemy. A well-trained soldier was able to identify the station in less than 30 minutes with the help of direction finding and by listening to a station's particular Morse sending, whether they used an electronic keyer, a bug or a straight key.

I never expected anything exciting to happen but before I knew I was a witness of the Polish crisis in 1980-1981 with the Solidarity movement. Although Russia did not intervene, we could see important troop movements in eastern Germany along the Polish border.

The 898 Battalion has a website at <https://www.898vdbat.nl/> however most of it is in Dutch.



9G2DX: 4X DXpedition to Ghana March 2019

Submitted by Dov Gavish 4Z4DX

Written by Zvika Segal 4Z1ZV

As in a typical legend, this amazing adventure began about 2 years ago. Innocently enough, I took the challenge to handle the importation and installation of DMR repeaters being donated by an "unknown" radio ham in Africa.

The donator was Haim Lewy, an Israeli ham based in Accra, Ghana and the owner of SkyLinks, communication company doing business in Africa. My close friend, Dov Gavish 4Z4DX, ham extraordinaire, immediately recognized the opportunity to operate in a rare QTH. An additional

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plus was to include locations in the WWFF (Flora and fauna, national parks), and to be the first one worldwide to operate in Ghana on 30/60/80 meter.

Initially, it looked like a weird vision but, fortunately, Haim took the challenge to arrange this DXPedition.

It turns out that getting to Ghana, as well as importing radio equipment, is not a trivial task. Haim arranged for us to get the visas, purchased most of the heavy and costly equipment such as: an IC-7300 transceiver, ALS-500 Solid State Linear, Spiderbeam antennas, poles, cables, ropes, tools and so on.



Getting a visa for entry into Ghana is a challenge. You must have a local invitation as well as the yellow International Certificate of Vaccination with at least a proof of recent Yellow Fever vaccination, 8 photographs and substantial fee in cash.

Haim worked with the NCA (the local communication authority), to get approval and a special call sign – 9G2DX – for this special event. As a point of reference, you can count more fingers on your hand than the number of local hams in Ghana. Actually, we met 100% of them, ... Two.

Dealing with the difficulties in setting dates for the 4X DXPedition, a heterogeneous and well-balanced group was formed that consisted of people who were willing to invest their free time, efforts and money. Among the group was Dov Gavish, 4Z4DX, a well-known figure in the ham community with over 50 years of seasoning. 4Z4DX has ham radio experience on all modes and has participated in delegations to Himalayas and meeting King Hussain in Jordan. Joining 4Z4DX was Simon Heger 4Z1SH, a mature senior citizen with personal passion for rag-chewing on SSB. Zeev Stadler 4X5ZS, “the youngster” in the group, is a man with fire in his eyes and the determination to be dedicated and to perfect his tasks. The last member of the group was Zvika Segal 4Z1ZV (that’s me), acting as problem creator and problem solver. I was also charged with managing communications issues, especially at the personal level (which is one of the challenges with such a unique group...).

On the start date we landed at Accra’s new and modern international airport. A VIP service was offered as part of our welcome mat. Once we collected our luggage, we were ushered through friendly immigration and customs and loaded up two 4X4 vehicles that waited for us and our belonging.

The first evening we spent in Accra, the capital, in high class hotel and had top notch dinner with Haim and his family at the Rokefeler sushi restaurant. Early in the morning, we moved to Haim’s facility to pack and load the equipment. With the help of the local



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drivers, we moved two fully loaded off road cars to the first operating site; a new beach resort, still under construction, that was opened especially for us. We got a whole section facing the Atlantic Ocean and few local guys to take care of us, as well as having a dedicated driver and car 24/7.

The way to the beach was a real adventure. We were introduced to an interesting trade system, "the mobile supermarket." Local people, the majority of them females, carry whatever you can imagine on their heads. This includes bread, ice, drinks to sewing machines or gas containers. They approach and offer their merchandise (a process through which you can try to improve your negotiation skill). Fifty percent off "list price" is usual result.

At the beach resort we started the installation of our gear. Every electrical and lighting pole was turned into an antenna tower. With the gracious help of the local people, we secured a block and line as the basic mechanism to haul up and lower down wire antennas.

The first installed antenna was a simple END FED, a 9:1 one transformer (AKA 9:1 balun) and 22 meters of wire with no radials. Performance of this basic antenna was impressive. We achieved a reasonable VSWR down to 60 meters and were rewarded with QSOs from all over the globe. This helped us get Dov operating CW, and simultaneously removed him from hounding us so we could continue install other antennas without "supervision". The first station used an IC-7300 transceiver, an ALS-500 (about 400W solid state linear), an MFJ manual antenna tuner, and Dov's favorite log software – the old and stable version of MixW.

Our plan was to install the "Compact and Portable" Spiderbeam antenna. I must



Zvika Segal 4X DXPedition to Ghana March 2019



Zvika Segal 4X DXPedition to Ghana March 2019



Zvika Segal 4X DXPedition to Ghana March 2019

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say that other than the name and stated performance (up to 9 dBi gain) there is nothing there to justify the term "Designed for DXPedition". If the intention is to have a long stay at the same location (and you have some engineers on the team), then the antenna would be practical. Once you open the box, you realize that the manual was correctly titled – "Fabrication Instructions." Actually, you get a KIT, with a Bill of Materials (i.e. poles, screws, rolls of ropes and wires, epoxy glue, uncut Velcro stripes, etc.). Even the 1:1 Balun is a kit that need to be "fabricated". A good knowledge of reading complex and unclear instructions, as well as the ability to measure and to cut wires to specific lengths, and good soldering skills are all needed.

It required very gentle handling to avoid breaking the carbon support poles and tangling the wires (which were everywhere). However, once the antenna was set up and running (at least for that one day), the performance was beyond our expectations. Unlike the Cobweb or Hex Beam, this is a real 5-band 3 elements Yagi (4 elements on 10 meters).

Once we understood the complexity of building the Spider antenna, we started to install other wire antennas, such as: a multi-band commercial antenna by Icom, a 40m dipole, and last but not least, the 80/160 meter Inverted V antenna recommended by Pop, YU7EF. This antenna was constructed of 30 meters of copper wire and an 8.5-meter vertical on an African bamboo pole. Loading coil for 160 meters was fabricated using empty mineral water plastic bottle and a tuning capacitor for 80 meters was a piece of open ended RG58 coax.

Performance of the antenna made Dov very happy as well as about 80 hams who were rewarded with their first Ghana QSO's. Thank you, Pop.

Later on, we tested also a short version of a 20-meter wire dipole antenna with loading coils built by Shimon. The center was supported by an African pole (i.e. a piece of a tree). We were surprised and delighted as this setup yielded many QSOs to North America and Japan.

Operating conditions from the beach resort were excellent. It is widely open to south America, and provided good conditions to the USA, especially on 20m during evening and nighttime. It also gave us good conditions to Europe and Japan. We even made a few QSOs with Antarctica.

The ongoing challenge was pacifying Dov who was very upset with Simon's SSB operating method. As a user of LOG4OM log S/W, Shimon transmitted to each ham his name as well as sharing



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with him the weather condition in Ghana. This drove Dov crazy, who's focus was to serve the global community with as much as possible QSOs.

We also sacrificed time during some of our meals in that it required driving for a total of one hour to get to a western style restaurant. Dov kept calculating the hundreds of "lost QSOs" due to eating and driving. In response, we decided to change the culinary process by leaving Dov to have fun with the rig while the rest of the team headed out for a meal. Even the pizza that was ordered for Dov was a waste of time and food, as Dov needs only one apple per 8 hours of continuous operation.



One event that made me extremely happy was once when Haim was staring at the radio station, we encouraged him to step in and operate. In few seconds he started to manage the pileup in most professional way. Haim was a member of the known "4X4HQ" club in Tel Aviv over 30 years. For him it was like riding a bicycle following a long period of time. Just like that...

We set up 3 radio stations: IC-7300 with the SS Linear, IC-7000 with the LDG IT-100 antenna tuner, and the IC-718 which operated as the FT8 station. Most of the QSOs on FT8 made by the Zeev – "the youngster" (over 1,000), which through his IT skills and dedication, perfectly met the requirements of such computer to computer digital communication technology.

Part of operating characteristics in Africa is the time domain and constant. Everything takes longer than planned, looks different than expected, and is subject to weird electrical stability. One evening there was a sudden power outage whereby all the nearby village lights started blinking like a hazard signal. When the village power came back and ours was still down, we learned the magic of the "pre-paid" electricity meter which sometimes resets itself after power failure. Our host needed to drive to the nearby office, pay the bill, and hope that it would propagate through the slow network. We continued to operate on batteries until they were also exhausted. Unfortunately, nobody was able to operate the generator since it was mysteriously not onsite.

Our next two destination were national parks: Kakum National Park (WFF004), a 3 hour drive west of Accra and Shai Hills Resources National Park (WFF007) about a one hour drive north of Accra.

At both parks the hospitality was warm and the park management, rangers and local



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people went above and beyond the call of duty to support us in any way they could. This included helping us to turn every tree into antenna pole, carry our equipment, and providing the best locations for operating. No need to explain that “best” is a relative term.

General lodging conditions in the parks do not meet western standards. There is a lack of hot water and low pressure to no water flow at all. Some of us slept on inflatable mattresses either in a tent or on the ground and had to shower using a bucket and a bottle like in the good old days.

During one of the nights we stayed in Shai Hills Park, a thunderstorm began, so the team had to rush and pack the radio equipment into the cars.

We also learned the hard way that wet trees are like a Faraday Cage. They effectively block propagation and radio conditions were just dead.

Following the adventure in the parks we went back to “civilization;” a high-class hotel in Accra which means clean rooms, hot water, and breakfast.

The last few days we went back to the beach resort and set up for the fourth time, all the stations and antennas. With the good seashore conditions, the “harvest” was above 1,000 QSOs per day.

Early the next morning, the driver knocked on my door and was happy to share with me that he took down and repacked all the antennas other than the Spiderbeam. It turns out that he misunderstood the requirements to leave all antennas as is other than the Spiderbeam. The Spiderbeam was going to be relocated to near Haim’s office. Hence, we had to set up all the antennas for a fifth time.

One of our tasks was to leave Haim with a well installed radio station. Part of the challenge was to take apart the Spiderbeam and transfer it and re-install it on two containers at Haim’s office.



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Zeev did a fantastic job in marking each and every piece of the spider parts and elements using color masking technology. As suspected the re-setup of the antenna took a while due to its huge size (over 10X10 meters) and limited available space.

The local metal shop owner who was hired by Haim to supply multi-pipe telescopic poles, gave us some additional insight to the way things work in Africa. There needed to be at least one dedicated Western guy attached to him, otherwise he would go to sleep. The welding machine was a real museum piece complete with a rusted transformer which was probably older than us. In addition, there was a magnificent extension cord which came equipped with neither plugs nor sockets. I will leave it to your imagination to guess how it worked.

Before departing Ghana, we had a meeting with NCA, the Ghana Communication Authority. A professional presentation was delivered by Haim to the manager and his 20 engineers, some of whom had taken part in our operation.

Ghana was also a great place to celebrate birthdays of 3 team members – Dov, myself and Haim who will soon celebrate a round number of years. Last night in Ghana, In the Chinese restaurant, we were exposed to the African version of “happy birthday song” along with fireworks and ice-cream cake.



Overall, we made in a net of 5 days of operation (3 locations and 4 setup and take down jobs), all combined with a lot of fun and adventures, over 5,200 QSOs. Over 50% CW by Dov and the balance divided between SSB and FT8. We worked over 80 countries including Antarctica and over 30 QSO with 4X stations back at our home in Israel.

All QSOs were logged into digital log s/w, at least once per day uploaded to eQSL and then screened of duplicates and errors. A corrected ADIF file was sent once



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per day to Mark Rosenberg 4X1KS, who supported us in setting up QRZ.COM, LoTW and clublog.com. He also acted as our focal point for all issues and on a daily basis reviewed and uploaded the QSOs to clublog.com. This helped to maintain very low level of errors (probably 2 complaints out of our over 5,200), and looked quite professional.

I would like to take this opportunity to thank the dedicated team, to Dov for his vision, to Mark for his support as well as reviewing and editing this article, to Charles Wilmott M0OXO who is still acting as our QSL manager, to NCA management, to all of the local people who helped us succeed and did their best to give us warm hospitality, and last but not least, to Haim Lewy who made our dream come true with a lot of effort and investment.

Remembering W5ASP

[Carl Luetzelschwab K9LA](#)

The first time I operated from ZF1A (the call of the Cayman Amateur Radio Society) was with Joe W6VNR (then WA6VNR, now an SK), Bruce W6OSP (SK) and Bob K4UVT (SK) in November 1994 for the CQ WW DX CW contest in the Multi-Single category. In 1995, Bob K4UVT (SK), Steve N8SR and I operated from the club station using Bob's ZF call – ZF2RF – again in Multi-Single for CQ WW DX CW. And in 1996, Bob K4UVT (SK), Mike K9MK, Mike N5HRG, Bob AA0CY, Mike N9NS (SK) and I returned for another Multi-Single effort in CQ WW DX CW using ZF2RF.

In those three years I also went to ZF for the ARRL DX CW contests and the ARRL 10-Meter contests, and that's how I met Joe W5ASP, who became a SK in April of this year. There's no doubt that I had fun in 1994, 1995 and 1996 operating in a Multi-Single effort, but the yearning was for a competitive effort. So Joe and I starting planning for a 1997 effort. We picked up Mike K9MK and Dan K1TO to round out the team. Because of Dan's contest experience, Joe, Mike and I made the decision to let Dan run as much as he wanted. Joe, Mike and I would handle the multiplier stations and we would fill in for Dan when he needed to catch some sleep.

That strategy worked out just fine. Not only did we win the World in CQ WW DX CW Multi-Single as ZF1A (a 2-point country), but we set the new Multi-Single World record (which has since been broken – 'tis better to have had the record and had it broken than to never have had the record at all).

In subsequent years Joe and I met at ZF1A for various operating events. He always had an infectious laugh and was willing to help out in any way possible. He was a great CW operator, and I enjoyed my time with him. He will be missed.



The 1997 CQ WW DX CW M/S winning team. Back: Joe W5ASP, Dan K1TO. Front: Carl K9LA, Mike K9MK. Photo by Vicky AE9YL

System and Use Method for a Morse Code Training Tool

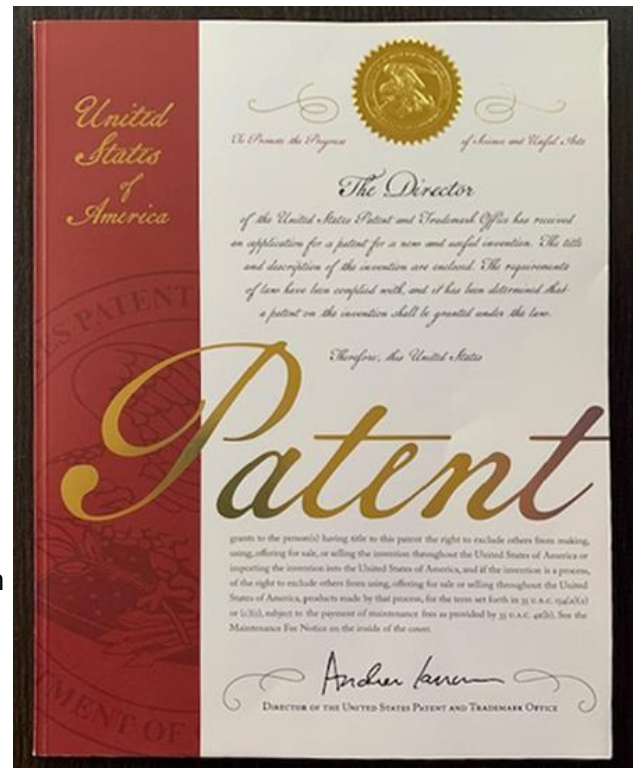
[Rob Brownstein, K6RB](#)

On April 22, I received in the mail a US Patent for a system and use method for a Morse Code training tool. It is patent number US 10,249,216 and its issue date is April 2, 2019.

Patents date back nearly 500 years. Today, a patent provides the patentee with the right to exclude anyone from making his/her invention. Note, it is not a license to make the invention; it is the right to stop someone else from making it. In the US, as in most countries, a patented invention must be novel and useful. Novelty simply means the first of its kind. Useful means it serves a valid purpose.

Patents are national, that is, a US patent provides the exclusionary right in the US. If you want to also include China, you must file a patent in China. In the European Union, it is possible to file a patent that conveys patent rights in all signatory countries of the European Union.

In order to obtain a patent for an invention, one must file an application to a national patenting authority which then examines your application and in view of other patents/publications, determines whether your application merits the issuance of a patent. Currently, in the US, only 40 percent of applications result in an issued patent.



When one files an application, it can take up to two years before an examiner reviews it. The process of going through the review cycle and either abandoning an application or succeeding in obtaining allowance and issue is called "prosecution." The whole sequence from application to issue can take several years. In this case, the application was filed January 12, 2018 and issued on April 2, 2019. That is a very fast prosecution!

The Invention

In the US, there are different types of patents – utility, design and plant. When we think of patents, we are usually thinking of a utility patent, where the invention is a machine or a method of making something or using a machine. Design patents are purely cosmetic; and plant patents cover plants that are propagated by human intervention rather than natural means.

In this case, the patent is a utility patent that combines a machine and a method for using it. The

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claims (which is the part that is covered by a patent) delineates the structure and function of a machine; and method claims delineate a way of making something or using something.

Successfully patented inventions typically aim at solving some kind of problem in a way that no one has done before. Here, the invention is designed to solve the problem of learning to send Morse code without having another person copy and assess the accuracy of what was sent.

The idea arose after several years of CW Academy where our tools are fine for self-taught copying but leave a lot to be desired with regard to self-taught sending. In fact, our CWA advisors are often playing the role of providing sending feedback to their students, whereas the exercises the students do, by themselves, rely on their own ability to be self-critical. Considering that a Level 1 student is now learning Morse code for the first time, it is a bit of a leap to expect them to critique their sending with a practiced ear.

Now, there are, to be sure, tools out there that send Morse code and even decode Morse code and display the decoding results. These tools make use of existing algorithms for encoding and decoding Morse code from or back into text formats. Since most of these inventions are meant to be used by someone who is unskilled in copying Morse, and to be quite liberal in decoding Morse that is sent with a fair degree of sloppy timing, such devices would not serve well if the intent is to learn to send Morse code well.

So, this invention had to meet several criteria. It had to be able to capture sent Morse acoustically, and it had to be able to compare what it captured with what it had previously sent. In other words, the invention sends a Morse sequence, and then captures a student's attempt to emulate what was sent. By comparing what was sent by the machine to what was sent by the student, the invention can provide affirmation, if sent correctly, or negation, if sent incorrectly. The decision on accuracy is based on the proper character and timing format within the limits of some tolerance level. Unlike the existing machines that decode sloppy code, or at least make an attempt to do so, this invention looks for a proper match of characters and timing before giving the sender an affirmation.

One of the ways this invention differs from existing tools is that it does not rely on algorithms for decoding sent code. Instead, it creates a waveform of the code it sends, and creates a second waveform of the code it captures. The second waveform is normalized for differences in speed and then compared to the first waveform. Because it avoids using encoding/decoding algorithms, the invention avoids infringement with inventions that do use them. That, it turns out, was a crucial element to this invention's allowance and issue.

Many Ways to Implement It

The drawings sent with the application show a block diagram (see next page) of structures and functions. These can be implemented in a standalone device using well-known means – microcontrollers, firmware, memory, and the like. But, since a smartphone already contains these structures, the invention can be implemented as an application that can run on a smartphone. Similarly, since these structures and functions are also present in a laptop computer, the inven-

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tion may also be implemented as a computer application.

The versatility of implementation may play an important role in getting this invention made and distributed. Since CWops Club is the assignee of patent rights, it has the right to exclude anyone from practicing (e.g. making) and using this invention. Conversely, it has the right to license its use to anyone, exclusively or non-exclusively.

My intention was to develop an invention that could be implemented in several ways, and would be implemented in several ways. It

was also my intention to offer licensing at token royalties to encourage third parties to license and make either the device or applications that run on smartphone or laptops.

The club is unlikely to make a lot of money from this invention, and that was not my goal. If we do it right, we may see one or more implementations that we can use with CW Academy that will improve the homework assignment effectiveness where it relates to sending practice. That was my goal.

Next Steps

Our club has several options for how to move forward with our patented invention. We can inform one or more vendors about the invention and invite them to consider licensing and producing a device or application. We can undertake to get an inexpensive prototype made and seek a grant to produce them, in volume, for use with CW Academy. Imagine, if you will, that Morse Trainer, our Level 1 tool, not only sent Morse sequences but could also capture sent sequences, compare them to what was sent, and either illuminate a green icon or a red icon. Our students would then know how well they are sending in addition to how well they are copying.

I see this as a big step forward in improving the process of helping people learn to copy and send Morse code.

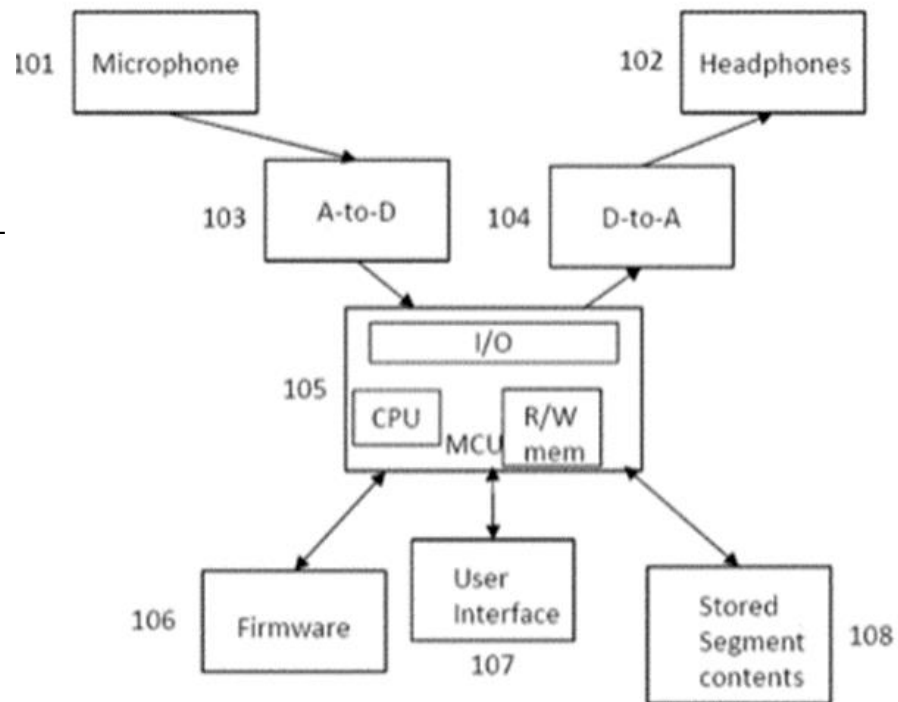


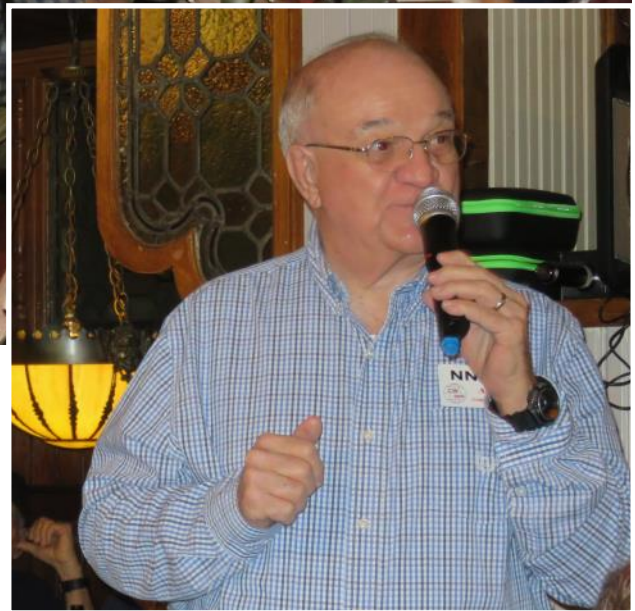
Figure 1

CWops at the 2019 Dayton Hamvention

CWops activities at the 2019 Hamvention started with the traditional **Thursday night dinner at the Spaghetti Warehouse** with over 100 in attendance. Dinner organizer Bill KC4D and CWops president Mac NN4K spoke to the occasion and a number of awards were given out, including the annual CWops Award for Advancing the Art of CW. Riki K7NJ chairs this award committee and he made the two presentations (see below). One nice surprise was CWops itself receiving an award from The Dayton Hamvention; see "[President's Message](#)" on [page 1](#).



Bill KC4D



Mac NN4K

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Rob K6RB spoke about the US patent recently approved and assigned to CWops ([see story page 22](#)) and he also handed out medallions to those present who earned a participation award for the 2018 CWTs. Joe AA8AT spoke about the success of CW Academy and emphasized the need for more advisors.



Rob K6RB



Joe AA8TA

Over 100 members signed in at the CWops booth in Building 6. There was a constant stream of visitors to the booth, and CW Academy was a popular subject. A group photo was taken Friday morning of those members who had not been out too late the night before.



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A second group photo was taken of CWA advisors. Thanks for your hard work!



The CWops Award for Advancing the Art of CW

The purpose of this yearly award is to recognize individuals, groups or organizations that have made the greatest contribution(s) toward advancing the art or practice of radio communication by Morse Code. This is the fourth year CWops has made this Award.

CWops emails a call for nominees to about 50 publications, clubs and others soliciting nominations for candidates for this award. Riki K7NJ chairs the selection committee, collects the nominations and disseminates the information to members of the committee which include Alan AC2K, Art K6XT, Mac NN4K, Ricardo EA4ZK and Vic 4X6GP.

K7NJ announced two recipients for 2019.

FISTS CW Club: Per a statement provided by Paul M0BMN, "The FISTS Club, (International Morse Preservation Society) was founded in 1987 by the late George "Geo" Longden G3ZQS of Darwen, Lancashire England, after recognising a need for a club in which veteran operators would help newcomers and less-experienced operators learn and improve CW proficiency. This principle has stayed with the club and now we have members all over the globe. We only have one membership requirement and that is a love of Morse. We are very happy that the club's efforts to encourage the use of Morse have been recognised by CWops and that we have been given this prestigious award. We are sure that a number of our members will (and have) join(ed) the ranks of CWops and so our relationship with your organisation will strengthen.

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"We wish CWops every success in the future and that your membership grows. We are both playing an important role keep Morse alive and active on the bands." Joe N8TI, President of FISTS North America CW Club also provided this statement: "On behalf of all of the members of the FISTS North America CW Club, I give my sincere thanks that CWops recognized FISTS as contributing to the preservation and use of Morse Code on the Amateur Radio bands. FISTS' whole purpose is to preserve and promote the use of Morse Code. This applies to any and all types of Morse Code activity, be it contesting,



ragchewing, QRP or message relaying. CWops moves the use of CW to a high level that all Amateur Radio operators should aspire to. CWops members demonstrate, through the use of high speed CW radio communications, that Morse Code is still a viable, efficient and reliable mode of communications. FISTS will do anything it can to assist CWops in its mission to promote the use of high speed Morse Code and greatly appreciates that CWops has awarded FISTS this honor.

Larry KA8HFN accepted the award on behalf of FISTS.

Hans Summers G0UPL: Hans is the designer of the QCX QRP 5 watt CW transceiver kit available [from QRP Labs](#). The radio has become very popular a wide range of amateurs including kit enthusiasts, QRP fans, SOTA and IOTA operators. Hans was present to accept his award and provided this statement: "It is my great honor and pleasure to accept the CW Ops award for outstanding achievement in advancing the art of CW. The QCX 5W CW transceiver kit that I designed has exceeded all my wildest dreams in the last 2 years



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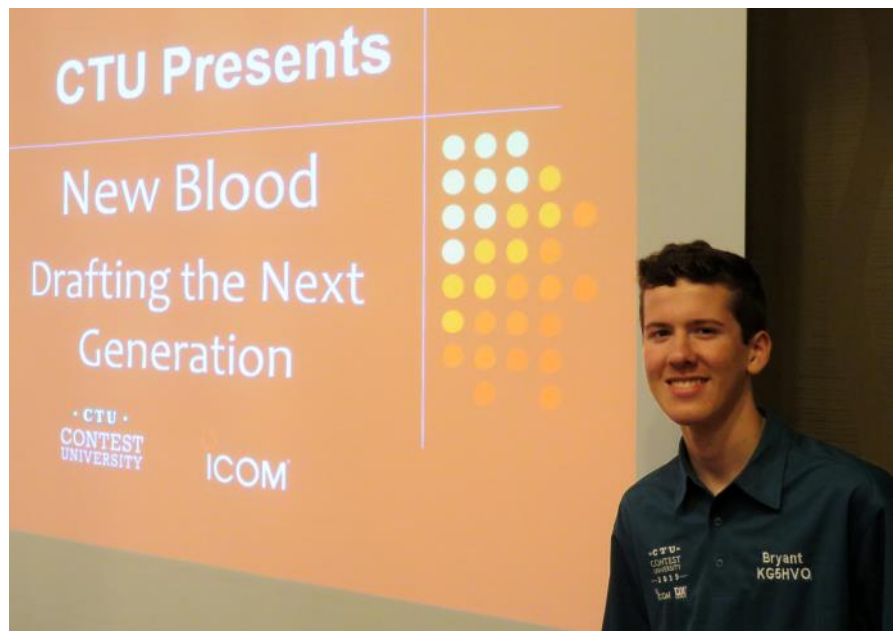
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since its launch. I have received many emails from people encouraged to try CW or even to get their ham license because of the QCX. CW has always been, and surely always will be, my first love in amateur radio; a hobby which has given me so much fun and education in good times, and sustained me through bad times. It has been a fantastic joy to be able to repay something back to the hobby and CW, by the design and production of QCX.

"QCX continues to do very well, it has exceeded my expectations many times over! I continue to get great feedback on it and very nice emails from people, many of whom are new hams. This the other day: "I got the 80m radio up and running. Another great radio, thanks. I know you're probably busy, but I just wanted to say thank you for offering the QCX kits at such a reasonable price. I bought the 40m radio before I even had a ham radio license, built it, learned CW, and have since made 12 QSOs and had several very nice rag chews on it. I'm up to 10 WPM now. By offering such kits at a reasonable price, you're growing the hobby and I'm sure I'm not the only new ham to get started because of QRP Labs."

Contest University: CWops was well represented on the faculty at Contest University, organized each year by Tim K3LR. Others presenting included Doug K1DG, Randy K5ZD, Bryant KG5HVO, Chris KL9A, Dan N6MJ, Ward N0AX, Frank W3LPL and Tim W3YQ.

And, although not a CWops event, CWops member Ted N9NB was the keynote speaker at the annual contest dinner.



Bryant KG5HVO, ready for his Contest University presentation



Ted N9NB was the keynote speaker at the annual contest dinner (K8CX photos).

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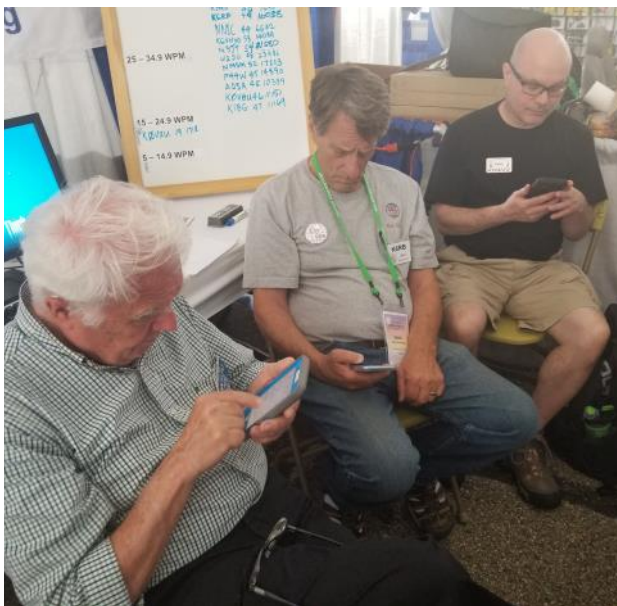
Other Dayton Sights



Victor VA2WA: [Contest Online Scoreboard](#)



Rich VE3KI at work in the RAC booth



W1UU, K6RB, KN4VV hard at work in the CWops booth.



Glenn K3PP and Bert F6HKA

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Tony N3ZN



Hans G0UPL, winner of the "Advancing" award at work in the QRP Labs booth ([see page 28](#))



Piero I2RTF



Vibroplex

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Tom N1MM offers some excellent advice.



Mac NN4K gives away a prize.



Yet another Spaghetti Warehouse photo

CWops Tests

[Rich Ferch VE3KI](#)

This month Lar, K7SV, provides a follow up to his guest column in the May issue. I'll be back next month with a mid-year review.

73,

Rich, VE3KI CWT Manager

Spread Out Please: A Follow Up

[Lar Schimelpfenig K7SV](#)

Once again, I am guest-writing for Rich's CWT column as a follow-up to my comments regarding Rotten QRM last month.

First, based on this week's CWTs, it does seem that folks are moving further up the bands. Even with what appears to be less activity, I'm finding stations up to and beyond 50khz above the bottom of the bands. I am happy to say that I didn't get run off any of the frequencies that I used for running this week.

As I analyze the incidents that I mentioned last month, most of them occurred right at the beginning of the CWTs and in most cases when I let the offending station know I was there, they moved. In all cases the stations were quite loud to me, so there's little doubt they should have heard me.

As I suggested last month, I think part of the problem is folks are cranking in sharp filters, finding the path of least resistance in a heavily populated spectrum of frequency, and calling CQ. Is it safe to assume that were I running high power and/or larger/higher antennas folks may not crowd me as much? They are obviously capturing more spectrum than I am, which not only impacts my ability to hear, but impacts the ability of other stations to hear me.

A well-known friend (who has exceptional filters between the ears) is proud to let folks know that he works CW using wide CW filters or even SSB filters. The same individual runs full power and huge antennas up high. Being as loud (and occupying as much spectrum) as he does, I expect that far fewer folks try hugging his skirts than my own!

As I speak of louder stations occupying more spectrum, I'm not suggesting their signals are not clean. It's simply a case where the louder signals capture more spectral area.

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In my way of thinking, someone who can plainly hear me occupying a frequency and calls CQ zero beat is akin to someone cutting into the head of line. Likewise, someone who tries to operate 100 or 150 Hz above or below an occupied frequency is like someone cutting into the middle of a line.

Neither is generally accepted behavior.

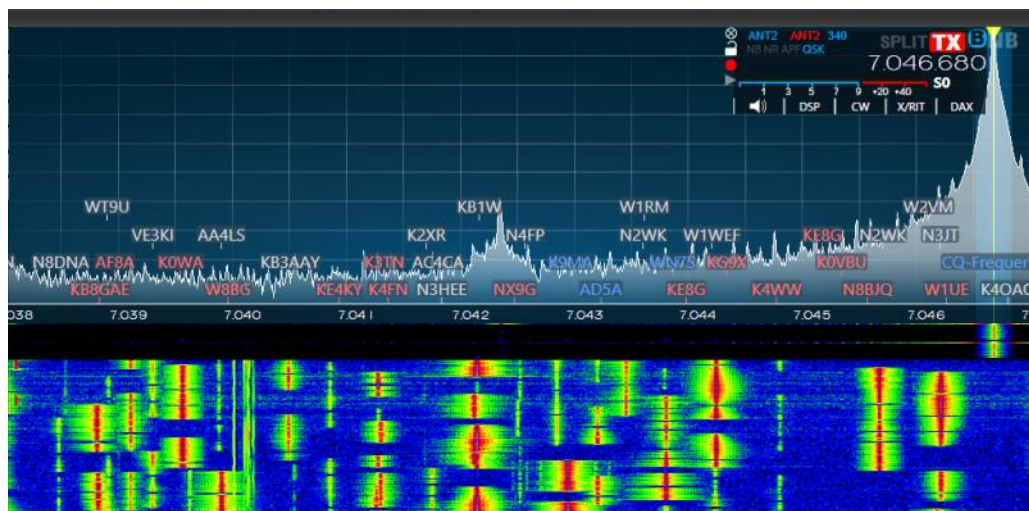
So, my suggestion is that for the huge amount of spectrum available to us during the CWTs, one should not need to use 200 Hz filters. If a frequency doesn't appear to be clear when using a 400 or 500 Hz filter, and you go to 200 Hz, you're not going to make friends with the folks you could hear with wider filters.

I suspect that 28 up from the bottom of a band is popular because it's the bottom of the suggested spectrum suggested for the CWTs. Especially in the big DX contests, the bottom of a band is popular with the big guns for several reasons. First, most people doing S&P begin at the bottom of the band and tune from there up. As a result, at the beginning of the contest, a good portion of the masses are near the band bottom. It also often happens that as they tune up in frequency, they may find a clear frequency and decide to run there. As a result, they may don't make it to the upper end. If you have the gumption to be the very bottom station on a band, you should have the advantage of no QRM from below.

There has been repeated discussion on the reflector by our European siblings about not having the masses available to work that we experience in North America.

One answer is of course for all of us to note the nonmember Europeans we work and try to increase European activity by nominating those who are interested in and qualified for club membership. In addition, as we give due consideration to weaker stations, that especially applies to the folks who have to make multiple hops across the ponds regardless of which pond!

I hope the suggestions made are acceptable to the masses and will result in less frustration for all as the number of CWops members and CWT ops continues to greatly expand.



A recent CWT and the spectrum above 7038: clear frequencies available at the top.

CW Academy

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

CWops was once again represented at the Dayton Hamvention which is now held in Xenia, Ohio, and the CW Academy was a popular topic of discussion. There was a little confusion on Friday morning as we had to move the booth around but, overall, the weather was dry and a bit on the warm side.

In many areas of the world, licensing authorities have not required a Morse code examination to get an amateur radio license for a decade or longer. But interest in CW seems to be as high as it has ever been. Many people stopped by the CWops booth and discussed how they learned Morse code years ago to get a license then forgot it. Or, maybe, they learned Morse code in the military. Perhaps they played around making a few CW contacts and moved on to other things. Perhaps they drifted away from ham radio for many years and are starting to come back and would like to regain their Morse code skills.

Perhaps a fortunate twist of fate found our booth a short walk down from a vendor who makes small QRP radios. In fact, he won an award at the CWops dinner the previous evening ([see story page 28](#)). These radios lead people to find out that CW is a great way to make those few watts go the furthest. One of the frequent things we hear is "I tried to learn Morse code but just can't do it." But many of them look down at the QRP booth and think, "well, if there was a good way to learn CW..."

That was our opportunity: yes, we can help them to learn or re-learn Morse code and have fun with it. I think the people helping at the booth let visitors know that learning Morse code will not get you a license, will not lead to a paying job, but will lead to a lot of fun. Since then, we have had dozens of people sign up for classes. How many were a result of Hamvention? Hard to tell. The middle of May is close to when the Spring semester classes are wrapping up and we get sign-ups for subsequent classes. But the interest out there is huge, and people are interested in our classes because they know that we will not dazzle them with gimmicks and will teach them using proven techniques and we will make it fun.

While all that sounds great, it does lead to a challenge: who is going to advise these potential students? We have over 60 advisors now throughout the world and we could use more. Some areas, such as Asia and the west coast of North America, need a little more support but we welcome anybody who finds joy in CW operating to assist us in training our next generation of CW fans. It takes two hours a week for eight weeks. Advising just one semester a year would be a help. We have lots of guidance and experience to help you along. And, you get to experience the satisfaction of guiding people on their CW journey. Please go to the [CW Academy section of the CWops web page](#) and sign up as an advisor.

As of this writing, the Spring CW Academy semester is still wrapping up with some advisors so a report of graduates will be in July's newsletter.

73,

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



New Members

Trung Nguyen W6TN

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

CWops	Call	Name
2280	WM6Y*	PJ
2281	CE2LR*	Matt
2282	KI7OMH*	Mike
2283	N7SU*	Dan
2284	KA5CAV	John
2285	K7RL	Mitch
2286	KZ6H	Steve
2287	N4DPM*	Rich
2288	N4GG*	Hal
2289	WA8Y	Steve

CWops	Call	Name
2290	K5YZW*	Ed
2291	N4EII*	Al
2292	K2VV*	John
2293	KI9T*	Pat
2294	KA3LXM*	Jim
2295	KD0NPM*	Rich
2296	NY3A*	Steve
2297	KN8U/BH4EPL*	Bruce
2298	K4NMR	Tom
2299	WR8O*	Ron

CWops	Call	Name
2300	K6LN*	Carl
2301	N4SJK*	Steve
2302	N4CU*	Bob
2303	NV1U	Tom
2304	K6YXH*	Norm
2305	W6VO*	Brad
2306	WA9MNF*	Ed
2307	PA0VLD*	Cees
2308	WS8G*	Rick
2309	SQ9S	Adam

*Life Member

Current Nominees

As of June 8, 2019

Need Sponsors: KM6SJT/K6ERI, KA6S, K4QU, KW5CW, M0NPT/7X2TT

Invitations Extended: AA6W, N1FN, UR3HC, KC2LM, N1MM, N5AHM, AB6UR, K6JS, K7BTW, N7ID

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

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

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

73,

Trung W6TN, Membership Secretary



CWops Member Awards

Bill 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. The CWops Award Manager (CAM) software, available at no cost, will help you keep track of your ACA and CMA totals.

In the table below, members whose call sign is in **RED** have achieved a milestone: 100 DX entities, 40 WAE entities, 50 states (WAS). Members who wish to track their totals for these awards can use the CAM software developed by N5RR. It's available at no cost here: www.bbcyber.com/cam/

Call	ACA	CMA	Call	DX	Call	WAS	Call	WAE	Call	WAZ
AA3B	924	7966	W1RM	188	N5RR	50	DL6KVA	51	W1RM	38
VE3KI	706	5069	F6HKA	171	W1RM	50	W1RM	50	F6HKA	38
W1RM	678	5747	W4VQ	151	W4VQ	50	G4BUE	47	W4VQ	37
WN7S	673	1330	N7WY	143	F6HKA	50	F6HKA	47	VE3KI	37
F6HKA	604	5282	DL6KVA	141	W1UU	50	VE3KI	46	N5RR	37
K3WJV	577	2578	G4BUE	140	VE3KI	50	N5RR	44	G4BUE	37
N8BJQ	525	5359	N5RR	129	G4BUE	50	N8BJQ	43	N5PHT	36
K4QS	510	2069	VE3KI	123	EA8OM	50	AA3B	43	DL6KVA	35
DL6KVA	486	2987	N8BJQ	122	W0EJ	50	W4VQ	42	I5EFO	33
K8AJS	468	2430	K1ESE	111	F6JOE	50	I5EFO	42	VK7CW	32
K0TC	431	2358	EA8OM	111	W6KY	50	EA8OM	42	I5IYJ	32
KG9X	417	1269	AA3B	105	N1EN	50	K1ESE	40	F5IYJ	32
K1ESE	397	3608	I5EFO	102	N5PHT	50	IT9MUO	38	RM2D	29
NA6O	386	2801	N5PHT	98	F5MNK	50	K3MD	37	W7GF	26
N1DC	376	2371	EA1WX	97	K5IX	50	IT9VDQ	36	JF2IWL	25
W9ILY	373	3654	W9ILY	95	K3SEN	50	IN3FHE	36	N1DC	22
KB8GAE	343	635	W0VX	94	AD1C	50	HB9ARF	36	K8AJS	19
WT9U	340	1253	IT9MUO	90	AB7MP	50	G4ILW	36	G4NVR	19
K9WX	323	2923	VK7CW	87	AA3B	50	F6JOE	36	CM8NMN	18
K1DJ	323	1983	N1EN	86	K5AX	50	EA1WX	36	WN7S	17
IT9MUO	317	1946	KY7M	86	I5EFO	50	W9ILY	35	G4ILW	17
NN4K	307	1951	F6JOE	86	VK7CW	50	W1UU	34		
KE4S	307	1930	I5IYJ	83	DL6KVA	50	W0VX	34		
K4WW	298	1817	F5IYJ	83	K0TC	50	RM2D	34		
AJ1DM	287	417	AD1C	83	KY7M	50	4X6GP	33		
G4BUE	276	3618	4X6GP	83	NA6O	50	ON4VT	32		
W4VQ	273	2827	IN3FHE	82	K1DJ	50	N1EN	32		
W1UU	270	2284	K5AX	79	N8BJQ	50	KY7M	32		
HB9ARF	263	1274	DL8PG	79	K9WX	50	I5IYJ	32		

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Call	ACA	CMA	Call	DX	Call	WAS	Call	WAE	Call	WAZ
W8DN	260	713	IT9VDQ	74	WT2P	50	F5MNK	32		
KE4RG	251	850	RM2D	73	K1ESE	50	F5IYJ	32		
CM8NMN	233	915	N1DC	72	K6DGW	50	K5AX	31		
K0MP	228	1331	W1UU	70	K3WJV	50	G4NVR	31		
K8RJW	227	326	F5MNK	68	K4WW	50	DL8PG	31		
KB4DE	223	499	KE4S	67	K2QB	50	N1DC	30		
G4NVR	208	746	K8AJS	66	W7GF	50	K8AJS	30		
AB7MP	201	1052	NA6O	65	WN7S	49	G4HZV	30		
AA8TA	192	1396	K1DJ	65	W9ILY	49	K4QS	29		
ON4VT	189	658	K9WX	64	W0VX	49	K3WJV	28		
W7GF	185	1490	K3DMG	63	ON4VT	49	K1DJ	28		
NU7Y	180	1027	HB9ARF	61	NU7Y	49	AD1C	28		
K6DGW	173	2038	KT5V	60	NN4K	49	M0DHP	27		
I5EFO	107	1175	K4QS	57	N1DC	49	KE4S	27		
M0DHP	98	204	K0TC	57	KT5V	49	G4DRS	27		
VK7CW	93	1603	W7GF	56	KG9X	49	VK7CW	26		
F6JOE	65	2999	W6KY	56	KE4S	49	K3DMG	26		
F5IYJ	65	837	K6RB	56	K8AJS	49	JF2IWL	26		
I5IYJ	64	837	G4DRS	56	K6RB	49	G0MGM	26		
MI0WWB	62	218	G4ILW	55	K3MD	49	SV2BBK	25		
KB8PGW	55	277	K3WJV	54	K0MP	49	NA6O	25		
SV2BBK	48	149	K3SEN	51	IT9VDQ	49	N5PHT	25		
N5RR	0	4961	JF2IWL	51	AA8TA	49	K6RB	24		
K3WW	0	4669	G4HZV	51	WT9U	48	K4WW	24		
K6RB	0	4032	NN4K	50	KE6K	48	MI0WWB	23		
K5AX	0	3634	ON4VT	49	K4QS	48	K9WX	22		
KY7M	0	3252	WT2P	48	K3DMG	48	NN4K	21		
W0VX	0	3219	G4NVR	47	EA1WX	48	K3SEN	20		
N5PHT	0	3184	G0MGM	45	DL8PG	48	KT5V	19		
EA8OM	0	2758	K4WW	43	CM8NMN	48	WT2P	18		
AD1C	0	2101	K3MD	41	4X6GP	48	W6KY	18		
W6KY	0	2088	K6DGW	39	W8DN	47	VE1OP	18		
N1EN	0	1928	CM8NMN	38	VE1OP	47	K0TC	18		
WT2P	0	1925	WN7S	37	KE4RG	47	WN7S	16		
EA1WX	0	1910	W0EJ	36	JF2IWL	47	W7GF	16		
N7WY	0	1838	VE1OP	32	IT9MUO	47	CM8NMN	16		
DL8PG	0	1789	M0DHP	32	I5IYJ	47	WT9U	13		
KT5V	0	1774	WT9U	31	HB9ARF	47	K6DGW	12		
K3DMG	0	1773	SV2BBK	31	G4DRS	47	K7QA	11		
K3MD	0	1734	MI0WWB	29	F5IYJ	47	W0EJ	10		

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Call	ACA	CMA	Call	DX	Call	WAS	Call	WAE	Call	WAZ
K3SEN	0	1643	AA8TA	26	AJ1DM	47	KG9X	10		
IT9VDQ	0	1516	K5IX	24	KB4DE	46	K0MP	10		
4X6GP	0	1381	K0MP	24	VE6JF	45	AJ1DM	10		
RM2D	0	1182	W8DN	23	K7QA	45	W8DN	8		
F5MNK	0	1111	NU7Y	23	RM2D	44	KE4RG	8		
KM4FO	0	1107	KG9X	23	KM4FO	43	K5IX	8		
IN3FHE	0	1033	AB7MP	23	KJ4M	43	AA8TA	8		
JF2IWL	0	931	K7QA	19	G4NVR	43	KB4DE	7		
K5IX	0	892	KE4RG	18	IN3FHE	42	AB7MP	7		
K7QA	0	777	KE6K	15	G4HZV	42	KM4FO	5		
VE1OP	0	768	AJ1DM	15	K8RJW	40	KJ4M	5		
W0EJ	0	754	KB4DE	12	KB8PGW	37	K8RJW	4		
KE6K	0	701	KM4FO	10	G0MGM	35	VE6JF	3		
G4DRS	0	692	KJ4M	10	MI0WWB	29	NU7Y	3		
G4HZV	0	603	K8RJW	9	G4ILW	27	KB8PGW	2		
G4ILW	0	555	VE6JF	8	M0DHP	22	KE6K	1		
KJ4M	0	498	KB8PGW	5	SV2BBK	18				
G0MGM	0	495								
VE6JF	0	376								
K2QB	0	125								

QTX Report

Enjoying the Art of Conversational CW

[Gary Stone N5PHT](#)

Welcome to the May 2019 Rag Chewer Column. Hope all is well and it appears many of you are still finding time to do some rag chews for sure! Been very busy here with several Parks on the Air camping trips and a non-radio 4-day driving trip to Texas out of necessity and to visit some family.

So, just what is the origin of the term, "rag chew?"

Doing a little research yields one explanation: Newspapers were often made from fibers and thus the name "rag." Someone might say, "Did you see the latest rag giving the local news?" To

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“chew” the rag was therefore to discuss the events of the day. Some ham radio “rag chews” involve such events but actually I am told that would be in violation in some countries. Most of my longer rag chews involve equip and careers and perhaps travel and family.

Do any of our members have a better explanation for the origin of the term “rag chew?”

Comments from QTX Submissions: (voluntary but on the submission page if you are so inclined):

W3WHK: Too many contests this month, not enough ragchewing!

HB9CVQ: Was more busy this time writing 5 technical articles on HF low band mobile. Less CW chatting ;-)). See www.qrz.com/db/hb9cvq.

MI0WWB: A great fun way to build your CW skills.

WB6TOU: Finally managed to reconnect with N6HCN twice for two minis due to QSB. Met a goat farmer and an electrical engineer (woods is full of them.) Mostly west coast contacts but again with a friend in Hawaii.

N6HCN: Testing new rig on 40m this month, finally caught up with WB6TOU, K1NVY. Topics: NU6F's military gear, bug talk with K5KV, feral cats with AA6ZE, life in rural MN with W0VTT.

GM0EUL: Not much rag chewing this month but some great QSOs. I managed a bit of rag chewing with a bug- that's pretty intense- and a couple were QRP.

KC0VKN: Had a great time in Dayton! Many eyeball QSO's there!

K6DGW: More time in May, summer conditions. Didn't understand how they could get worse but it seems like they did.

KB6NU: I may have actually had more, but somehow I managed to turn off automatic logging of the QSO end time, so I can't honestly claim any more.

K2KRG: Lots of great M/QTX this month from my truck while commuting to work. Also while traveling to Dayton I had some great Contacts including Chip W9EBE and Tom K3TF. I also had a mobile to mobile with Dean G4WQI who was ridding with Jack W4TJE and Wayne W4HG.

MEDALS

Remember that we give out QTX Medals at the end of the year for 3 levels: (QTX). Maybe we can develop something for MQTX later.

Gold Medal – 400 QTX Points

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Silver Medal – 300 QTX Points
Bronze Medal – 200 QTX Points

MEDALS for 2019: We have several Bronze earners so far: KC0VKN (260), N8AI (258), K2KRG (227) and N5IR (211).

QTX FOR MAY 2019

Call	QTX	Call	QTX	Call	QTX	Call	QTX
N5IR	51	W9EBE	25	HB9CVQ	8	SV2BBK	3
N8AI	48	KB6NU	23	K5YQF	8	GM0EUL	3
K2KRG	48	N5PHT	17	WB6TOU	7	KB8GAE	2
I5EFO	29	N6HCN	15	AJ1DM	6	W3WHK	1
F5IYJ	28	KC0VKN	13	K6DGW	6	MI0WWB	0
K1ESE	27	K4AHO	10	K8UDH	4		

MQTX FOR MAY 2019

Call	MQTX	Call	MQTX	Call	MQTX	Call	MQTX
N8AI	63	K1ESE	15	K8UDH	9	GM0EUL	2
K2KRG	60	MI0WWB	15	KB8GAE	6	W3WHK	2
SV2BBK	33	K6DGW	12	K4AHO	5	AJ1DM	1
W9EBE	27	N5PHT	10	N6HCN	5		
I5EFO	18	HB9CVQ	9	WB6TOU	4		

2019 Totals for QTX:

Call	QTX	Call	QTX	Call	QTX	Call	QTX
KC0VKN	260	F5IYJ	113	K8UDH	25	W3PNM	10
N8AI	258	W0ITT	59	K6DGW	25	N9SE	7
K2KRG	227	N6HCN	58	W3WHK	24	WN7S	5
N5IR	211	K4AHO	42	N4PIR	22	WA8IWK	4
W9EBE	176	HB9CVQ	39	DL5DBY	21	N5LB	2
N5PHT	173	K5YQF	33	KB8GAE	20	W5LA	2
K1ESE	146	WB6TOU	29	K0DTJ	15	MI0WWB	1
I5EFO	133	N4DT	28	SV2BBK	13	K3GHH	1
KB6NU	117	AJ1DM	26	GM0EUL	11	AB7MP	1

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2019 Totals for MQTX:

Call	MQTX
N8AI	346
W9EBE	192
K2KRG	149
SV2BBK	129
I5EFO	106
K1ESE	83
N5PHT	480
MI0WWB	70

Call	MQTX
W0ITT	65
HB9CVQ	55
DL5DBY	52
K6DGW	51
KB6NU	42
N4PIR	38
GM0EUL	37
KB8GAE	34

Call	MQTX
K4AHO	27
N6HCN	24
K8UDH	22
W3WHK	15
WB6TOU	13
AB7MP	8
K5YQF	8
W3PNM	7

Call	MQTX
N9SE	6
AJ1DM	3
N5LB	2
WA8IWK	2
W5LA	1

Hope to cu on the bands. NOTE: If you ever find me with missing reports, numbers or anything on this column please email me so I can get it corrected!

73,

Gary N5PHT, QTX Manager

My Story: New Member Biographies

Mike Curry KI7OMH

Thanks so much to those who nominated and sponsored me!

My interest in amateur radio began when I was in elementary school, even though I only got licensed a few years ago. My father was a forester for the state, so we always had radios and scanners around the house, especially during fire season. I was always fascinated by the crackling voices, and curious about how that all worked. At the time I didn't know any hams, or even where to get started.

In high school I became a wildland firefighter during the summer, and spent a lot of time on radios, getting to know the radio techs (who



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were all hams, and helped install the CB in my pickup). Still, I never pursued my license. What kept me from trying was the CW requirement . . . it intimidated me, and so I just moved through life, occasionally thinking about it, but convinced I'd never be able to learn CW.

Three years ago, while teaching a mountaineering course, one of my students brought along an HT on a climb of Mt. Rainier to listen in on the guide and National Park Service channels. We got to chatting about his experiences as a ham, and he shared with me the CW requirement was gone. That's all it took, and a few weeks later I took my technician exam. He loaned me an Icom 706mkII for a few months, and while I was mostly chatting on 2m, I enjoyed listening to the HF bands, and got my general a few months later.

I finally got my own rig last summer, a Kenwood 480SAT, that still serves as my main rig today. I'm also a homebrew enthusiast (I'd been involved in electronics as a hobby for a few years, mostly audio amps, so it was a natural extension). I've got a homebrew uBitx and a 20m QCX. I have about a half-dozen homebrew antennas, and I'll always take the option of building it over buying it if I can.

As a mountaineer, I became interested in SOTA right away, and it didn't take me long to figure out that CW was the way to go when operating remotely. With the pressure of having to learn CW gone, I decided to give learning it a try. I tried to learn on my own a few times, but never got past about 8 wpm. Then I found CWops CW Academy. It took me a few months to build up the nerve to commit, but I've never looked back. While I thought my CW interests were really just going to be SOTA and the occasional ragchew, my L2 course introduced me to contesting, and I was addicted almost immediately. Don't get me wrong, I'm not that great, but I'm learning, and I'm having a great time!

On the non-radio side of life, I'm a husband, father of two, nonprofit administrator, and part-time professor of nonprofit management. When I'm not on the air, you'll usually find me climbing frozen waterfalls during the winter, and rocks and mountains the rest of the year.

Dan Sands, N7SU

"Why don't you go introduce yourself to the boy down the street who has the ham radio antenna?" With those words in the early fall of 1965, my mother set the stage. My Elmer, only a Novice himself, was two years older than me and I sat with him for hours on end as he made CW QSOs with his Knight T-60 and a Star Roamer receiver. He had a great fist and used a J-38. I modeled my own CW after his example. I received my Novice license in March 1966 (WN7FCV) and was able to climb the ladder to General class in November. My Novice station was a DX-40 and an SX-140.



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In the 60's, there was an amateur radio club at almost every high school. I remember the CW network of high school-aged hams that existed not only locally, but around the country. I recall how we all loved QSL cards and we spent many back-and-forth minutes on CW, painstakingly exchanging our mailing addresses for cards. *Callbook* was an expensive luxury for teenage hams. We even had a two-semester Electronics class that was part of the standard curriculum within our high school district. Where did that all go? (sigh)



After I received my General class license, like all Novices, I was eager to start using a microphone. I got a Johnson Ranger and also had a Johnson Valiant. Looking back on my logs from those days, I don't see many A3 QSOs. Phone just didn't turn out to be the big deal that I thought it would be. I stayed with my Novice roots in CW.

At the University I attended I had the great fortune to have another ham as a roommate. He had a Swan 350 and we broke many dormitory rules when we managed to hang a dipole antenna in the attic and poke a small hole in the ceiling for the coax. We had fun having a station in our dorm room and it was definitely a distraction to our studies.

Work, marriage and raising a family have all moderated my activity levels over the years but my lapses in activity have all had rebounds and I've managed to keep a station on the air from every QTH here in Phoenix. I find myself mostly interested in CW, QRP and CW contesting. I have a small collection of bugs, straight keys and paddles. I often ask myself the question of the ages – how many of these things do I really need?

The photo I've included doesn't look related to amateur radio but it was all part of a plan that included amateur radio at its start. In planning for retirement, the XYL and I decided the first big adventure would be to restore an old car and use it to travel Route 66. I also planned to take a portable station along and make contacts from many locations along Route 66 as our journey progressed. We bought the '49 Buick in 2005. We spent seven years completely restoring it to its factory original condition. The Route 66 trip happened in September and October 2017. We traveled Route 66 from Flagstaff, Arizona to Chicago then turned around and went west to Santa Monica, finally returning to Flagstaff. The plan for amateur radio evaporated though when a reality check showed there was not enough time in the day to do everything involved in traveling and sightseeing coupled with station setup and QSO time. We were on the road for 38 days.

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In retirement, I've found much enjoyment in returning to my roots, collecting and using all the rigs that I wanted as a youth but could not afford. I have now managed to accumulate too much and I have to resist every temptation to acquire anything else. I now finally own and use a complete Collins S-line. All the hams I knew in high school wanted to just see an S-line station in person but the closest we got were pictures in *QST* magazine or other printed advertisements. The teenage Novice in me still does cartwheels when I look at it in my station.

My fondness for nostalgia has led me to inherit the leadership of an annual Novice Rig Roundup event. This contest-like event happens over a one week period at the first of March each year. There is about 2000 who actively participate in a group devoted to collecting and using rigs from the Novice era and about 200 that actually get on the air and participate in the event, which is CW-only. If I have piqued your curiosity, please visit www.novicerigroundup.org or contact me for details about the groups that have formed on Facebook and Yahoo.

My greatest achievement in life is my three children, two sons and a daughter. My oldest son has followed me into amateur radio (KD7PMS). When he was very young, I set up a Hallicrafters SX-110 next to his bed and he would SWL at night after lights out. He told me that his interest in ham radio began with that SX-110 and the pleasure it provided him in the listening experience.

I express my sincerest thanks to Hank, W6SX, for his sponsorship of my CWops membership and to those who supported my nomination. CWops is truly a pinnacle moment in my amateur radio adventure.

Hal Kennedy N4GG

Ham radio runs in the family. My dad was licensed in 1916 – callsign 2NJ. Before ham radio he was a ship's operator crossing both the Atlantic and the Pacific – mostly spark. He passed away when I was four – so the radio attraction got passed along via DNA, not direct contact. People don't believe me when I tell them my father was born in 1897, but it's true. A lot of time has passed. I have some of his logs and they are fascinating. He was copying NSS (East Coast) while on board ship in the Pacific, on, 28,200 meters!!

I became a novice at age 12 - 1961. W2DLT (still active), K2YCB (sk) and W2NPT (sk) were my Elmers. I had a good team to help me along. The novice license required one to start on CW and it's a shame it's no longer that way (an editorial comment). CW became a first love. That hasn't changed in 58 years on the air. I can talk with my fingers – cool!

My ham career followed a typical progression. From Novice to General to Amateur Extra within a year. 25 WPM seemed difficult at the time – in my advanced years twice that seems easy. W1AW code practice sessions were my main teaching tool. On-air periods were up and down. 1966-1970 were spent in college and QRT except for the summers. 1986-1987 saw me back in college and QRT again. Operating was minimal as kids arrived and a living needed to be earned. I retired in 2003 at age 55, and ham radio was again front-and-center.

Ham radio shaped my education (that first degree was a BSEE), my career and I found Kathy, my

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wife of 48 years, via the hobby as well. I have no regrets about my hobby (actually, an avocation).

Rigs have come and gone – I still home brew a lot both in the shack and out in the antenna patch. Currently deed restricted, the antennas are all “wires in the woods.” They change every few years. I’ve published antenna articles and operating articles in QST and have had numerous articles published in NCJ. I am also a contributor to the ARRL Handbook and the ARRL Antenna Book. I’m active in the SEDXA and the SECC. Contesting and DXing are “my thing.” I also give lots of presentations. I’ve spoken at Dayton and at many hamfests and club meetings.

In 2010 I completed building “Blue Lightning,” a replica 1910 synchronous rotary gap spark transmitter. It runs a half kilowatt and makes all the noise and ozone the first ones did 100 years ago. Disrespected, it can be lethal (part of the “fun”). I’m one of the only ops around who knows how to tune up a spark transmitter and that knowledge has been put to use. For the 100th anniversary of the ARRL, “Old Betsy” was restored at ARRL HQ. I was in close contact with W1AW station manager Joe Carcia, NJ1Q - advising how to get that famous rig put back together, tuned and made safe for all the expected visitors (that part was not easy). If you are near Atlanta, come visit N4GG and you can send on an authentic spark rig (into a dummy load!).

The spark bug got me interested in the history of early wireless. Some of my presentations have been about our history, particularly from Marconi spanning the Atlantic in 1901 through 1929 when spark was outlawed.

So, what’s next? More CW for sure. More DX, more contests, more DXpeditions (TI, HP, PJ2, PJ4, PJ6, VP2M so far), more writing, more presenting, more experimenting. The arctic flutter that comes with working deep Asians over the pole on a cold winter night still excites me – it stirs old engrams. It will do so no matter how many times I do it. Radio is magic, it really is. To his credit,

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Contesting and DXing are “my thing.” I also give lots of



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Marconi always said he had no idea what made it work. I've had all the course work and nearly six decades doing it, but deep down I don't know how it works either. You can close a key in Atlanta and someone in Europe can hear it – that is pure magic.

CW Forever, DX IS.

Al Sutton N4EII

I am appreciative and humbled by membership into CWops. Thank you Michael Goltz N8DNA for your nomination and to my sponsors.

My radio story began with a pair of Midland Walkie Talkies (Channel 14) from Santa Claus the Christmas of 1965. From that point forward I was always interested in two-way communication and radios.

Throughout my life I have been blessed with the best of amateur radio mentoring. My high school radio club advisor Robert Foster exposed our members to SSB via our Swan 500C and prepared us for and administered the Novice exam. I received my Novice License WN4RAE in 1970 and explored the band allocation by way of a Hallicrafters SX140 and a Heathkit DX20 at 5 wpm.

Fast forward to 1982 and a ham radio neighbor Blair Hatcher AB4V rekindled my interest and I was on the air again with a General License N4EII. Blair was a National Traffic System Morse code high speed operator. He planted the need for speed idea, but it took a while to start the process.

After being QRT for 25 years, a friend and customer Dennis Keith NC4DK told me he was an Amateur Radio Operator and explained the process to again obtain a license. Dennis encouraged me to join the Raleigh Amateur Radio Society and I was on my way. My daughter Megan joined me for testing. She received her Technician KN4DRM and I was again a General KN4DRL until I received N4EII by way of the vanity call process and an upgrade to Extra last year.

RARS club member Carl Davis W8WZ CWops #1660 introduced me to the CW Academy. The fun and learning began.

CWA 1 advisor Phil Graticer W3HZZ

CWA 2 advisor Ron Norris. VE3FXX

CWA 3 advisor Jerry Weisskohl AC4BT



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Thank you to my CWA advisors for your time, encouragement, and knowledge. Also, thanks to the CWops officers and the membership for a great organization.

Oh, about me, I am in my second year of retirement after a 41 year career of distributing Law Enforcement Equipment in the Carolinas.

Again, THANK YOU to all my mentors.

John Smith AA7ST

First off, thanks to good friend Steve, K3SW, for getting me back into ham radio and sponsoring my membership along with AA3B, N8AA and K3WW. CWT has been a lot of fun and I'm glad to be aboard as CWOPS 2263!

I was first licensed in 1959 as KN3IAM in Philadelphia and a few months later got my general class as K3IAM. I was first on the air with a Hallicrafters S-76, a Globe Chief 90 and a long wire with a homebrew antenna tuner. Got a lot of RF burns with that! Ham radio waxed and waned through



college, but CW was always my favorite mode, especially the CW sweepstakes. Back then, you could work any 40 hours over two consecutive 33-hour weekends and I remember coming up from my basement ham shack with CW ringing in my ears. I still have some SS logs going back to the 60's, including the necessary dupe sheet! How things have changed with N1MM logging.

My dad, K3ZQN (SK) got me into Navy-Marine Corps MARS, now defunct, in the late 60's and I kept involved after moving to NY as W2GRU. When the sub-bands were announced, I decided it was time to get the Extra Class license, which I did in the early 70's, sweating the 20 wpm code requirement but managed to pass. As MARS call sign N0JCI, I became more involved in volume message traffic handling via SSB and RTTY, restoring surplus military equipment in the process. During a DOD billet cutback in the mid-seventies, I volunteered for what was normally an RM1/C billet as civilian Director of the first and third Naval district, call sign N0ASI/NAV1. At the same time, my Dad was the volunteer director for the 4th Naval district as N0ASD/NAV4! That was a lot of fun and work along with a full-time engineering job. I think I burned out on all that, though.

After moving to RI in the 90's, the bug bit again and I was on the air again as AA1SE. I was only on the air for a little while and we then retired to AZ. Steve, K3SW, bugged me about getting back on and I was able to resurrect my Extra Class license by taking the technician license test from volunteer examiner Quinton, NU7Y. I got an IC-7300 and AH-4 antenna tuner and was back on in

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2017 as AA7ST! Funny but if you adjust for inflation, the IC-7300 in 2017 cost as much as my first novice rig! Now in an HOA-restricted community, stealth antennas became my way of life. I have an MFJ 33' fiberglass mast with a wire running in the middle that I raise Tuesday night and collapse Wednesday night for CWT (and of course as needed for CW SS).

Along the way, I learned how to write software and have a company (CCDWare, Ltd.) that sells astronomy-related software to this day.

My wife Diane lovingly and graciously puts up with all this nonsense and is incredibly supportive in whatever I do.

When I think back to how far radio technology has come in the past 60 years, indeed technology in general, I am astounded. It has been an amazing ride.

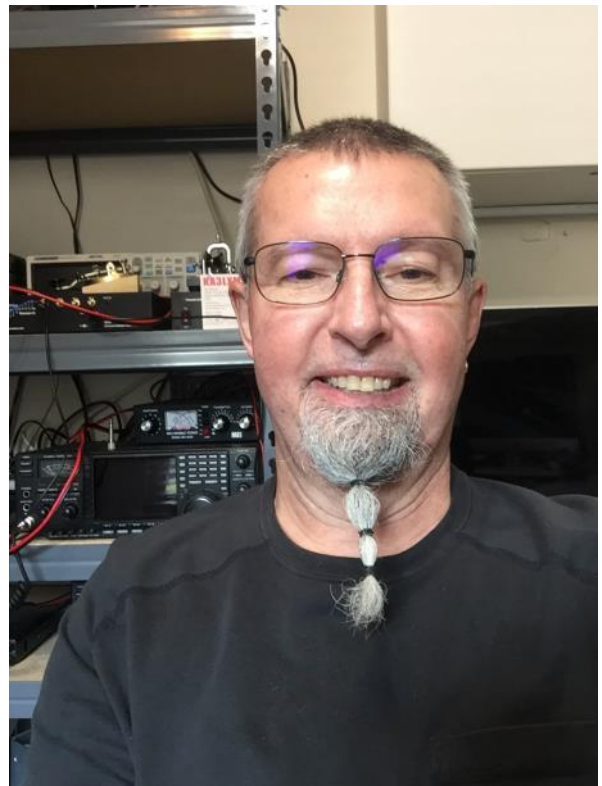
Jim Rorick KA3LXM

First, a sincere thank-you to CWA advisors Ron VE3FXX and Jerry AC4BT for putting up with me; These dedicated individuals provided instruction, resources and inspiration to me and fellow classmates. Also, thanks to AA3B Bud (nomination) and the other kind folks who sponsored me!

I have always been interested in electronics in general and radio in particular. My grandfather would take me junkyard scrounging and he gave me my first short-wave receiver back in the early 60's. I didn't really do anything with CW till 1973 when I enlisted in the army (my draft nr 63 as I recall). I spent 18 weeks in a 14-week course learning Morse code! We had to copy 500 characters / cut numbers (5-character groups) with less than 10 errors at 18-WPM to pass... just barely avoided cook-school!

After 6 years in the military, I continued working for Uncle Sam and spent most of my first 20 years of civilian employment overseas. In 1983 while stationed in New Delhi, India, coworker and ham operator Dick Miller (sorry Dick, I can't find your call sign!) got me interested in ham radio and administered the Novice exam, code test and all, to me. I was assigned KA3LXM and received an Indian reciprocal license VU2LXM. For the next 2 years, I worked exclusively CW on an ICOM 730 and a quad antenna. Life got in the way, and that was the last of ham radio.

Fast forward 35 years and I'm still married to Linda for over 40 years; kid and grandkids. Uncle Sam paid for my degrees and I held positions as mathematician, systems engineer, technical lead, program manager yada, yada. Teaching at the local college was one of the most rewarding



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things I have done - I have the utmost respect for anyone teaching at any level. Never "worked" a day I my life - Always enjoyed what I was doing! I retired from the government, General Dynamics and few small companies.

I have never understood folks who say they are afraid of getting bored when they retire. I still don't have enough time! Typical home maintenance, care and feeding of a couple boxer dogs, tinkering with electronic projects and associated software, a couple motorcycles, welding, small machine shop in the garage, beer brewing, bread making (especially sour dough!) everything eats up time! And then I decided to get back into ham radio!

In Nov 2017, I started with a General license KC3KHH. After getting my Extra a month later, I received a vanity call of KA3LXM - my first call! I'm also an ARRL VE working out of my local club in Ft. Washington, MD - FWARC. I have an end-fed-half-wave antenna in the backyard powered by an IC-7300, IC-756Pro-II or USRP-1, love to tinker with hardware and software, and GNURadio is one of my favorite toys!

CW still holds my focus. From my early days of sitting in an uncomfortable chair, cans on my head, pounding keys on a mill, to relaxing with an adult libation trying to head-copy a station going slow enough for me - CW remains fascinating! CWops is a large, active group of like-minded individuals. Collectively they have demonstrated patience for the newbie and dedication to improving their own skills. I am very proud to be a member of this elite group!

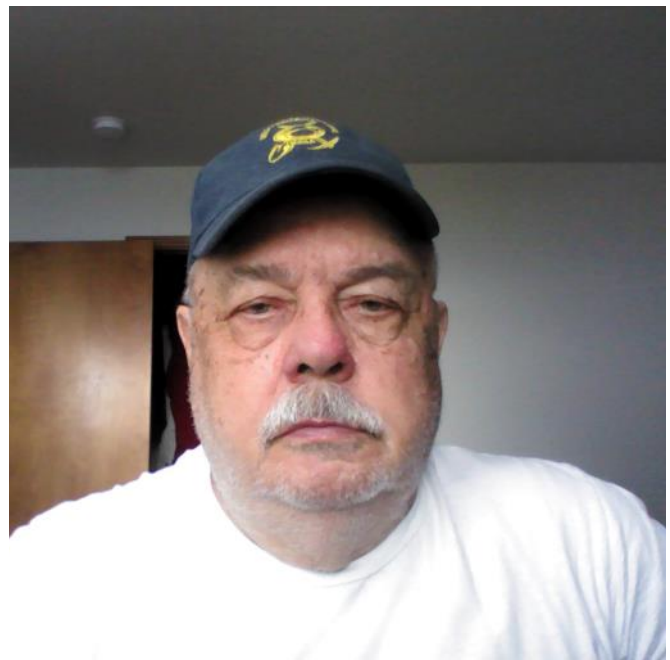
Ron Gallo WR8O

Could never have imagined that my call might be associated with the calls of all the great CWops. Sort of feels like being a novice again.

Would like to thank those who voted for me, those who put up with me on CWT and my Level 2 and Level 3 advisors; Scott KF7GGN and Jerry AC4BT. Good advisors and good friends.

Licensed initially in 1976 (77?) but only pursued CW to upgrade. Kind of liked it but didn't have the confidence to make it happen. Took comfort in SSB which became a hard rut to get out of. Experienced a little taste of CW during the National Parks On The Air program from the ARRL in 2017 and there was no turning back. Club friend and CWops member, Bob N7WY suggested CWops. Glad I asked him for advice.

Will be traveling but plan to be as active as I can. Really like HF mobile. Hope you will listen for ..--- ..--- N N on CWT.



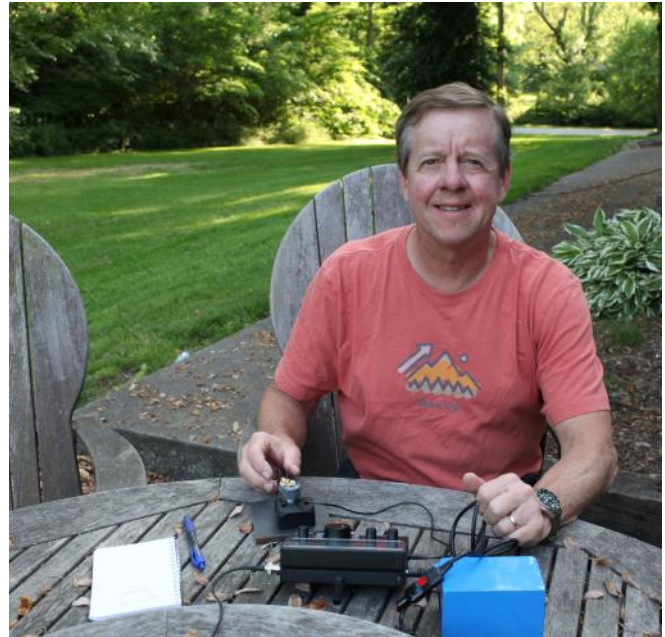
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Pat Kelley KI9T

First, let me thank Christian, W4ALF, for nominating me to CWops membership, as well as my sponsors, Bryan, N3FZ, Woody, WD9F, and Dave, K1VUT. CWops is a first class organization and I'm very pleased to be part of it.

It seems as though I've always been interested in the magic of communicating via the airwaves. I didn't know any hams growing up. When I was very young my father built a Heathkit color television and we received Heathkit catalogs at our home for many years after that. I eagerly read about the amateur radio equipment offered but took no action to learn more about the hobby. I'm not ashamed to admit it, the closest I came to being a radio operator in my youth was a fairly brief foray into CB radio with some of my buddies in high school. 10-4!



After establishing my career as a prosecutor and state court trial judge, I got my Technician ticket in 1999 at age 41. I quickly upgraded to General and, true to my roots, began operating mobile HF SSB, which I really enjoyed when there were plenty of sunspots. Then I taught myself CW and never looked back. After upgrading to extra, I took a break from ham radio around 2009 to pursue other things, such as riding motorcycles, climbing big mountains and going to our sons' athletic events. Those things along with work made for a very busy time.

Last November I decided to get back into radio. I'm retired now, and am enjoying it more than ever. I'm only doing CW, though I may do some FT8 while the sunspots are low. I read about CWops and was able to get into an Academy Level 2 class with Ted, WA3AER, in January of this year. After a month respite, in April I entered a Level 3 class with Christian, W4ALF. Wow, what difference structure makes! Both Ted and Christian are fantastic teachers who have set me on a CW trajectory I would not have imagined back in November. I love everything about CW, particularly its musical qualities, the concentration it demands, and the kind of people who tend to gravitate toward it. I see improvement as a lifetime pursuit.

Going forward I'll be enjoying the CWT's and other sprint type contests, chasing DX, QRP fox hunting, ragchewing, and operating QRP portable, including SOTA and POTA activations.

Rich Stafford KD0NPM

I am honored to become a CWOPS member and thank Chris W4ALF, Joe KK5NA, my classmates and many others for their excellent instruction and support.

I grew up in a very small town in rural Iowa. Corn, cattle and hogs were kings. It was a great place

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to grow up. I lived across an alley from the grain elevator where my father and grandfather worked, a coal yard, lumber yard and just a block from the railroad tracks where we put pennies on the rails to be flattened by steam engines. Tom Swift, Buck Rogers and Godzilla ruled. Shortwave listening was big then and I built a Heathkit GR-91. Fortunately, there was a welding shop nearby where I hung out at night. There I met Roger K0HCL (SK) and John when I was about ten, and they became my Elmers. My family supported ham radio fully and I was licensed as WN0CGM. A trip to Chicago followed for the General exam given by a crusty examiner who gave me a second, successful, run at code. My shack was a converted coal bin in the basement. Rig was a borrowed Heathkit DX40 and the GR-91. Summer jobs and generous parents allowed the acquisition of an HT-37 and Drake 2B; pure gold!

Eventually other interests developed and amateur radio fell by the wayside. I was a math major in college, then attended medical school in Iowa. There was further training in Las Angeles and Boston. I became a pediatric gastroenterologist. My wife, Carole, and I lived in Minneapolis for about 35 years where I practiced and taught. We have two fine sons, one of whom is KK4NOC. They blessed us with five grandchildren. We moved to Niskayuna, NY about four years ago to be with four of them, all under nine years old. They are all a source of pure joy.

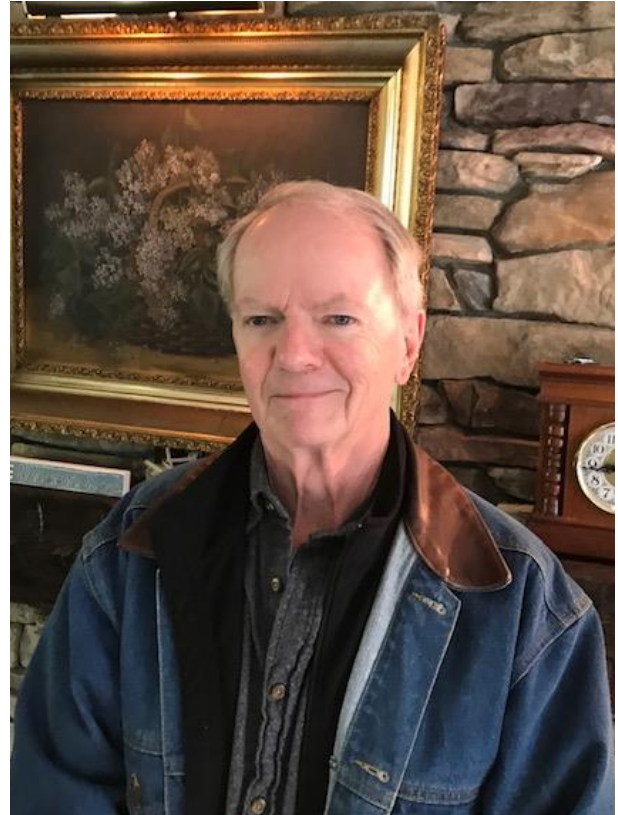
As retirement neared I rediscovered radio. I became KD0NPM in 2011. Current rigs include a KX3 with KXPA. City living poses severe antenna limitations. Morse code was always special to me, and fortunately I found CWA. Level 2 was great, and level 3 introduced me to a new realm. I am very fortunate to have this endeavor shared by many talented and interesting colleagues. I hope to see you all on air.

Vic DiCiccio VE3YT

Thank you to Rich VE3KI for nominating me and others who sponsored me, as well as Trung W6TN and Tim K9WX for all you do in making new members feel welcome. The thing I value most about ham radio are the friendships and comradery with those interested in my favourite aspects of the hobby.

Fred Robinson, VE3GCP, set me on a path not only to CW, but to my education as an EE, when he taught Morse code to a bunch of boy scouts in 1967. It was the Summer of Love but instead of going out on a date, Fred spent the early part of Friday evenings for several weeks cleaning contacts, debugging our oscillator assembly errors and helping a group of young guys learn the code. Ken Warner VE3DYO (SK), my high school English teacher, helped me make CW contacts on

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the school station, which included his own Heathkit DX-40, before I was old enough to get a station callsign – at that time Canada required all station owners to be 15 years of age.

The local Hamilton Ontario amateur radio club had a Field Day tradition of one station for each band and mode, and my first time at FD I got to sit beside Rae Baker VE3CZN (SK), a talent-



A wet and cold Field Day in 2015

ed phone contester who got me hooked. I logged but couldn't hear the jumbled mess that was 20m sideband as selectively as he could. At the age of 14 it was great sitting up all night making contacts (even if they were phone), and about 4 am he poured each of us a rum and coke. I needed a sleep in the back of the car, but was back for more next year when my high school buddy and I talked the club executive into taking a chance by giving two kids a shot at 40m CW. We worked over 500 Qs, pounding brass and logging on paper, using my NC300 and DX-60.

I was hooked on CW contesting. With only a 40m dipole at my parents' house, I was limited to 40 and 15. At university, when I felt I had time, I did some contesting with the school station and later put up a quad at my first house. By 1982 my career, babies and an interest in duathlon (run-bike-run) and marathons squeezed out ham radio for a while.

In 2012 I refocused on ham radio and my friend Eric VA3DZ invited me to an ARRL Sweepstakes CW multi-op. My CW had atrophied so some training was required. Sometimes, while taking a break for half an hour of Morse Runner in the middle of the workday, I'd think, "This is so realistic, why do I have all that expensive HF gear?" My ham friends brought me back to the real world when I emailed them that I just worked ON4UN on Morse Runner.

Earlier this year I retired from the University of Waterloo where I directed the Institute for Computer Research, so maybe I'll finally get a decent tower up. The Thursday night NS Sprint is a weekly habit and I've recently started doing the CWTs.

Two years ago, I met a young man at Dayton, near the Begali booth. His passion was CW pedestrian mobile and he built an ingenious arm for his ALICE pack that held a KX3 in front of him, where he could easily access the paddle. He credited the CWops CW Academy with improving his CW and was enthusiastic about getting others to do the CWTs. CWops should be very proud of its impact.

Carl Jacobson K6LN

I would like to thank my CW Academy Level 2 advisors Dallas, K1DW, and Frank, K1EBY, and my

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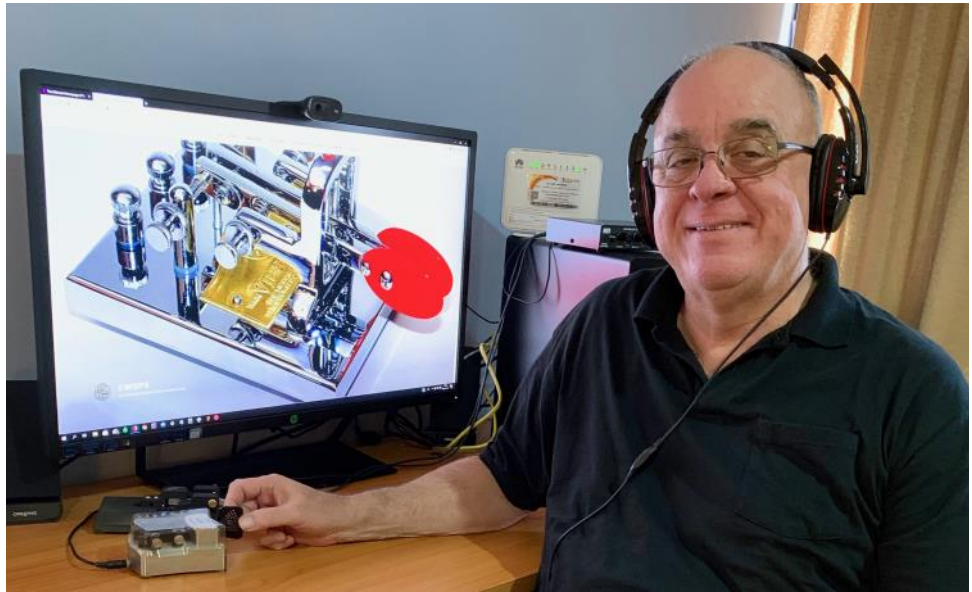
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Level 3 advisor Joe, KK5NA, as well as my fellow students in all the CWA classes I attended for helping me improve my CW.

And of course, thanks to K1DW for nominating me and K1EBY, K7QA, K1VUT, and N7SU for sponsoring me. I am honored to be CWops member #2300.

I was always interested in radio and electronics, especially two-way wireless communication. As a youngster in Arizona, I was fascinated at how the guy who drove the ice cream wagon could talk to his base station a few miles away using a two-way radio. I wanted to become a ham and in 1965 when I entered Cortez High School in Phoenix, I joined the school amateur radio club. As it turns out, one of my sponsors, Dan, now N7SU, was also in that club.

The teacher who advised the club was a ham and gave the exam for the Novice license. In 1966 I received the Novice call sign WN7ETQ and a few months later I passed the General class exam and received call sign WA7ETQ. The General exam atmosphere back then was very serious. An FCC official had come over from Los



Angeles to administer the exam. He was dead serious and so were we, no levity at all. I started to choke during the 13 WPM sending test but recovered and passed. Then I passed the receive test and the theory exam. I felt then and feel today that it was one of my most significant accomplishments. Like others, I had originally thought I would use mainly voice, but I ended up preferring CW.

Some of us young Phoenix-area hams would meet on 15 meters AM. It was only local, no skip, and that was pretty much the only voice I did. For a while 40 meters opened to Japan and my dipole was oriented in the right direction for that. I had to get up at 4:30 AM and be on the air at 5 to catch the propagation, but it was worth it. As a teenager, I believe that was the only time I ever voluntarily got up early. I also listened to W1AW and W6OWP Code Proficiency Runs and obtained a 30 WPM certificate.

I should mention my equipment back then. I built a 10-watt CW-only transmitter and later got a Johnson Viking Ranger. For a receiver I had a Lafayette HA-63 general coverage SWL receiver. The antenna in Phoenix was a 40m dipole, then later in Chandler an inverted V. Another friend in the high school club got a Vibroplex bug so, not to be outdone, I built a keyer and got a Vibroplex single lever paddle. I went from a straight key to a keyer and paddle fairly early in the game.

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As I moved through high school and college, life got in the way and I became inactive in ham radio and let my license expire in 1971, though I still was able to copy CW occasionally. I might hear it as a station ID on a police officer's radio. CW never really left me.

Fast forward to 1999 and I decided to get licensed again and signed up to take the exam. I listened to some CW audio cassettes for practice and read through a study guide. Then I went to take the exam.

The atmosphere was totally different than 1966, serious, but upbeat. A friendly volunteer examiner gave the test. I passed the theory for the General and the Amateur Extra license and the 13 WPM receive-only code test for General. There was no sending test. I told the man, "Well, I'll come back next month and go for the 20 WPM Extra code test." He said, "Hey, why don't you try it now? You've got nothing to lose. If you fail, it doesn't count against you, and you just might pass." So, I took it and passed! When I had walked into the exam center I had hoped to get a General class ticket. I was ecstatic as I walked out, knowing my Amateur Extra class license would soon be in the mail.

Though I had the ticket, I still did not get active. I had a lot of demands on my time back then and lived in an apartment so a good HF antenna was out of the question. I did, though, keep my license current.

A combination of hard work and luck, mainly the latter, led to my being able to retire in 2003. I did just that and started travelling the world. I had always been fascinated by Asia, in part by my CW QSOs with Japan as a teenager, so I concentrated on spending time there. I didn't even think of ham radio or CW, except during those rare times I would hear it in a movie or on a communications radio as station ID.

In 2018 I read an article on remote operation and decided to get back on the air. My CW was rusty--I hadn't sent with a paddle or key in over 50 years--so I started the January-February 2019 semester in Level 1. After two weeks I moved into Level 2 and then took Level 3 in the April-May semester. Now virtually all my ham activity is operating US stations remotely on CW from Asia where I spend most of my time. Currently I participate in the weekly CWTs.

Good luck to everyone and I hope to see you on the air.

Steven Linley WA8Y

When I retired in 2008, my wife wanted to keep working. I got up with her, made coffee, went to my shack and worked into the Pacific on 80 meters. As you know 2008 was a solar minimum and my best DX was on 80 meters. I started with a Double Extended Zepp at 75' but I made it the driven element of a wire Yagi by adding a wire reflector and a director.

I fed the Zepp with ladder line and brought it directly into the shack. Probably not my best idea but on 80 meters the RFI was minimal. I was using a big Dentron MT-2000 antenna tuner, amplifier (Dentron DTR-2000L) and a brand new Icom IC-718 with DSP. I reached 80m DXCC mostly from SSB QSOs that I made in or near the DX window (3790 to 3800 kHz).

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A couple years later, I built a screwdriver antenna (based on a design in the *Amateur Radio Handbook*). I bought an Icom IC-7000 for my SUV and HF mobile became a dream fulfilled. The IC-7000's CW filters and memory keyers worked great for contesting, so I often used it in my shack. I also home brewed a 5-band quad on EZNEC and erected a 70' tower.

I've learned CW as a Novice and I enjoyed 40 and 15 meters. Morse code was something I had to do and improve to pass my General. My dad was a Technician and I wanted HF privileges. By the time I took my General I could copy 20WPM and I enjoyed CW. And CW was the only way I could work DX since my antennas and transmitters were very modest.



I learned to copy code with my hand, using pen and paper. By 2005 my paper log became DXLab Suite and CW contesting was becoming a fun past time. My need to hand write to decode CW has been a big handicap.

I joined CWops on Wednesday May 22nd and began using the student resources which has already improved my CW. I participated in the Wednesday CWTs and CQ WPX CW contest. I tried to copy in my head and type into N1MM+. While working S&P mode, I occasionally gave in to my dependence on pen and paper to improve my Q rate (really). My CW skills always improve by the end of a contest. In order for me to head copy I needed frequent breaks and went to bed at a reasonable time. By the end of the contest, I was able to run a frequency for about 3 hours. Because of that, my score exceeded my expectations. I worked about 250 stations in 3 hours (on 20m). I made about 840 Qs in about 20 hours (mostly S&P). My station, antennas and skills are never going to set any records (and my rotator only moved occasionally, I'll soon replace it) but I improved my score over the last time, which was very satisfying, surprising and fun.

In 2010 I began using RemoteHams (with my Icom rigs and W8RJ's station). That way I could log those rare DXpeditions and play radio while away from home. By 2013 I achieved 5 band DXCC. I now have 8 Band DXCC. For the past two years I've been working on 160m DXCC. I have a mixed band total of 304 confirmed countries. I don't know if I'll ever make Honor Roll, but the journey is very fun and satisfying. My remote station now includes a Flex 6600, Maestro and RF-KIT RF-2K+ amplifier.

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In 2014 my wife and I began spending part of the winter in Hollywood Beach, Florida. And using my station from there is more fun than using my mobile. At the end of our Florida stay this year we took a transatlantic cruise to Spain. It took seven days to reach the Azores. While touring Ponta Delgada, Azores, Portugal I spotted several ham towers. I took pictures of all the ham antennas I spotted and CU2CO has offered to help me identify the owners. I can't wait to see if they're in my log.

While I didn't bring an HT on this trip, (apparently there are three repeaters near the port) I did bring a laptop. I was operating my remote station from land and sea. Although the ships free WiFi bandwidth was barely adequate for my Flex (streaming WiFi was \$30/day) I had good success from land. From our hotel in Barcelona I connected to my station in Michigan. I made QSOs with Janez, S51DX, Vasily, ER4DX (and a few others) on 20m. But I think my best QSO was on 80 meters. I surprised my 89 year old father and checked-in to his 80 meter net. He was overjoyed to hear me.

I'll keep practicing with CWops level 2 and 3 resources and evaluate my skills again before September classes start.

Below are pictures of the ham towers I spotted in Portugal and Spain (I had to reduce the resolution to send this document). For more about me and amateur radio, visit my QRZ page.

Mathias Acevedo CE2LR

This started when I was 14, when I belonged to firefighters. Because of personal circumstances I resigned, staying with the VHF equipment. And one day I asked ham that programmed the radios if I could do the handy, and he told me that the radio club (CE2RCF) was doing an exhibition. There I learned about the topic of the radio hobby.

I signed up for my radio license, getting my first CD4862 license.

After participating a year in the radio club, I retired. I started to know the World of the DX and contests and I moved to a house in which I had a tower with 5 elements for 28Mhz and 2 elements for 7Mhz at 12 meters of height.

After that we installed a 20-meter-high tower in which we put the 5 elements of 28Mhz and in the



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tower of 12-meter height we left 4 elements for 14Mhz and 6 elements for 21Mhz. (First installations). After obtaining my current license CE2MVF, Roberto CE3CT me invites to his station, which I listened only in contests. I went to visit Roberto where I met a perfect contest station, giant antennas, last generation equipment, and he invites me to a meeting.

ARRL 10m, and from there I did not leave world of the contests. Meanwhile I was talking about the CW mode which I did not understand. I saw Pedro CE3FZ doing CW in the same contest, and that caused me to learn CW. I started to practice with Dale VE7SV guiding me, and in 2015 I could receive in CW mode and from that moment I continue practicing CW, to improve day by day.

I went to Damas Island to a DXpedition, XR2T, very good experience.

After all that I put up 3 20-meter towers at home with mono bands antennas (antennas made at home) and now enjoying very good friends of the hobby.

Now I work at a company of my grandfather, a poultry, in which I perform in the administrative and commercial part.

Felix Riess DL5XL

I was born in 1970 and have been listening to Short Wave radio since the early eighties. At that time, there was still a minimum age requirement of 14 to take a ham radio exam, so I started playing with CB radio a little until I met Ed, K1TWJ, of Burnham ME who really started my interest in amateur radio. After taking a crash course organized by DARC, Germany's national amateur radio society, I eventually got my ham ticket. My Morse code teacher at that time was Eberhard, DJ8OT.



Right from the beginning, my favorite mode has always been CW. I like to play with almost everything this great hobby has to offer and enjoy trying new modes, but operating CW still is what I enjoy most, from rag chewing to DX chasing.

My current HF station consists of an old but reliable Kenwood TS-850S with an Alpha 99CS amplifier, a 3-element SteppIR Yagi antenna plus some wires for the low bands. I usually share the shack with two friendly cats that were affectionately named "Schneeball" (snowball) and "Streifchen" (small stripes) by my kids. The QTH is a small village right on the banks of the river Weser, near the city of Bremen and the North Sea.

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For the last 15 years, I have worked as an engineer for a German shipping company. Our office specializes in polar research, so I get to travel to Antarctica quite regularly. Altogether, I have spent more than four years on the icy continent around the South Pole. Whenever I can and conditions permit, I get on the air as DP1POL from that rather remote location.

I have also joined a few DXpeditions, with the trip to Kermadec Island in 2010 where we brought ZL8X on the air being the most memorable one. Currently, I serve as president of Radio Telegraphy High Speed Club (HSC). We have quite a few fellow CWops members in our ranks. If you'd like to find out more about HSC activities, please check www.highspeedclub.org or visit our booth (A1-499) at the upcoming "ham radio" exhibition in Friedrichshafen, Germany.

Apart from ham radio, I also enjoy traveling, hiking and geocaching which can all be combined very well on a holiday - and you can even take a little radio along!

Thank you very much for inviting me to CWops! It is great to be a part of such an active community, and I am looking forward to participating in the club's events such as CWT.

Norm Goodkin K6YXH

Ham since 1957, when I "texted" my school buddies on 40 m CW, going near 20 wpm with a hand key while eating a snack, talking on the phone, and doing homework.

Active in the local ham radio community, I've been holding quarterly Tech classes for over 10 years. I participate in emcomm with several local groups, including LA County DCS and the Topanga Disaster Radio Team.

I'm a member of the Canejo Valley Amateur Radio Club, a group that promotes CW. You can usually find me listening to one of the repeaters in the PAPA System, one of the largest repeater groups in the world, covering all of Southern California.

My wife, Naomi WB6OHW, has been a ham our whole married life! We have 3 kids, all hams, and six grandchildren, all hams except for the twin 4 year olds, and they'll be licensed soon! All-in-all, nearly 40 family members licensed.

Naomi and I also support the Greater Los Angeles Amateur Radio Group VEC - she's in



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charge of materials and I maintain the website.

My main reason for increasing my CW speed is to do a better job on Field Day!

Tom Grosvenor NV1U

I first became interested in becoming a Ham in, 1967. However, with college and a job I had to wait till 1971! I eventually worked my way up to Advanced. My former call was, WA1NUY but unfortunately, I let my license lapse in 2001. (I could have sworn it said 2010!)

I was living in places where I couldn't put up antennas, married and had my own audio repair business "Colonial Audio Service" in Wakefield, MA. Therefore, life (in general) kept me away from Ham Radio.

For 19 years, I resided in Boston, MA because I worked for the Boston School Department and had to live within the city limits. My condo was on the fourth floor, atop a (42) unit condominium building where they actually allowed me put antennas on its flat roof. I could see the Boston skyline! I installed a CX-333 (which got out like "Gang Busters) and a "COBRA Lite Jr", a center fed dipole with ladder line and a JetStream 4/1 balun. For a shortened 80-10m antenna, it worked really great!

In 2017, I purchased a home in "The Villages" within Central Florida. The Stealth Antenna Adventure Begins!

A little history:

From 2010 - 2013 I was bed ridden with a bone disease and since I had let my Advanced ticket lapse, I decided to study for a new ham ticket! Eventually, I studied my way right to "Extra" and as an added bonus, I also got certified as a VEC! I have done several exam sessions since moving to The Villages. What a great feeling to see new hams pass their exams!

Unfortunately, due to that illness, I now have a prosthetic right leg and require an



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"Adaptive - Left Foot Gas Pedal" to drive. My vehicle is a, 2007 Toyota, FJ Cruiser! It has a "Bandi" antenna mount, on the rear door hinge where I attach Ham Sticks for HF plus two NMO roof mounts for a 220 MHz and a dual band VHF/UHF antenna. My main radio was an ICOM IC-7100! I used it for HF, VHF & UHF. For 220 MHz I used a "TYT TH-9000, (1.25m) rig. I soon discovered that I was still able to install all my equipment, run cables under the door jams and center console, etc., so I mounted all the radio heads and transceiver decks on 'quick release' mounts. It literally took me about five minutes to remove everything and stow into a suitcase, on wheels! When it came time to power everything, I had help from a ham buddy, Dan - N1BHK. Dan ran the fused, 8 AWG Zip cable from the battery through the firewall and down to the rear compartment where the transceiver decks were located. Without Dan's invaluable assistance, the project may have never gotten off the ground! "Thanks, buddy"!

Sadly, after moving to The Villages, with all the golf carts running amuck, I decided to remove my equipment for safety reasons...

My biggest project took about a year to decide, plan, design, permit and install. It's a variation of an inverted L. Standing at 20' my flagpole antenna has two flat toppers, to cover 80m thru 6m. It was designed by Don Crosby, W1EJM. TNX, my friend.

John Yodis K2VV

I was licensed in January 1968 as WN2EAH with the encouragement of my father, W2KLW, "interning" at my high school radio club, W2YPN, in Albany, NY. When my first week on the 15M novice band yielded DL2EZ, 5N2AAJ and 9Q5LC, I was hooked on DXing and anxious to upgrade. (I still have the OO report stating that I was sending too fast for the novice band.) I quickly passed the General (WA2EAH) and Advanced before the mandatory 2-year waiting period for the Extra. I went on to earn a bachelor's degree in chemistry at Rensselaer Polytechnic institute with a minor in amateur radio at club station W2SZ.

I requested the CW-friendly call K2VV in 1977. I got into some heavy-duty contesting from New York, at one time simultaneously holding the 20m records on ARRL DX CW/phone, WPX CW/phone and CQWW CW.

XYL Sue, KA2CUP, and I moved to the St. Louis area in 1995. After finding 5 acres with no restrictions in 2000, we put up 120 feet of Rohn 45 with multiple Yagis.

Other than DXCC, my main pursuits are WPX, IOTA and RDA. RDA, the Russian Districts Award is particularly challenging; I've worked over 1900 of the 2639 districts. I serve as manager of the W0 QSL Bureau and as Midwest Division representative on the ARRL DX Advisory Committee.



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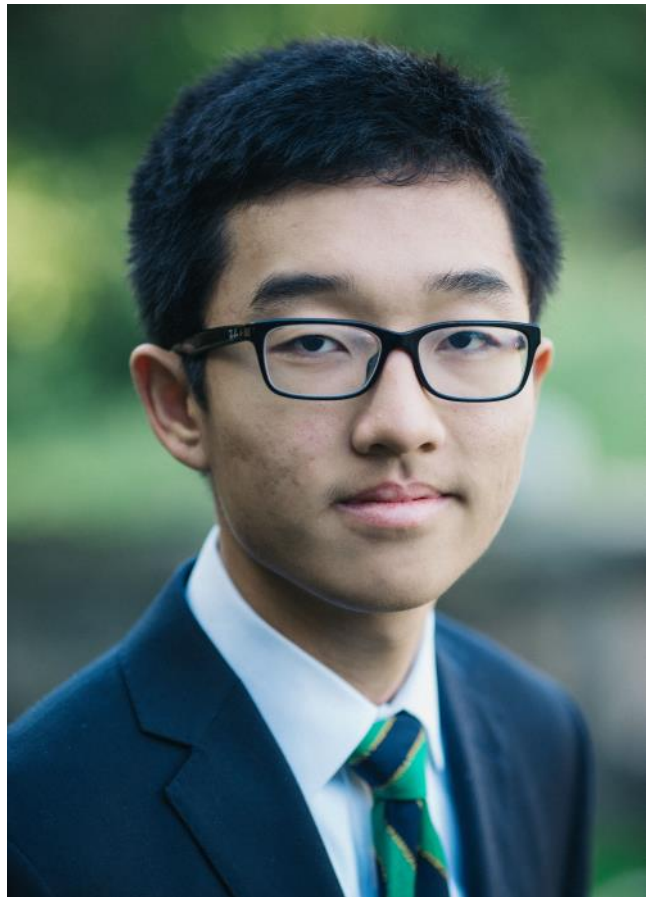
I retired in 2018 after 40+ years in the specialized field of liquid electrical insulation: magnet wire enamels, motor varnishes, potting compounds and circuit board coatings. You'll find me regularly calling CQ DX on 20 CW, awaiting the return of sunspots.

Bruce Yang KN8U/BH4EPL

Thank you to Greg, NA8V, for nominating me, and Tom, K7QA, Mike, ND9G, and Rich, K1DJ for sponsoring my nomination. I met Greg and Mike, among others, in Dayton last month during my first Hamvention. Needless to say, it was quite a surreal experience to meet many familiar calls in person!

I grew up in Shanghai, China and came to the US for high school. Currently I am an undergraduate at Georgia Tech in Atlanta, majoring in electrical engineering.

Although I didn't get my first license until 2016, I have always been interested in radio communications, mostly through my interest in aviation. My uncle BG4BIX, who was mainly active on VHF, gave me his Tecsun PL-660 receiver so I could listen to VHF airband, and I later acquired an RTL-SDR to decode 1090MHz ADS-B signals. But soon I found out that these receivers didn't satisfy my curiosity! I wanted to be able to actively communicate with others, so I found out about how to get an amateur radio license, studied the Technician question pool, and got my license in November 2016.



I upgraded to General in June 2017 before moving down to Georgia Tech. Eager to experience the magic of HF, I joined the GT Amateur Radio Club, W4AQL, right away. W4ATL and KJ4IQA introduced me to contesting in November with Phone Sweepstakes, a long-running tradition at the club, and I've been in love with contesting ever since.

After learning CW in 2018, I tried to work as many CW contests as I could. I got my Extra on the afternoon of WPX CW Sunday, and immediately worked the remaining 4 hours of the contest with my new privileges. I worked the IARU HF Championship at BY4AA while I was back home (and also got my Chinese license, BH4EPL), and when I came back to school, I worked both Sweepstakes CW and CQWW CW. Unfortunately, I missed out on the CQWW USA Rookie plaque by 100,000 points, but I hope to win the CQ WPX CW Rookie plaque this year.

Being among the few youth contesters, I would like to see more fellow young hams share my enjoyment of radiosport. As Contest Director of the Young Amateurs Radio Club, I am involved in

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the YARC Youth Contesting Program (YCP), which tries to pair up North American big-gun stations and youth operators who are interested in contesting. Currently we are looking for hosts and operators who would like to work the IARU HF Championship in July, so please let me know if you're interested!

My other interest in ham radio is in satellite communications. I am a research assistant at the Georgia Tech Space Systems Design Lab in charge of ground station maintenance. We will be launching two CubeSats this month onboard the Falcon Heavy, and I'm excited to support the mission!

For most of the last two years I operated HF at W4AQL. Recently I moved to a new QTH and was able to build my own HF station. Currently my station consists of a loaned Elecraft K2/100 and a 40/20 fan dipole up about 25ft which also provides a good match on 15m. Now that I can get on the air from the comfort of my home, I am working the CWTs more often, and I hope to hear many of you on the bands soon!

Rick Allnutt WS8G

I began my ham radio journey entirely on CW using a TenTec Century 21 radio in 1982. Licensed as a General Class operator, I had a blast making contacts with maybe a hundred people all over the US. Unfortunately, I did not know any other hams and did not find any local club. The joy of radio faded out and I sold my rig when I moved to another house.

Moving forward about 10 years, I made a military move to Dayton Ohio and was introduced again to amateur radio and to the Dayton Hamvention. I first started with the local repeaters and the Xenia Club, meeting many people that became important to my radio interests. Primary among them was Frank, WS8B, who helped me to get interested in moving forward with my license, learning how to build antennas and QRP radios, and to get to know many fellow hams in the local area. I advanced to Amateur Extra Class when 20 WPM CW was required.

I ended up teaching about a hundred people how to get their code up to the point they could advance to higher license classes, but never personally felt comfortable with CW. I could not head



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copy and was amazed when I found out that a fellow in the Xenia club could copy CW in his head while driving.

Forward another 20 years, and my friend (and Dayton Hamvention volunteer boss) Jack (WB8SCT CWops # 1709) encouraged me to get back into CW this last year. We started having weekly skeds, working on my being able to head copy. By last fall, I had gotten far enough along that I could participate as a level II CWops Academy student. That led to the spring Level III. What a great year it has been! I now have learned enough that I can use the base of my current skill level to keep on learning. I have a "license to learn" as a result of the help of many other hams that are doing the same thing.

As the Assistant General Chair of Dayton Hamvention, I have had the opportunity to help spread the news that CW is back in Amateur Radio with a roar! No longer required, everyone involved is here because they love what they are doing. And not only that, it is "normal" to be able to learn how to head copy - not just something that superheroes can do. I frequently advise people that want to learn code to go to the CWops internet site and start their journey.

Many thanks to the many people in CWOPS who have worked so hard to form and nourish the organization which is responsible for my being able to now feel comfortable both in a CW rag chew and also in a CW contest.

Just by way of general background, I am musician (it helps with CW), an electrical engineer, an aerospace medicine specialist physician, a teacher, a father, and a pretty good husband to Diane (NS8Z) who is likely the reason that I do all these things.

