



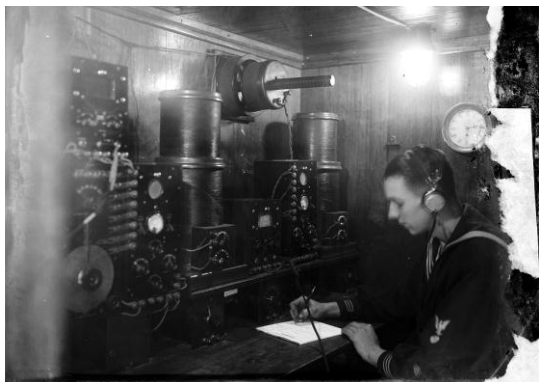
Solid Copy

The International CWops Newsletter

April

2012

Issue No. 27



CWops "CWT"

11, 25 April 2012

Start time:

- 1300Z
- 1900Z
- 0300Z (12/26 Apr.)

1-hour each session

Exchange name/number (members)

Exchange name/SPC (non-members)

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

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From the president...

North American CW Weekend

Now is the time to sign up for this great event. A fun weekend with fellow CW operators and spouses in our nation's capitol offers a variety of things to do, places to go and friends to spend a little time with. Bobbie and I will be there and we hope to see you there too! For details go to:

<http://www.cwops.org/DCweekend.html>

CW Academy – Accomplishments

The CW Academy is not yet one year old and we already have some wonderful accomplishments to be proud of. Nothing speaks louder than a satisfied customer:

“For nearly four years I've been trying to learn CW on my own with some small degree of success,” says Gary, W4GDC. “I was able to send and receive about 8 words per minute with some accuracy. About a month ago I was browsing the CWops website CW Academy page and decided to ask for a mentor.

Jack W0UCE contacted me within a few days and we arranged a first session. All went well so we set up a regular mentoring schedule. To my surprise I was able to copy 20 wpm within two weeks.”

From Tom, KC9RXI: “Thank you for telling me about the CWops academy. Art, K6XT, is a wonderful mentor. Art’s expertise, thoughtful suggestions and encouragement have made me a better CW operator. For the last three months Art and I have had weekly on air contacts on 30 meters.”

Michael, KF7ADB was a “no-code” ham, licensed in 2009. But he was intrigued by the dits and dahs that he heard at the low end of the bands. He knew he *had* to learn CW. “It didn't come easy, but within a few months I managed to learn the code well enough to have a slow-speed QSO and not embarrass myself too much. Over time my CW skills improved...but I hit a plateau at about 13WPM. By this time I had also picked up several bad habits, including having to write each character down on a notepad as I heard it. When the other person stopped sending, I'd look down at what I had written on my notepad and hope it made sense.” After about three weeks of nightly on-air sessions with a CWA mentor Michael was able to copy 30 wpm in his head. This “...opened up a number of opportunities for me in the world of amateur radio, including CW DXing and being invited to operate multi-op CW contests.” It also allowed Michael to become a member of CWops, #869.

CW Academy – Moving Forward

You will be seeing mention of the CW Academy in various ham publications. A press release has been sent to major ham radio publications around the world. An article on the Academy has been submitted to QST as well. We don't have a publication date but will let everyone know as soon as we do.

To assist instructors and those who are considering becoming an instructor, Jack, W0UCE has prepared an instructor's guide which will be available shortly. If you want one now, please email Jack, W0UCE at w0uce@nc.rr.com

73,

Pete, W1RM

From the VP:

ACA/CMA Report

Call	ACA	CMA
KZ5D*	305	2056
N5RR*	301	2203
W1RM*	278	1939
N2UU*	237	1271
K6RB*	233	1481
VE3KI*	229	1350
W5ZR*	218	1512
EA8OM	201	1376
W1UU*	185	954
W5ASP*	167	659
AA3B	152	2735
EA8AY*	146	1236
NN6T*	117	522
KR3E*	98	892
EA1WX*	98	1030

* = updated totals

73,

Art, KZ5D

From the secretary

NEW MEMBERS REPORT

We are pleased to welcome the following new members to our Club. Those with asterisks are LIFE members! Congratulations to all!

1031 MJ0ASP Mat

1032 K9GS Gary

1033 K5TF* Dick

1034 KG3V* Tom

1035 WA9TZE Jim

1036 N4BAA Jose

1037 KM00 Tony

1038 N4OX Jay

* = Life Member

73,

Jim, N3JT

From the editor



I have to tell you that I love this club for many reasons. It never ceases to amaze me how volunteers with lots of other things to deal with repeatedly step up to the plate to take on club efforts. And, it shows. Our bi-monthly CWTs keep growing in popularity. Every time there are new participants discovering this fun on-air event. And, all who take the time to participate add to the fun for everyone else. Each member who plays in CWT becomes, in effect, an ambassador for CW and CWops.

We're also preparing for September's CW Open with a get-out-the-news campaign that will start very soon. Ragchewing members are submitting their QTX points, monthly, and interesting topics are bandied about on the listserv (also known as "the reflector"). But, from my perspective, the most important thing we can do as a club is to increase the population of competent CW operators. To that end, we came up with CW Academy.

For a few months, now, we have been quietly taking signups for advisors and students, and pairing them up for informal on-air practice sessions. But, the cat's out of the bag. Ed, KR3E, has written and distributed a news release. It 'hit' in one online news section and we got over 40 signups in a half a day. To be sure, Jay, W5JQ, and Jack, W0UCE, have their work cut out for them. They'll be grouping the signups, pairing them up with advisors, and managing the program as it continues to grow.

If all goes as planned, you can expect to see a growing crowd of CW students carving out some new novice bands that will serve CW learners worldwide. If you have a panadaptor, keep your eye on the bands above x.050. That's where advisors and students will go to practice, and that's where advisors and students will hang out for unscheduled QSOs.

If you have signed up to advise one or more students, I applaud you. You are playing a key role in perpetuating the art of CW. If your schedule is such that you can't commit to a weekly advisor role, then whenever you can get on the air, please check the new novice bands for learners looking for CW practice. You don't have to crank down your bugs and keyers to slow speeds, just extend the space between characters. That way, these students will get used to hearing code sent at high character rates but still be able to copy the slower word rates.

If you don't hear anyone, call "CQ CWA." You're bound to get asked "what is CWA?" Tell them it's an ongoing effort by CWops to help hams who want to improve their CW skills, and direct them to our website to read about it and perhaps join up. Here's your chance to give back to ham radio some of the pleasure and satisfaction you've enjoyed all these years.

We now have a membership with numbers above 1,030. Those who have joined the club recently often assume that there is a hardcore group of members who run the show. CWops is of members, by members and for members. If you'd like to help make any CWops effort more successful, don't wait to be asked, just volunteer. This isn't a company. There are no owners. We are all owners.

73,

Rob, K6RB

CW Academy

The past month has been a busy one for us at CW Academy. Jack, W0UCE, has completed a set of guidelines for advisors of the Academy. Jack's experience with teaching and mentoring students over the years provides for a step-by-step foundation beautifully laid out in this document that should benefit all participants of the Academy. These guidelines should also establish common ground for our students as they transition from the learning stage, to the early QSO stage, to the proficient, higher speed stage.

Jack has also pieced together a series of "Morse Code Song" files to aid in sound and pattern recognition of Morse characters. And in another crowning achievement, Jack has been teaching his students through a free audio/video internet conferencing application called OOVOO. Both of these teaching aids are described below.

Morse Song

One very unique aspect of Morse Code is every letter, number, word and punctuation mark has its own distinct, easily recognizable sound and rhythm. If students learn Morse Code by sound in the same way toddlers learn to talk, there is no need to endure the arduous task and drudgery of memorizing dits and dahs. It is just as easy to learn Morse at 20, 25 or 28 words per minute as it is at 5. Rather than starting slow and then increasing speed, start learning at a minimum of 20 wpm or higher.

There is also a direct relationship between music and Morse code, so why not learn Morse Code through an enjoyable second language learning experience set to music. The original Morse Code Song created in 2004 by Andrew Crawford, VE1VAC, combines the unique sounds of all twenty-six letters of the English language with rhythmic cords which makes learning simple and enjoyable. Morse Song Groups are also useful tools for learning to copy, send and overcome letter confusion and other problems. Refer to CW Academy Advisor Guidelines Pages 4 through 8 for teaching method recommendations.

Morse Song Sequence Groups

Four groups of digitally rearranged MP-3 Morse Song files and Morse Code as a second language teaching techniques and letter sequences have been combined to form CW Academy tools which can be used for self-learning. They can also be incorporated with various teaching methods used by CW Academy Advisors or others who teach Morse Code. Morse Song MP-3 files and letter teaching sequences have been grouped in the order they most frequently appear in English language words.

Morse Song MP-3 Files are available for Download in the CW Academy Advisor Reference section

- Morse Song A-Z All 26 letters A through Z Sequence
- Morse Song A-Z Group One, Two, Three and Four Sequence - Single MP-3 compilation
- Morse Song Group One E,T,A,O,N,I,R,S
- Morse Song Group Two H,D,L,U,C
- Morse Song Group Three M,W,F,Y,P,G,B,V
- Morse Song Group Four K,J,X,Q,Z

OOVOO Audio / Video Conferencing

OOVOO is a free high-quality Internet based audio/video chat and conferencing application that has proven to be an effective teaching tool for CW Academy advisors and students. OOVOO provides a live face-to-face teaching and learning environment for one-on-one sessions or up to six people in a virtual classroom. OOVOO is available for PC, Mac, Android based Tablets and Smartphones. If your computer does not have an internal webcam, an inexpensive USB webcam will provide suitable audio video capability.

CW Academy advisors can send Morse over-the-air and students can reply over-the-air or by OOVOO keying. Radio side-tone can also be used; however, there will be some degree of latency. When teaching beginners, OOVOO and Morse Song can be combined by simply using Media Player or another MP-3 device to play Group One, Two, Three and Four audio files.

Real-time audio/video conferencing offers a tremendous advantage for instructors because the students can be monitored both visually and audibly. Student facial expressions and body language can often reveal issues that can be immediately addressed by the instructor. OOVOO and Morse Song also enables instructors to teach or mentor students anywhere in the world if students don't have HF capability or when propagation precludes holding an on-the-air Morse training session.

OOVOO is available for download at: <http://www.oovoo.com/home.aspx>

Contact WØUCE with questions or suggestions regarding Morse Song or OOVOO via e-mail to: w0uce@nc.rr.com

The “CW Academy Advisor Guidelines” and the Morse Song .mp3 files will be incorporated into our website in the near future.

Next, we now have more students than advisors signed up with the Academy. This means we will have to assign new students to advisors that may already have a student. The OOVOO tool allows this to become less burdensome. We also suspect that over the past eight months a number of advisors are no longer working with the students originally assigned to them. This may be because

the students have “graduated” to the fully operational CW ranks or they may have fallen through the cracks. We need to know several things from all advisors. First, what is the status of your program with the student assigned to you? Second, are you willing to handle more than one student? Third, are there any changes to your band capabilities or times available? Please email Jay, W5JQ, jtemple@pcisys.net with this information. If I try to do a mass mailing to all the advisors, it will probably end up in your spam folder and I certainly don’t have the time to do this individually. Thanks!

Finally, we are pleased to hear the increase in activity in the novice sub-bands. This gives our current and prospective students the flexibility to find potential QSO’s outside of the structured sessions with their advisors. All of us should scan these portions of the bands occasionally to find those slower newbies or re-treads that could use some help and encouragement. And be sure to tell them about the Academy.

73, Jay, W5JQ, Jack, W0UCE

QTX Results

We are making some important changes to QTX. The input form in the “members only” section is now changed to make it easier for you to report your points and for us to publish them. Instead of having to list all your QSO callsigns, you now only have to give your monthly QTX points score.

Instead of waiting to the 15th of the next month to submit them, we will now shorten the deadline to the 5th of the next month.

If you use a computer logging program, one way to keep track of your QTX QSOs is add an asterisk to the ‘name,’ like ‘Alex*’. Then, at the end of the month, you can go back and scan the log and pick out the QTX QSOs.

Each issue of Solid Copy will have the score from two months back and the cumulative score.

Call	QTX Points	
	Month	Year
	February	2012
K1ESE	29	59
N5IR	26	51
K6RB	15	35

WA3NZR	16	16
KR3E	11	15
JE1TRV	4	7
HB9CVQ		4
NN6T	3	3
K9FN		2
W1RM	1	1
EA6OM		1
W5PG		1
W1HIS		1

73,

Ed, K2EGJ

The QTX is a program for members who enjoy casual CW QSOs. Anytime you have a QSO that goes over 20 minutes, jot down the call sign of the other station, and before the 5th of the next month (e.g. before 5 April for your March total), go to the website QTX page in the ‘members only’ section and put in your total.

A Better Way to Send CW?

By: Fred Jensen, K6DGW



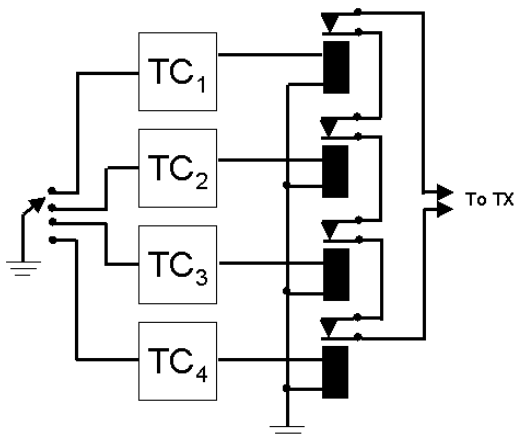
Morse code has been sent via radio in a number of different ways over the years. Most of us probably have sent it using a “straight key” such as a J-38 ... up and down, with down closing the contacts and turning on the transmitter. Tap it and you send a dot. Hold it down for 3 times as long and you send a dash. Leave it up for a “tap time” and you space one dot or dash from the next. Leave it up for 3 of those times and you space one letter from the next. And, leave it up for 7 of those times and you space one word from the next. Mechanically, it is very simple, but it puts the entire problem of timing on the operator. You could turn your J-38 on its side so now it was back and forth rather than up and down [called a “sideswiper”], but the timing problem is still there.

It didn't take very long for the electromechanical bug to arrive. It was back and forth like a sideswiper, one direction just closing the contacts for dashes which you made just like a straight key. The other direction started an armature vibrating on a flat spring which made dots automatically with approximately the right spacing until the armature quit vibrating. Bugs were a lot easier to use once you mastered it, and now the dot timing was fixed at however you set the weights on the armature. Some bugs were machinists' works of art, shiny, and with velvet lined wood boxes to carry them around. Some, like my WW2 J-36, built by Lionel of model train fame were decidedly proletarian in appearance. In fact, mine looked like it had gone ashore with the Marines at Iwo Jima, but it worked fine and only cost \$5 at Surplus Sam's in Los Angeles. This was a decided advantage since all of my earnings were going into my college fund right then.

Then came electronic keyers ... 10 or so dual triode vacuum tubes which made both dots and dashes with the correct timing, and keyed your transmitter with a relay. We often modified our bugs to bring out separate dot and dash connections and prevented the armature from vibrating to operate our keyers. Soon paddles came along, separate contacts on each side to operate the keyer. And progress brought us iambic keyers with dual paddles that could go right, left, or be squeezed together to create alternating dots and dashes. The electronics migrated from vacuum tubes to solid state transistors and finally to microcircuits.

In all cases however, and despite all of this progress, the timing issue remained ... we “send” the dots and dashes ... the spacing between them is an open issue. Theoretically, an electronic iambic keyer could produce perfect code, but the operator still had to operate it correctly to get the right spacing. Is there a better way? Well, the answer is “maybe,” and to find it, we need to think out of the box so to speak, and the key [no pun intended] may be “spacing.”

Since the electronic keyer makes perfect dots and dashes, the real problem we're confronting for perfect Morse sending is the spaces which, except for the one-dot-time spaces between consecutive dots or dashes, are still under our control. It turns out there are three different length spaces in Morse, measured in dot-times: one [between dots and dashes], three [between letters], and seven [between words]. More careful study reveals that the one-dot time space really comes in two flavors ... one-dot spaces separated by a single dot time key-down [which would be the dots], and one-dot spaces separated by 3 dot times key-down... the dashes. And, this is the “Ahh Ha!” moment. It's the spaces that matter. Get them right and the dots and dashes fall out automatically! It would appear that all this time, we've been “sending” dots and dashes when we should have been “sending” the spaces between them!



As is often the case, this is not a new revelation. A. F. Scotten, W6ZMZ, realized this simple fact and wrote about it in the October 1949 issue of QST. He even came up with a keyer circuit to accomplish it which he named “The Humbug.” I've drawn it up for you.

His scheme was pretty simple – four normally closed relay contacts put the transmitter into key-down. I'm presuming that he would have some sort of normally open foot switch or the like to keep the transmitter off until ready to send.

Those boxes marked “TCn” are timing circuits, in his day likely free-running multivibrators each using a couple of triodes. Each one produces one of the four spaces we need. One sends by selecting them with some form of a 4 position switch. When none of the four are selected the transmitter is in key down state. Each one “sends” a space of one of the four flavors followed by key-down.

He even offered a test sentence to demonstrate the difficulty of perfect spacing: *“Then after Richard had arrived he and Clarence each kissed beautiful Annabelle and she ceased all resistance because in actual fact she liked it better than ever”*

Ignoring for the moment that this sentence was surprisingly racy for QST in 1949, its dominant feature is that it does not contain two or more consecutive dashes. He maintains that it is very very difficult to send this in Morse with any of the various keyers of the day [iambic keyers hadn't been invented in 1949].¹

Today? Well, we'd use solid state devices instead of relays, and we'd likely build the timing circuits onto a programmable microcontroller. If I was building this, I'd replace his 4-position switch with four individual SPST switches mechanically linked to 4 paddles that you depressed, similar to the keys on those stenographs that court reporters use. Several configurations come to mind: four keys right next to each other that you just put the fingers of one hand over, or possibly two sets of two using two fingers of each hand. In fact, the court reporters actually press more than one key at a time to make some of their shorthand marks. It's called a “chordal keyboard” since it's like playing chords on a piano. Programming our microcontroller to recognize single, double, and triple depressions, we would need only 3 switches. The code might be:

KEYS			ACTION
1	2	3	
X	X	X	TX on
X		X	TX off
X			Dot Space
	X		Dash Space
		X	Letter Space
	X	X	Word Space

Since the controller will make perfectly timed spaces, you'll automatically get perfectly timed dots and dashes as well. It would have been very difficult in 1949 to have the controllers remember the key combinations in a buffer and send them perfectly even if our keying was a little erratic, but today, adding that sort of memory is trivial.

Back in 1956, while the professional marine CW circuits were rampant with very poor fists, badly sent code, and terrible signals, the ham bands were filled clean, mostly stable signals and it was rare to encounter poorly sent CW. None, except those sent from punched tape, were perfect however, despite the fact that the solution for perfect CW was at hand and published publicly since there is no indication that W6ZMZ had attempted to patent his brilliant and novel creation. Why it did not revolutionize

CW sending on the ham bands is a mystery. It is a deeper mystery however why his article appeared in the October 1949 issue of QST and not in April.

1 I don't have any problem sending this on my Winkey or K3, but he seemed to think I would.

Don't Mess with SUQ

By: Hans Brakob, K0HB



Uncle Sam kept me busy in my youth as a Navy radioman, sending me on many expense-paid cruises to all manner of exciting places, including several cruises to the Mediterranean Sea as part of the 6th Fleet.

After a few years at sea I fancied myself a pretty hotshot Morse operator.

Some of you out there who sailed in the 6th Fleet during the late 50's/early 60's may remember the famous "Task Group Commanders Circuit", commonly called "SIXES-ALFA". This was a high speed Morse net which routinely clipped along at 40WPM with busy spurts somewhat faster. It was a matter of some pride that only holders of an official "Speed Key Certificate" were allowed on the circuit, and only the best of those were qualified as NCS. (Yes, before you could use a Vibroplex on a Navy circuit, you had to pass an examination and obtain a certificate.)

Anyhow, as a qualified NCS on SIXES-ALFA, there was no doubt in my inflated ego that I was one of the hottest seagoing ops to ever key up a TBL. (TBL was a big black 100W MF/HF CW transmitter fitted in WW-II/Cold War era destroyers.) Certainly there was no mere civilian radioman out there to challenge my skills.



In those days the US Navy maintained a small presence in the Red Sea/Persian Gulf called the "Mid East Force". The Commander of this force was a Commodore who maintained his flag not on a warship, but on a seaplane tender (mother ship for seaplanes, which the Navy no longer even flew) docked at the Brit base on Bahrain. His "force" usually consisted of a couple of destroyers on loan from the 6th Fleet in the Mediterranean. These destroyers rotated to this duty for about 2 months by a transit of the Suez Canal. (As an aside, Admiral Scott Redd, better known at K0DQ, once flew his flag as Commander of this Force.)

Vessels transited the canal in convoys, northbound and southbound, which were coordinated to meet and pass at a "wide spot in the road" at the Great Bitter Lake. If there were any warships in the

convoy, they were the lead ship, and the lead ship carried a UAR canal pilot.

Communications between the pilot and the Suez Canal Authority was via an MF (420 Kc/s) Morse circuit between the lead ship and the UAR station SUQ at Ismailia.

In early October of 1961, my ship, USS Henley DD762, drew the short straw and was sent off on Red Sea patrol.

After a last liberty port at Piraeus, Greece (remember “Fix” beer) we transited to Port Said and embarked our pilot for the trip through the canal.

The pilot had me file a departure report to SUQ and promptly at 0700 we started our transit. Periodically (at passing El Ferdan and Deversoir, if I recall correctly) he issued short progress reports which I sent to SUQ.

In due time the convoy entered Great Bitter Lake and anchored to allow passage of the north-bound convoy coming up from Port Suez. Prior to weighing anchor for the remainder of the passage, the pilot was required to obtain updated instructions from the Canal Authority. Turned out this happened just as I was due to be relieved on watch for noon chow.

Wanting to turn over a “clean” log to my relief, I was somewhat impatient that the operator at SUQ was operating at a rather leisurely pace (perhaps “only” 25WPM). Surely this lowly civilian operator could send just a bit faster?

So I slid the weights back to the rear stop on my Vibroplex and sent.....

“SUQ DE NHXW QRV QRQ K”

What happened next still causes me regret every time I contemplate that short cocky transmission. An image comes to mind of a swarthy-complexioned mustachioed Egyptian with a wicked gleam in his eye, chomping an unlit cigar, pulling the weights completely off his key, and muttering “I’ll show this gob some real QRQ!”

The crisp Morse transmission which came back to me was utterly off the chart in terms of speed. No operator on the vaunted SIXES-ALFA had ever even caused me to really concentrate, but I was missing every other character this fellow sent. In embarrassment, I sheepishly unplugged my speed key, broke in, and on the pump handle sent....

“SUQ DE NHXW QRX OPERATOR CHANGE QRS”.....

and turned the circuit over to my relief. Never again, and I mean NEVER again, has the opsig QRQ ever passed my fingertips.

Current Nominees

Need Sponsors	VK3IM	Tim Hunt
Need Sponsors	WP3A	Jaime Jimenez

For more details about nominees and status, check the “members only” on the Website:

www.cwops.org

For information about joining CWops, check the Website under “membership.”