



SpiderBeam at 5T0JL (photo by 9K2AI)

CWops "CWT"

Every Wednesday

Regular Tests: Full Speed

Start times: 13Z, 19Z, 03Z (+1)

1-hour each session

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

(Avoid DX pileups!)

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

CWops Officers and Directors

President: Rob Brownstein [K6RB](#)

Vice President: Peter Butler [W1UU](#)

Secretary: Jim Talens [N3JT](#)

Treasurer: Craig Thompson [K9CT](#)

Director: Bert Donn [G3XSN](#)

Director: Vidi La Grange [ZS1EL](#)

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

Webmaster: John Miller [K6MM](#)

Editor/Publisher: Rick Tavan [N6XI](#)

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This will be my last president's message after having the honor of serving for two



consecutive terms.

I can still remember as if it was yesterday when I began this journey on January 1, 2012. My thoughts were that the club was off to a good start and I wanted to make sure we improved what's working, fix

what's not, and keep the spirit and momentum alive. Looking back, I think it all came to pass.

Having been a manager in business for many years, I knew that the key is to find the right people and try your best to encourage and help them succeed. And for these last four years, I've tried to do that. So, I would like to

thank the following people for making me look good: Rick Tavan, N6XI, took over as editor/publisher of *Solid Copy* and has done just a splendid job. When I first began as president, I was already co-managing CW Academy with Will Baber, WJ9B, and Jerry Weisskohl, AC4BT. As of last year, Jerry became sole manager and has managed this great program masterfully. For our members who enjoy radiosport, CWT has been in the sure hands of Rich Ferch, VE3KI and CW Open is under the management of Al Maenchen, AD6E, and regional managers, Bruce Meier, N1LN, Alf Indelicado, IT9MUO, and Dai Nagakura, JF2IWL.

Our ragchewer program, QTX, has been extremely well managed by John Huffman, K1ESE. In addition, I'd like to thank our secretary, Jim Talens, N3JT, our membership secretary, Colin Jenkins, KU5B, and our directors, Bertram Donn, G3XSN, Vidi La Grange, ZS1EL, and Nodir Tursoon-Zade, EY8MM. Our online communications have played a big role in our success and Don Greenbaum, N1DG, and Joe Hetrick, KC0VKN, have made that possible. CW Academy has become an acclaimed service the success of which is largely due to its advisor corps. Again, thank you all for making me look good.

Our By Laws stipulate elections in November and the nominating committee put up Vaden "Mac" McDonald, NN4K, as president, Jim Talens, N3JT, as secretary, and a new director, Stew Rolfe, GW0ETF. As there were no other nominations for these positions, these gentlemen have been elected. So, let me say something about each one. Mac McDonald has been participating in CWT, was appointed an ambassador for the South East US region, and has been an advisor in CW Academy. Since he has had his hand in virtually all aspects of the club, Mac is very qualified to lead us for at least the next two years. I will do my utmost to make the transition as seamless as possible. Jim Talens has been secretary since the club was founded in 2010. He has been a great person to bounce ideas off of and has been steadfast in his attention to detail about club matters. Finally, Stew Rolfe has been an ambassador, a CW Academy advisor, and a participant in CWTs. He has a very good perspective on the club and its doings, and will be a solid director, I'm sure.

The club is still growing and evolving in good ways. I'm proud to be a member and to have served as its second president. I will continue my advisor corps participation in CW Academy, my participation in CWTs and CW Open, and will be heavily focused on launching a new program – Youth CW Academy. Again, the success of Youth CW Academy will depend on the coordinated efforts of a team of people. If we succeed, we should help to bring an increasing number of young people back into the hobby and ensure that ham radio will not disappear when its current population of old timers moves on.

It has been an honor and a pleasure to have served you as president, and I appreciate the support and encouragement I received from so many of you during these four years.

73,

Rob K6RB

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From the Editor



Changing of the Guard

Many of us dislike politics and, at least here in the US, the practice has degraded into a living (livid?!) example of how people should not conduct their affairs. Fortunately, CWOps has not followed that unfortunate example. After a brief and quite civil election season, CWOps has identified its new leadership.

Outgoing President Rob Brownstein K6RB reports the election results in his column just above. Thanks for volunteering to serve and congratulations to our incoming new officers. Thanks to outgoing director Bert Donn G3XSN for his service to the board and thanks to Rob for his outstanding leadership these past four years. Rob's enthusiasm for all things CWOps has been inspiring and his successes exemplary.

Member Fred Kleber K9VV, CWOps #524, won the world in the 2016 ARRL DX CW Contest in the single operator, low power category from his station in the U.S. Virgin Islands, NP2X. It happens that CWOps had sponsored the plaque for that achievement and Fred sent his gracious thanks to the club. It does us all proud when one of our own wins a contest, taking home a plaque with the club's name on it as well. Congratulations, Fred, for a job well done!

VE9AA passes along this resource tip: The [Learn CW Online](#) webpage has call sign, text, code groups copying, etc. and the high scores are very impressive. Many EU's are well over the 100wpm mark for call sign copying! Another resource for improving your CW skill is pileup competitions and xxx, software developer for the KCDXC competitions at Dayton Hamvention and elsewhere, offers some encouragement in that direction in [his article in this issue](#).

The Page 1 photo this month is a teaser for an article planned for the January issue about an expedition to Banc d'Arguin National Park, TIDRA Island (AF50), Mauritania by Jean Lewuillon 5T0JL. This picture is of Jean's new SpiderBeam antenna in the city, but the expedition involved some far more remote terrain which you will see next month.

Speaking of photos, I've had some trouble finding suitable, new, radio-related photos for the Page 1 picture, sometimes resorting to interesting but non-radio items. If you have some photos that might work well in that corner, please [send them along](#). Try to include an explanatory paragraph or at least suggest a possible caption. Thanks!

Errata: In the recent How We Were article about W7VSE, I neglected to include a pointer to an article on his 1995 trip to the Friendship Games in Russia. To read this story, sign in to our [Yahoo! Groups](#) page and go to <https://groups.yahoo.com/neo/groups/cwops/files>. Click on 134 A Trip to Russia and you will find Vic's full story.

Enjoy this December issue and, as usual, keep those articles and columns coming and don't forget to tell me what you want to read in *Solid Copy*.

73,

Rick N6XI

Editor

News & Notes

[Jerry Weisskohl AC4BT](#)

This is a column where members can report their activities, happenings and achievements, both radio-related and personal. Please send brief notes to Jerry AC4BT at jweisskohl@gmail.com.

Emil, I5EFO: I don't have a beam antenna for 40 meters, so I decided to use a long wire antenna installed for 2200M and 630M bands. This antenna is 360 feet long which is about 11 times a quarter-wave of 40 meters, and it has a good directivity in the longitudinal direction.

Fortunately, the antenna is oriented to NA, which is just what I want. To get the maximum current at the input point, resulting in maximum antenna efficiency, I use a short counterpoise tuned with an MFJ-934. Adapting to 50 ohms I get an L-type MFJ-16010 Tuner, to which I apply a power of just over 100 watts by an old PA Kemtron "Interceptor" (perhaps someone will remember) with two 6LQ6 tubes. The PA is driven by a Yaesu FT-817 with 2.5W power out.

With this setup, in the last 19Z CWT of 30 November, I made 40M QSOs with N4AF, N3JT and VE3KI. This antenna seems to work quite well in reception too, because I have also heard signals of K3WW, N3RS and others from US.

N8XX, Hank: I was on a Thanksgiving Day trip to Cincinnati, (Southwest) Ohio between November 24 and 28. I noted that there are two National Park Units in Cincinnati, and three in the Dayton Area. So, being an intrepid National Parks on the Air activator, I took my KX2, three cell LiPO, 33' wire and a 31' collapsible fishing pole with me. Of course, November 24 was Thanksgiving Day, stuffing ourselves with turkey, stuffing, and all the extras.

I used my own call, N8XX, for this adventure. On November 25, I had a successful activation tour of three NPS sites, one a "twofer"). First was William Howard Taft National Historical Site, NS78, 44 Q's (They'd never stop, so it seemed), from CA, CO, CT, ID, IL, KS, KY, MI, MS, NC, NH, NJ, NM, NY, OH, ON, PA, TN, TX, VA, WI. This started at 1400Z, but after some time, I tried switching to 17, then to 20, but didn't hear anything. Probably all the DX was resting up for the CQ WW DX contest. Anyway, I wandered to 30 Meters, which was a gold mine, 11 Q's in 12 minutes. It was a real rush to have such pileups greeting my KX2 running 10 watts to a 33' sloper.

Next was Dayton Aviation Heritage National Historical Park, HP11 and North Country National Scenic Trail, TR04 (twofer), 31 Q's from CA, FL, GA, IL, MA, MN, NC, NH, NM, NY, OH, PA, PQ, TN, TX, UT & WI. Started out with a single CQ to see if I was being heard, but one after another station just kept on calling. I finally had all 25 lines of my paper log filled, sent the cacophony to QTX, and fired up the computer for the balance. Moral of the story, "Get computer running BEFORE even a test CQ."

The highlight of this activation was that I met WD8RIF who was just finishing up an activation at the site. (Note, Eric, WD8RIF uses a KX3 and a similar antenna). It's always nice to meet folks with whom you've been working for some time. I probably could have made more contacts, but on a National Scenic Trail one must NOT be attached to a vehicle, and one MUST transport the rig

and antenna by foot to the setup location. It was not quite 4°C, and ye olde bones were getting a bit chilled, so QRT. I did make it to 17, 20, and 30 meters, and had at least one spot for each band, so folks who were paying attention should have been able to find me.

Charles Young Buffalo Soldiers National Monument, MN18, 29 Q's from CT, FL, IL, IN, MD, MI, NE, NJ, NY, OK, PA, RC05. SC, TX, WA and WI. I ran out of paper logs (used at TR04 & HP11). Folks were calling when the computer chimed with "battery low, please charge" and a few minutes later it crashed. I probably could have made another 10 Q's, because 20 meters was quite hot!

I was on locally in Cincinnati on November 26. Again the first was NS78. I met Eric again there, and watched him in operation and while shutting down. He moved to TR04, this time in Cincinnati, about 2 or 3 miles from NS78. We worked each other on 80, 40, 30, 17, 15, 12, and 10 meters. We didn't make it on 20, because we couldn't find a clear spot, even though we probably wouldn't have bothered the DXers with their KWs and beams. We wanted to be "considerate amateur operators. After that, I announced myself on the DXclusters, the NPOTA Facebook page, and on the QRP-L reflector, and a similar cacophony of mini-pileups occurred. On 40 there were 14 contacts, and on 30 I managed six.

Then on to the Cincinnati location for the North Country Trail (TR04). Weather was warmer than on Friday - it hit a balmy 8°C, and the wind was light. Again, after announcing my presence, contacts started rolling in almost immediately. On 40, 20 contacts, and on 30, six contacts. Great activation!

If anyone is a serious contesteer amongst this readership, this is nothing about which to write home. But it's always an adrenaline rush to hear a pileup of two, three, four or more stations calling me, with a QRP station, using a marginal, portable antenna. This is especially true for the North Country Trail, where there have been more than 12,000 contacts made. It also helps that the assembled multitude of NPOTA operators have notice that a million contacts are possible from the 450 plus NPS units during the year. If someone mentions #1millionQSOs on the Facebook page, this seems to bring contacts out of the woodwork!

I'd encourage any and all CWops members to consider working activators who activate NPS units with the CW mode, and/or "Activate" the nearest National Park Service unit yourself. In all but National Scenic trails one may use Mobile units, or may operate from inside a NPS office (with permission, of course). See arrl.org/npota and/or npota.arrl.org for more information. I can guarantee you, it's fun! It's not quite as deep a pileup as when we operated as W1AW/* during the 2014 centennial, but it's still somewhat akin to being a DX station in a "semi-rare" location!

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The *Tiny*Keyer

the World's Smallest Fully-Featured CW Keyer with Computer Support

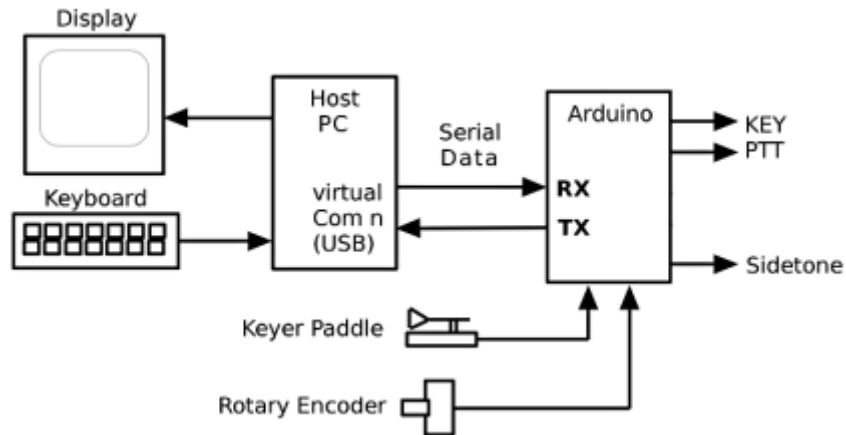
by Martin Kratoska, OK1RR

This little pixie is a \$20-30 weekend project. It is intended more as a computerized ham shack addition, a keying interface with paddle input and a speed control knob, than a regular keyer. Although it can be operated as a standalone keyer, it is intended for daily CW work and contesting with computer support. Most functions should be adjusted and operated from the computer. When connected to a computer (here 99.9% of the time), it needs to be definitely K1EL's Winkeyer USB compatible. There is no need for any internal memory, buttons etc., all "memories" are actually macros, played from the station computer (where they are ASCII-defined and assigned to F-keys, such as TR4W, CQRlog and others. In the Standalone mode it does not use any memory, it works as "plain" keyer without memory.



Of course, if you go to SOTA, etc., a paper log is likely in use and memory buttons may be needed. In that case, choose another keyer. Tinykeyer has no typical memory and no buttons, except a switch in the rotary encoder to enter the command mode.

The Tinykeyer, based on an Arduino Nano Rev. 3.0 board, employs the K3NG code (the credit and big kudos go to Anthony Good K3NG). It can be used with any Windows/Linux/Mac logging or contesting software with Winkeyer USB (K1EL) support. It is a very small unit (outer dimensions 45 x 45 x 18.6 mm, appx. 1.8 x 1.8 x 0.73 in) which does not have any fancy options like a zillion buttons, psychedelic flashing LED lights, or cockatoo colored displays). Only a speed control knob and a mini LED indicating the command mode are on the front panel, nothing more.



Block diagram of the Tinykeyer.

This project is not intended for beginners. An intermediate-level builder's experience (also with SMD parts) is needed. Although the circuitry is quite simple, it does not mean that everybody who already built a traditional kit with leaded parts will be successful. You need basic tools for SMD parts, and clean and accurate work is mandatory. Otherwise you will be surprised how uncomplicated it is to build. It is a single board construction with a sandwiched Arduino Nano Rev. 3 module. The external wiring is minimal, unlike some tricky mounted parts (rotary encoder, input and output jack sockets) may require some kind of preparation. A professionally made, double sided, L-shaped PC board with solder mask, metal plated through-holes (vias) and silkscreen printing on both sides is used (Gerber data available).

Specifications

- CW speed adjustable from 1 to 99 WPM
- Power, programming and interfacing via USB port
- Rotary encoder speed control
- Command mode for using the paddle to change settings
- Logging and contest program interfacing via K1EL Winkey 1.0 and 2.0 interface protocol emulation
- Optional PTT output with configurable lead, tail, and hang times
- Both keying and PTT outputs rated for 60V/180 mA
- Iambic A and B modes
- CMOS Super Keyer Iambic B Timing
- Ultimatic mode
- Single lever paddle mode
- Bug mode
- Straight key support
- Paddle reversal
- Farnsworth Timing
- Adjustable frequency side tone
- Keying Compensation

- Dah to Dit Ratio adjustment
- Weighting adjustment
- "Dead Operator Watchdog"
- Autospace
- Wordspace Adjustment
- Non-volatile storage of most settings
- Sleep Mode
- QLF ("Messy" Straight Key Emulation)

As a nice bonus, the Tinykeyer is a completely Open Source project, including Gerber data for PCB production, is freely upgradeable and its cost is about 1/6 of the Winkeyer price when you organize a group buy.

For basic settings, an acoustic menu in command mode is used. To adjust a parameter, press the Speed Control knob towards the front panel. Tinykeyer responds with “boop-beep” sound and the LED turns on. Play a letter corresponding to the desired command, adjust, and return back to the operate mode with X command or another press of the Speed Control knob. The keyer responds with “beep-boop” sound and the LED turns off.

- A** - Switch to Iambic A Mode
- B** - Switch to Iambic B Mode
- C** - Switch to Single Paddle Mode
- D** - Switch to Ultimatic Mode
- E** - Announce the speed in WPM
- F** - Adjust sidetone frequency* ("acoustic menu")
- G** - Switch to bug mode
- H** - Set weighting and Dah to Dit ratio to defaults (weighting = 50, dah/dit ratio = 3)
- I** - TX enable / disable
- J** - Dah to dit ratio adjust* ("acoustic menu")
- L** - Adjust weighting* ("acoustic menu")
- N** - Toggle paddle reverse
- O** - Toggle sidetone on / off
- T** - Tune mode
- W** - Change speed* ("acoustic menu")
- X** - Exit command mode (you can also press the Speed Control knob again to exit)
- Z** - Autospace On/Off
- ?** - Status**

** Left paddle decreases, right paddle increases, squeeze exits.*

*** Status is played in Morse in following order:*

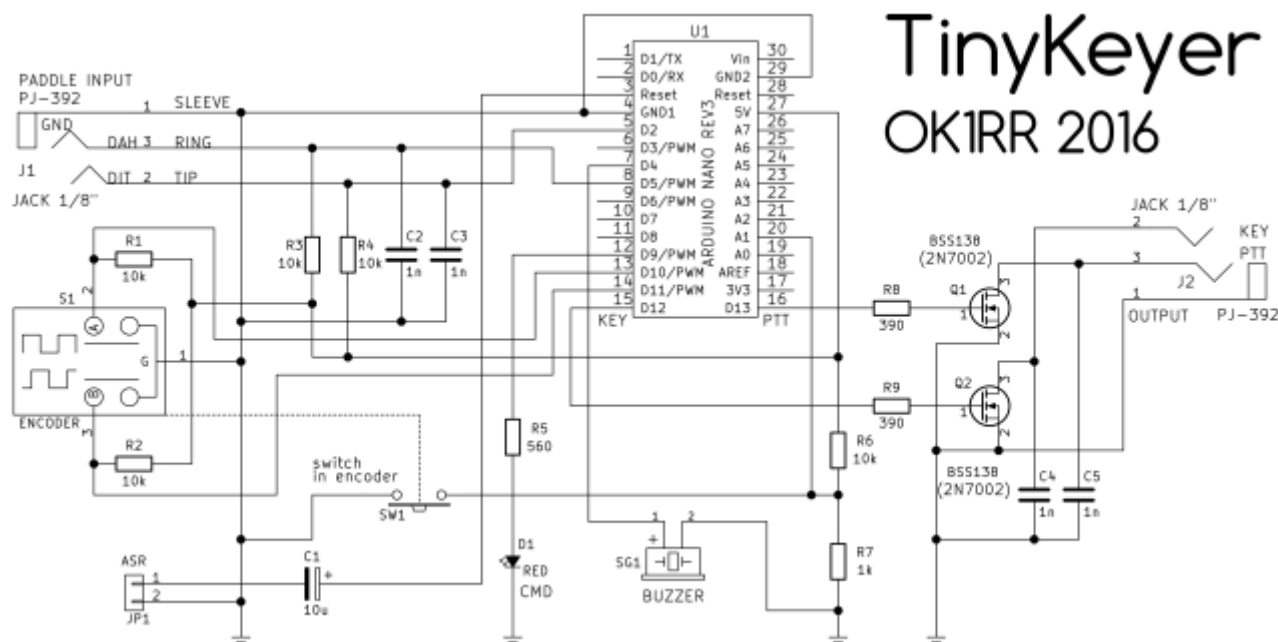
1. Speed in WPM
2. Keyer Mode (A = Iambic A, B = Iambic B, G = Bug, S = Single Paddle, U = Ultimatic)
3. Weighting
4. Dah to Dit Ratio

Commands A, B, C, D, G, H, I, N, O, T and Z are simple on/off switches. E and ? are information requests with sound output. F, J, L and W may need an adjustment (*left paddle decreases, right paddle increases, squeeze exits*).

The circuitry is as simple as possible. There are no multiple outputs, just a single keying output and PTT. Simple switching FETs are used, no optocouplers – low resistance in ON state is more important than isolation (BTW check the grounds in your shack, you will see that the ‘isolation’ is mostly an illusion).

There is no need to use an Arduino Board with FTDI UART chipset. A cheaper Chinese module with CH340 chipset was used in several tens of units without any issue. The support and compatibility with Windows (from XP/SP3), Linux 32 and 64bit (kernel above version 3.00) and OSX 10.7. (Lion or later) was thoroughly tested and found good.

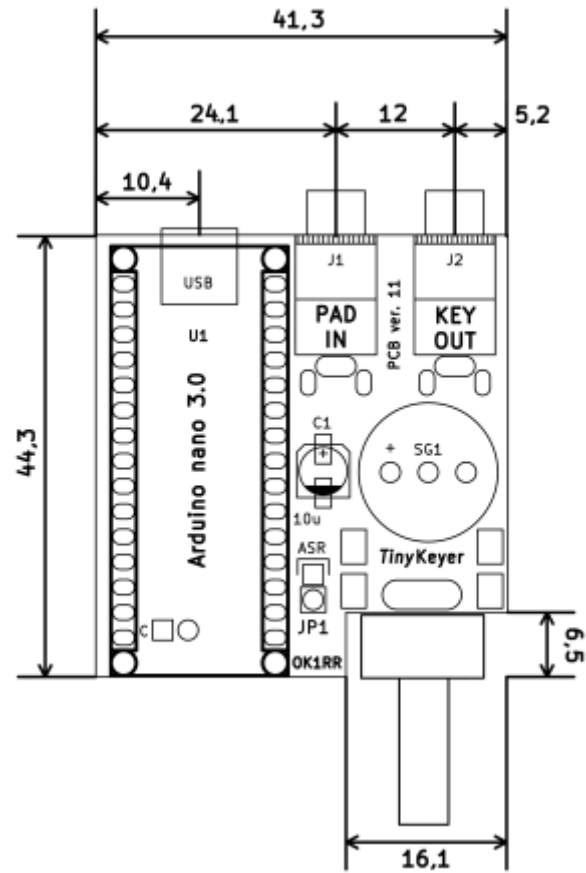
The schematic



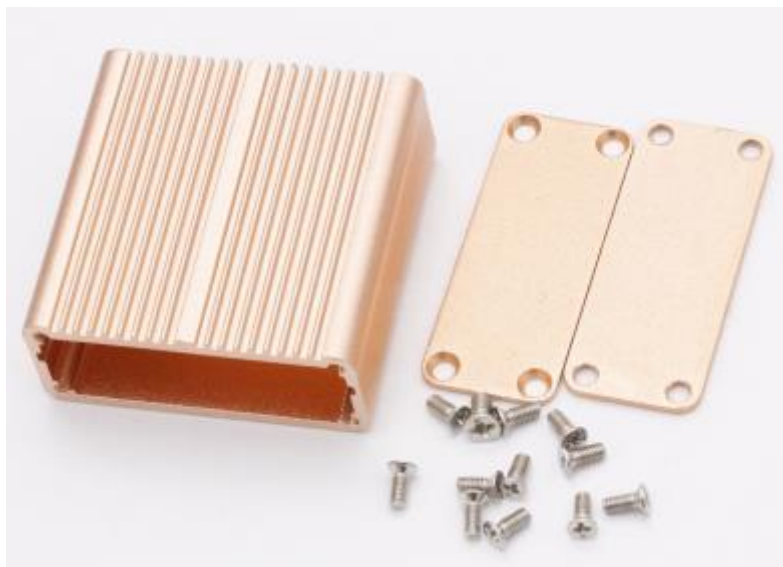
An Auto Software Reset in form of C1 capacitor is used. While firmware upload, it must be detached from the ground (jumper JP1). For regular operating JP1 must be in place. All commands and keyer response are sounded from a small piezo buzzer. All inputs and outputs are bypassed with 0.001 uF capacitors, no other RFI measures were used.

Construction

The following drawing shows overall dimensions in millimeters. The main board is L shaped to accommodate the rotary encoder.

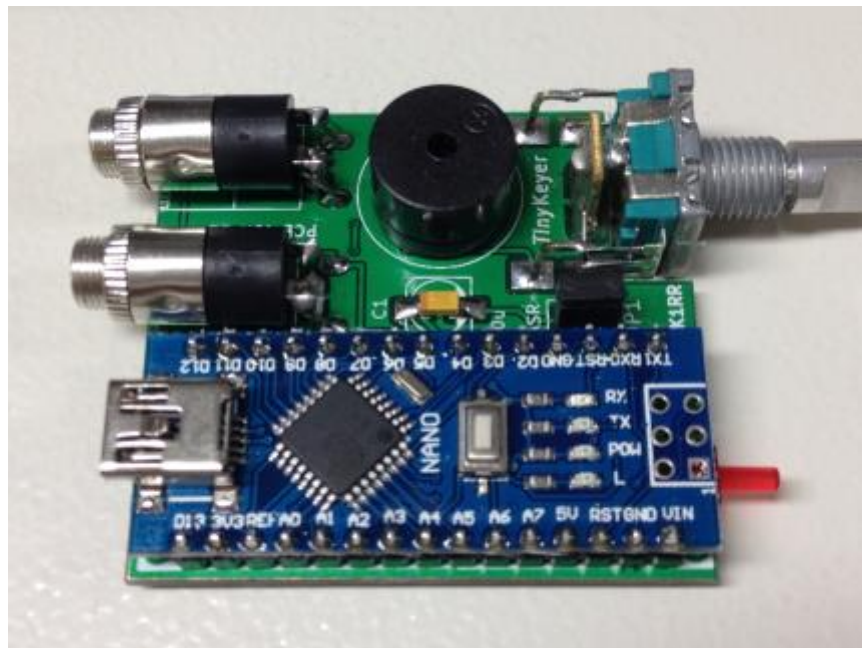


The assembled board is housed in a small aluminum box.

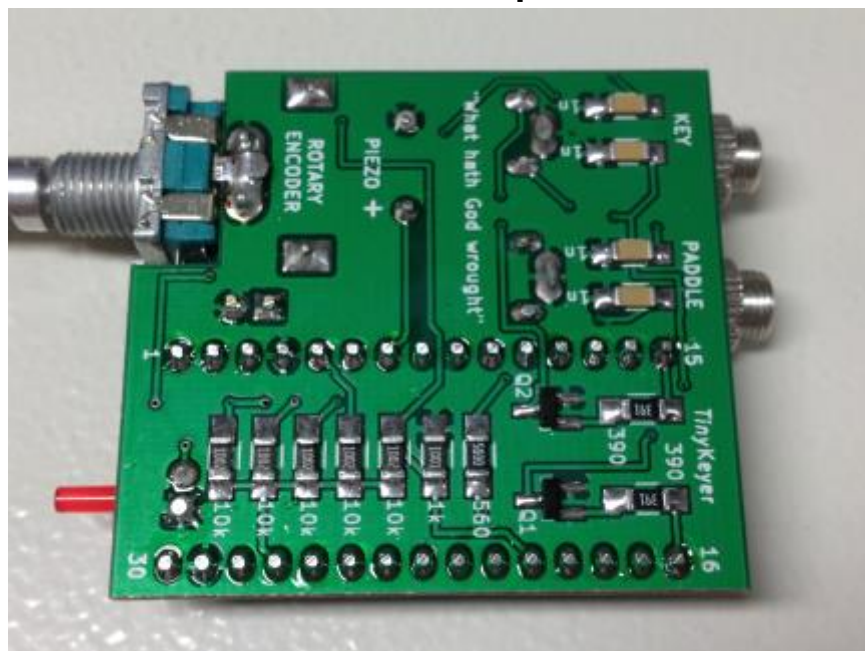


The aluminum box (W x D x H 45 x 45 x 18.5 mm).

A picture is worth more than 1000 words, so some images from the assembly may help with the construction.



Inside – top.



Inside – bottom.



Front view.



Rear view.

More details are available on my web site:

<http://www.ok1rr.com/index.php/technical-topics/122-the-tinykeyer>

There is also dedicated support group at Yahoo:

<https://groups.yahoo.com/neo/groups/tinykeyer/info>

Both sites have detailed info, lot of images, a builder's guide, a buyer's guide (what & where to buy on eBay) and downloads of all related files. PCBs are available from the author.

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Dayton CW Competitions to Enhance Pileup Skills

by [Chuck Sanders NO5W](#)

A few months ago in Solid Copy our editor, Rick-N6XI, reported on his recent trip to the Dayton Hamvention which he had not attended for a number of years. Rick had brief but complementary notes for most aspects of the Hamvention, including the long-running and ever-popular [CW Pileup Competition](#), sponsored since 1980 by the Kansas City DX Club and held in the KCDXC Hospitality suite at the Crowne Plaza. I have recently noticed some chatter on the reflector regarding resources for practicing CW pile up skills. A number of these are available on the Internet including Morse Runner and RufZ, both of which are excellent and fun to play. Another one that may not be as well-known is somewhat unique in that it makes use of pile up competition audio from previous competitions in the style of those sponsored by the KCDXC, with many of the competitions being from previous years at Dayton. With that in mind, and having been involved with the Dayton pileup competition as the software developer since 2012, it seemed like a good time to write this brief note describing the Pileup Practice resource available for [download](#) on the [NO5W website](#).

Before getting into the description of the pileup practice resource, perhaps it would be a good idea to give a brief overview of the KCDXC competition at Dayton for those who have not had the opportunity to take part in recent years. On Saturday night around 8pm, shortly after the Contest Dinner is over, operators begin gathering in the KCDXC suite where there is ample opportunity for eyeball QSOs and for imbibing 807s and other more substantial beverages. Once an early crowd assembles, the fun begins with up to six competitors at a time going into the operating room, each sitting down at an operating position consisting of headphones and a laptop provided by the KCDXC. After receiving instruction, donning headsets, adjusting the volume, and smiling for a photo-op, the audio is started from the host computer that manages and scores the competition and the competitors go to work listening to the audio and copying call signs into a small "Player" application which forwards each entered call to the host for real-time logging and scoring. In the meantime, those enjoying an 807 and eyeball QSOs in the suite "waiting room" turn their attention to a large flat-screen TV scoreboard to observe how the competition is going. The real-time scores are presented in either of two ways: in a tabular leader board format with competitors ranked in order of their scores and in a Morse Race format. The leader board format has the advantage of presenting all scores – you can watch the current players bubble up through the previous players until they reach their final score. That can be an interesting view of the competition but by far the more popular of the two scoreboards is the Morse Race. In the Morse Race, which has been a feature in the competition since real-time scoring was introduced in 2012, timed scores are kept for each competitor and this enables the scores of the current top five contenders from all of the previous competitors to be replayed as incrementing bar graphs along with bar graphs of the real-

time scores of the current group of competitors in the operating room. This gives immediate indication of current players who might be moving into the top five, and who, from the current top five, might be in jeopardy of being bumped. Processing of operators in groups of six continues until finally around midnight the last group from a total of approximately 100 competitors finishes up, and the prizes are awarded to the top three finishers as well as door prizes to those who have taken the test but perhaps did not finish in the top three.

Here is a description of the pile up practice resource that you can download and use to jump right into the competition against the winners and other players from several years in the past. The download currently on the website consists of the PileUpNet Player application, which is the same as the one used at Dayton, along with the audio and valid call sign files from previous competitions. Most of them are from the Dayton archives but there are a few from Austin's Summerfest, some from competitions held at W5FOC meetings, and one set that was used at WRTC 2014 in New England. The Dayton files go back as far as 1998 and, except for 2006-2007, are complete through 2016. All of the competitions are about five minutes long and consist of about 100 call signs transmitted with various speed, pitch, QRM/N, squirrely stability, and some overlap. On most of the competitions you can check to see what the winning score was before you decide to try it and by doing that you can get an idea of the level of difficulty to expect: a winning score in the 50s generally indicates a test of the highest difficulty whereas a winning score above 70 suggests a somewhat easy test – but unless you are truly an “ace,” all of them will be challenging.

As mentioned previously, beginning with Dayton 2012 and continuing to the present, timed scores have been captured for each contestant in order to support the Morse Race. This data is included in the download and will allow you to replay your session to see how you did in the Morse Race on a second-by-second basis against the top five who actually took the test when it was given, against a Dayton participant selected by you, and against the average of all Dayton participants. For those competitions you can also replay/review the test in 20-second segments to, for example, review time periods when you may have fallen behind or gained ground against the top five Dayton participants. Of course each time you take the test you can review the call signs you got correct and those you busted.

That's a quick overview which I hope will create enough interest for you to give it a try. Here are a few obvious reasons you might want to do the download of PileUpNet Practice:

- You are planning a trip to Dayton in the near future and would like to sharpen your pileup copying skills in order to improve your chances of scoring well in the competition and/or your ability to handle the pileups once you are spotted in the next CW contest. If you plan to come to Dayton you should by all means plan to take part in the pile up competition and for that a little practicing beforehand can be beneficial. It can be a humbling and/or rewarding experience but regardless of where your score falls on the leader board, it will be fun with all those eyeball QSOs and perhaps an 807 or two.
- You do not foresee a trip to Dayton in your future but, in addition to improving your ability to handle the pileups in your next CW contest, you are curious about the Dayton Pile Up Competition and would like to get an idea of how you stack up against some of the best CW operators on the planet when put to the same test.

- You are thinking of setting up a pileup competition at the CWOps booth at a local ham fest and would like to review what is available to run that event. To facilitate operation at a ham fest, the software contained in the download can be easily configured to run in “Kiosk” mode wherein players drop by one at a time to take the test and at the end of the competition session results are available for awarding prizes, bragging rights, etc. The Kiosk approach is easier to set up and run than is a competition like the ones the KCDXC does at Dayton and is more appropriate if you expect only a small number (<20) of contestants.

The download includes a brief set of instructions which you can access either from the download page on the website or by using the Help button on the application. If you still have questions after consulting the help file feel free to [contact me](#). In addition, if you are interested in using the software for a competition of your own and would like to discuss some of the considerations for doing that, please feel free to contact me.

Good luck in the pileups whether real or otherwise.

73,

Chuck NO5W

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My Story – K4EET

by Dave Hamm K4EET, CWOps #1724



First licensed as a Novice in 1974 signing **WN4JQX**, I became **WA4JQX** with my General ticket and also used **AA4JQX** in 1976 during the bicentennial celebration. I established a secondary station at college and was assigned **WD4DSB** for a brief period. When I moved from Virginia to Maryland in the early 1980s, I relinquished the fourth call area designator and became **KC3VI** with the Advanced Class license that I had obtained during college. There was a long period that I was radio-inactive on HF and used VHF only while away on business trips. In 2005, I joined the ranks of disabled hams as a rare degenerative neuromuscular disorder began to take its toll on my body. Having been planted in a wheelchair for the rest of my life and slowing down a tad bit to "smell the roses," I

rediscovered HF radio, local radio clubs and made many new radio-active friends. I now see what all I had missed out on during my busy years. My, my, how ham radio has evolved! Still a lot to grab my renewed interest in HF and plenty to keep me busy. In 2007, I decided to request a vanity call to

reclaim my fourth call area designation where I still hold fond memories. I chose **K4EET** for Electrical Engineering Technologist but my wife prefers Ears, Eyes and Toes. I'm still her Mr. Potato Head! Hi, hi...

I want to cite a man that I have never forgotten although I lost touch with him long, long ago. He was quite a guy. Copied CW in one ear at 40 WPM and still carried on a conversation with me at the same time, all full duplex! At the time, I was a recent high school graduate and had been bitten by the ham radio bug. This man took me under his "key" and taught me what I needed to know to pass my Novice license. Once I was licensed, he gave me an antenna tuner that he had home-brewed many years prior to complement a Heathkit SB-102 station that I had just built and on the air I was! That man? My Elmer was Bill Nighman W4ZSH (now an SK and he also held W4XR). How I wish that I could have a CW QSO with my Elmer today!!! *RIP, Bill.*

I'll never be able to show Bill where all ham radio has taken me but it did persuade me to specialize in Radio Communications Theory and VLF to SHF Propagation at Virginia Tech and land a job with Motorola Communications and Electronics as a Microwave Product Consultant and later as a Two-Way Radio and Point-to-Point Communications Systems Engineer. I "played" with radios throughout my professional career and ended up using Motorola radios at the end of my career working in Public Safety within the State and Local Government sector as the Police Communications Systems Manager of a large 9-1-1 Emergency Communications Center responsible for all of the Motorola Radio Consoles, Geac Computer Aided Dispatch (CAD), Plant 9-1-1 Phase II Telephone Answering System (TAS) with Automatic Vehicle Location (AVL) for cellular telephones, and all mobile/portable Motorola radios used by the sworn Police officers. What an experience to know that people's lives, citizens and our own Police officers alike, relied on the systems that I had overall responsibility for. Talk about a heavy responsibility! I give all the glory, honor and praise to our loving **God** for giving me the necessary confidence and knowledge to keep everything operational with top-notch reliability.

If it had not been for my Elmer, Bill Nighman, W4ZSH/W4XR, I may have never known that radio communications would be my area of expertise. Thank you, Bill! 73 es gud dx!

As I reflect on all of this, that was back in 2013, while using my Drake TR7 and Yaesu FT-757GX HF transceivers and an Icom IC-208H VHF/UHF transceiver. I still wished that I could enjoy a long rag chew with my Elmer. Thanks again Bill! You got me started in a great hobby that I would enjoy for my entire life...

Finally, in mid-2014, I was given/donated a FLEX-6500 HF transceiver. What an awesome radio that is! Many people have given me things that I needed/dreamed about as a disabled individual. My Four Wheel Drive Maryland Creepers group donated me a Dell Latitude 600 laptop computer, some friends from my church donated an over-the-bed Hill-Rom Hospital Table and then there was the FLEX-6500 radio. What generosity has been shown by friends and strangers! But the real praise, honor and glory goes to **Father God**, His Son **Jesus Christ** and the **Holy Spirit** that lives within. **Thank you, Jesus!**

73 to all es hope to have a nice QSO with you all one day!

Dave, K4EET



CW Academy

[Jerry Weisskohl AC4BT](#)

CW Academy's (CWA) winter semester (January/February 2017) will be kicking-off the first week in January. I just completed and sent out the student assignments to the CWA Advisors, and the Advisors are now busy contacting their new students and preparing for the start of the semester. This will be the 15th overall semester that CWA has conducted CW classes. The very first CWA semester was conducted in the spring of 2011.

For the Jan/Feb 2017 CW Academy semester we have 38 Advisors and 212 enrolled students: 112 Level 1 students, 75 Level 2 students and 25 Level 3 students.

As you can see, CW Academy student signups continue to increase and CWA is struggling to meet this increased demand. CWA has a continued need for additional Advisors in all areas of the World. The team of CWA Advisors is comprised of dedicated volunteers providing CW instruction internationally at no cost to the students.

If you love CW and want to join us in our mission to ensure that CW remains relevant and continues to prosper, please consider joining the Academy's elite team of Advisors. All it takes is a love of CW and a desire to help aspiring students learn to use CW. It's fun and rewarding and you will make many new life-long friendships at the same time!

CW Academy's classes are conducted using Skype video conferencing. This allows us to connect to students all over the world using the Internet. Minimal equipment is needed for both students and Advisors – just a little free time and a desire to help people by sharing your CW skills and expertise.

More information about becoming a CWA Advisor can be found at the CWops website (www.cwops.org). The link for the sign up form for becoming a CWA Advisor is:

<http://cwops.org/cwa-advisor-su.html>.

Here's to another successful and fun-filled CW Academy semester!

73,

Jerry AC4BT

How We Were – AI6O

by [Hank Garretson W6SX](#)

Ed Felter, AI6O, CWops # 1337 reports:



Eddie Felter, KN3IYK, Tilghman, Md., looks pleased because of his WAS of 38 which includes KL7 and WH6, not to mention his DX of XE3, LA6, OH7, G3, DL6, and UA1. Eddie operates in a trailer, his dad travels a lot and Ed has been portable in all the call areas!

June, 1960 • CQ • 87

I am 14 in this CQ magazine picture taken in 1959. As you can see, I'm using a Heathkit DX40 on CW and the receiver is a Hammarlund HQ100. Being in a trailer, my antenna was a Master Mobile with a center section loading coil that used a pin for the various bands. I upgraded to General class the month this was printed. Those were the good ol' days!

By the way, a friend Bill, W6RGS, was cleaning out his 50 plus year collection of CQ magazines. A couple of years ago, while serving as president of the San Diego Six Shooters ARC, I was waxing eloquent in my presidential duties when Bill rudely interrupted me and in front of 70 people, presented me with the actual copy of the magazine and a couple of copies of the page. What a gift!

73,

Ed Felter, AI6O ex KN3IYK

Please send YOUR *How We Were* Photos to w6sx@arrl.net

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CWops Tests

by [Rich Ferch VE3KI](#)

From time to time I receive comments about ongoing QSOs being trampled on in CWTs. The latest one is from one of our own members who is well aware of the CWTs, but who would like the opportunity to complete QSOs begun before the CWT session without having them suddenly trampled on and unceremoniously terminated. I must say I have had some of this happen to me during CWTs – someone starting to CQ on top of an ongoing CWT QSO without sending QRL? first, or sending QRL? and then starting up a CQ before I even had time to move my hand over to the paddles to respond. Please remember – you should be listening for more than just a few milliseconds before starting up on a new frequency; you should be sending QRL? or in some other way interrogating to see if the frequency is in use; and when you send QRL?, the purpose is to elicit a response, not to check off a requirement on a checklist. Give a potential responder, who may be straining to hear a weak signal, enough time to react and respond. There's no hardware or wallpaper at stake, so surely a few seconds is not too much to ask.

Band conditions keep on deteriorating, at least on the higher bands. Even 40 meters has been poor for me in the evening (0300Z) sessions. DX in the Caribbean and Europe comes in OK, but the signals from the northeastern US that I would normally expect to work a lot of are now weak and watery. The 40M band is starting to feel like 20M used to under better conditions. In compensation, 80M and 160M are getting much better. 0300Z is not a good time of day to find a lot of activity from Europe, but what signals there are have often been loud here. That's a compensation for us in the northeast, at least. If you are in the "black hole" or on the west coast, you may not be taking as much comfort from this.

As of December 2, we had 144 out of the year's total of 156 sessions completed. According to my preliminary calculations, there are now 32 members who have reached the gold medal level, with another 11 already at silver and within striking distance of gold by the end of the year. In addition to those 11, there are 30 more who have reached the silver medal threshold, with several more likely to get there by the end of the year. And it looks as if we will end up with about 50 at the bronze medal

level once the dust settles. I'm not sure I'll be able to complete the tabulation and checking in time for the January newsletter, but certainly by the February issue the lists will have been finalized.

With respect to participation levels in the individual sessions, we are usually above 120 reported scores in each session now. There are several CWT regulars who do not report their scores to 3830scores.com, so the actual participation numbers are even higher. That's a lot of signals to squeeze into a small piece of frequency real estate in a short period of time.

Till next time, let's all keep on having fun in the CWTs.

73,

Rich, VE3KI

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CWops Member Awards

[Pete W1RM](#) and [Peter W1UU](#)

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: <http://www.bbcyber.com/cam/>.

Call	ACA	CMA	Call	DX Total	Call	WAS	Call	WAE	Call	WAZ
W1RM	816	4504	W1RM	174	N5RR	50	W1RM	48	W1RM	38
AA3B	804	5841	F6HKA	159	W1RM	50	F6HKA	45	F6HKA	38
F6HKA	767	4346	W4VQ	142	W4VQ	50	N5RR	43	W4VQ	37
VE3KI	735	4027	G4BUE	123	F6HKA	50	G4BUE	43	G4BUE	37
N8BJQ	628	4124	N5RR	117	W1UU	50	VE3KI	42	N5RR	36
N5RR	593	4068	VE3KI	112	VE3KI	50	OK1RR	42	VE3KI	35
K1ESE	580	2495	OH2BN	112	G4BUE	50	EA8OM	42	N5PHT	32
G4BUE	518	3205	EA8OM	111	EA8OM	50	W4VQ	41	IK0YVV	32
IT9MUO	467	1397	N8BJQ	109	W0EJ	50	N8BJQ	41	VK7CW	28
N5PHT	466	1884	K1ESE	99	F6JOE	50	OH2BN	40	JF2IWL	25
K6RB	456	3403	SM6CNN	93	W6KY	50	AA3B	40	W6NS	19
K5AX	423	1927	OK1RR	93	N1EN	50	SM6CNN	37		
NA6O	404	1500	AA3B	93	N5PHT	50	IT9MUO	36		
W4VQ	393	2455	EA1WX	92	F5MNK	50	F6JOE	36		
IT9VDQ	391	951	W0VX	88	K5IX	50	K1ESE	35		

Call	ACA	CMA		Call	DX Total		Call	WAS		Call	WAE		Call	WAZ
NN4K	387	983		N1EN	86		K3SEN	50		W1UU	34			
W1UU	347	2042		F6JOE	84		AD1C	50		W0VX	34			
K3SEN	332	1006		IT9MUO	83		AB7MP	50		KZ5D	34			
W9ILY	326	2639		AD1C	81		W9ILY	49		KR3E	34			
W0VX	325	2633		PA7RA	79		W0VX	49		EA1WX	34			
F6JOE	317	2601		KZ5D	78		VK7CW	49		W9ILY	32			
N1DC	309	855		DL8PG	77		N8BJQ	49		N1EN	32			
K6DGW	305	1635		W1UU	75		K6RB	49		IT9VDQ	32			
DL8PG	298	1709		N5PHT	74		K6DGW	49		F5MNM	32			
W6NS	292	1090		KR3E	73		K5AX	49		PA7RA	31			
VK7CW	291	1074		N1ZX	70		K1ESE	49		DL8PG	31			
W6KY	271	1966		K5AX	70		GW0ETF	49		IK0YVV	30			
K8AJS	262	403		F5MNM	68		AA3B	49		NN6T	29			
I5EFO	242	333		NN6T	67		WB9G	48		N1ZX	28			
K3WJV	238	882		GW0ETF	67		W6NS	48		K5AX	28			
EA8OM	235	2758		VK7CW	65		SM6CNN	48		GW0ETF	28			
NU7Y	232	479		IT9VDQ	62		NN6T	48		AD1C	28			
W5ASP	231	1018		W9ILY	57		NA6O	48		JF2IWL	25			
G4DRS	214	496		IK0YVV	57		N1ZX	48		G4DRS	24			
AD1C	209	1919		W6KY	55		N1DC	48		K6RB	23			
N1EN	200	1928		K6RB	54		KZ5D	48		I5EFO	23			
K5IX	200	630		NA6O	50		KT5V	48		HB9ARF	23			
G4NVR	191	265		JF2IWL	50		IK0YVV	48		VK7CW	22			
JF2IWL	151	913		4Z1UF	50		DL8PG	48		N5PHT	21			
EA1WX	146	1724		G4DRS	49		NU7Y	47		4Z1UF	21			
K2ZC	112	767		WB9G	48		KR3E	47		K2ZC	20			
4X6GP	109	975		HB9ARF	41		JF2IWL	47		G4NVR	20			
AB7MP	86	617		K3SEN	39		WX7SJ	46		WB9G	19			
G4HZV	85	99		I5EFO	39		NN4K	46		N1DC	18			
KZ5D	0	3239		W6NS	38		KG5U	46		G3YJQ	18			
SM6CNN	0	2477		K6DGW	38		K0DTJ	46		W6KY	17			
N2UU	0	1774		K2ZC	37		IT9MUO	46		NN4K	17			
OK1RR	0	1618		W0EJ	36		G4DRS	46		NA6O	17			
NN6T	0	1577		N1DC	35		EA1WX	46		KG5U	17			
GW0ETF	0	1451		KG5U	35		K3WJV	45		K3WJV	16			
KG5U	0	1322		NN4K	33		K2ZC	45		K3SEN	16			
PA7RA	0	1200		KT5V	32		IT9VDQ	45		W6NS	12			
KR3E	0	1136		G4NVR	31		PA7RA	44		K6DGW	12			
F5MNM	0	1111		G3YJQ	27		OK1RR	44		KT5V	11			
PA4N	0	955		K3WJV	25		KM4FO	43		W0EJ	10			
N1ZX	0	940		K0DTJ	25		HB9ARF	43		K8AJS	10			
WB9G	0	888		NU7Y	21		OH2BN	42		G3XLG	10			
KT5V	0	814		AB7MP	21		K8AJS	41		W5TM	7			
IK0YVV	0	767		K5IX	20		I5EFO	40		G0DJA	7			

Call	ACA	CMA		Call	DX Total		Call	WAS		Call	WAE		Call	WAZ
W0EJ	0	754		G3XLG	18		NV9X	38		K5IX	6			
HB9ARF	0	723		K8AJS	17		G3YJQ	37		K0DTJ	6			
K0DTJ	0	668		WT2P	14		4Z1UF	36		AB7MP	6			
WX7SJ	0	610		W5TM	11		WT2P	34		KM4FO	5			
WT2P	0	574		KM4FO	10		G4NVR	34		WT2P	4			
OH2BN	0	530		G0DJA	10		W5TM	32		NV9X	1			
KM4FO	0	500		NV9X	4		G3XLG	31						
N7WY	0	403		KE6K	4		KE6K	17						
W5TM	0	235					G0DJA	8						
G3YJQ	0	234												
G3XLG	0	201												
NV9X	0	149												
KE6K	0	116												
G0DJA	0	23												
PA1FOX	0	5												

73,

Pete W1RM

CWopsCAMScores@comcast.net

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New Members

[Colin Jenkins KU5B](#)

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

1712 K0PGE* Ron
 1713 WB0PYF* Ray
 1714 VK5EEE Lou
 1715 WC4E Jeff
 1716 TZ4AM* Jeff
 1717 K5HP* David
 1718 SM1TDE Eric
 1719 AD6JV Bill
 1720 N3AAK* Bob
 1721 K0HX* Stan
 1722 WN9W David
 1723 N0KV* Barry
 1724 K4EET* Dave

1725	KC3X*	Hollis
1726	W5BOS	Lanny
1727	K1SWL	Dave
1728	K8DK	Doug
1729	G4ILW*	James

* = Life Member

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Current Nominees

As of December 9, 2016:

Need Sponsors: KB4RGC, N9SZ, VE3PVI, AB6XG, WA9SEO

Invitations Extended: W9XS

For more details about nominees and up-to-date status, check the “Members Only” pages on the Website: www.CWops.org.

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

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QTX Report

Enjoying the Art of Conversational CW

by [John Huffman K1ESE](#)

QTX is a way of counting conversational CW QSOs. One point is awarded for each QSO of 20 minutes or longer. We have two ways to recognize QTX activities - the QTX Plaque and the QTX Achievement Medal.

Here's the latest tally of this month's CW conversations of 20 minutes or longer. Remember, you can work anyone, anywhere, as many times as you like. They all count for QTX.

QTX Monthly Standings

Below find the November QTX reports received -

<u>Call</u>	<u>Nov.</u>
N5PHT	128
K5KV	86
KI4XH	61
N5IR	58

KC0VKN	48
K5YQF	47
K1ESE	39
K6HP	18
HB9CVQ	14
K4AHO	13
K0DTJ	9
I5EFO	3
K6DGW	3
W3WHK	2

Gary N5PHT did it again. He is consistently our leader since he became active in June, with amazing totals each month. Benny K5KV takes second again this month. Fred KI4XH is in third for November.

Reports were down this month to just 14. We usually run a bit over 20 reports each month. QSOs were down to 529, but we have had lower this year. A lot of other things cut into CW time during this season.

Personal best for the year was submitted by KC0VKN. Joe keeps getting better each of the last couple of months.

QTX Medal Standings

We award QTX medals for the following totals at the end of the year -

Gold Medal - 400 QTX points
Silver Medal - 300 QTX points
Bronze Medal - 200 QTX points

It will be fun to see if you can accumulate the contacts needed to reach each level.

QTX Year to Date

<u>Call</u>	<u>YTD</u>
N5PHT	808
K5KV	688
KI4XH	598
N5IR	556
K1ESE	547
K5YQF	469
K4AHO	262
AC4BT	240
KB6NU	221

KC0VKN	198
NN6T	180
K6HP	167
K6RB	137
HB9CVQ	104
W3WHK	85
I5EFO	57
NN4K	47
KE6OIO	47
N1ZX	39
K0DTJ	31
WA8IWK	31
N9SE	27
K6DGW	18
K3TN	17
WC5W	17
K8UDH	11
W5JQ	10
N5LB	2
AB7MP	2

Gary N5PHT is extending his lead this month. With just two months left he will be hard to catch. Benny K5KV holds on to second and is always near the top, month after month. Fred KI4XH is the third station at well over 500 QSOs for the year.

So far the following stations have qualified for medals -

Gold - N5PHT, K5KV, KI4XH, N5IR, K1ESE, K5YQF

Silver - No one here, but three have time to get there.

Bronze - K4AHO, AC4BT, KB6NU

The year is running out and just one month is left for that final medal push. If anyone missed sending in a report for some month, please email me so that I can update your annual total.

Good luck!

Thanks to all for your participation.

73,

John K1ESE, CWops #792, *QTX Manager*

QTX – Encouraging Conversational CW

Upcoming CW Operating Events

by [Joe Staples W5ASP](#)

This brief list of operating events is intended to provide members with options for using and improving their CW skills in less intense and more casual on-the-air activities.

NOTE: This column has focused on major worldwide contests and regional North American events but there are many other CW operating events in other parts of the world. To alert our readers of events in your region, contact the [author](#).

The Ten Meter contest can be either a blast or a dud ... just depends on the "ions." With the sunspot cycle pretty much "over-the-hill," this year may herald a long term downswing in conditions. Check the propagation gurus, and throw some "fu-fu dust" up towards old Sol.

One thing to keep in mind about the 10M affair is that even in the absence of decent propagation, the onset of Sporadic-E can bring about wonders. Dozens of stations have been worked on a "dead" band by swinging the beam and calling ... and calling ... and calling again through 360 deg. Take the Qs any way you can get 'em.

This year the RAC Winter contest will take place the weekend before Christmas. It marks the end of the year's scheduled operating events for many of us. As with the other Canadian contests the activity will be open to any and all who chose to join in.

The RAEM contest is organised by the Union of Radioamateurs of Russia in memory of Ernst Krenkel (1903-1971), a famous polar investigator and radio communications operator (callsign RAEM. Beginning in 1924, Krenkel was a pioneering member and main radio operator of many Russian Arctic winter research expeditions, as well as a veteran of the Russian Arctic polar station "North Pole-1" and numerous other Arctic marine expeditions. The event is held on 10 thru 80 Meters, and is CW only. The exchange is a rather unique. It consists of the serial number of the QSO, and the participant's geographical coordinates, degree values only. Best see the rules for the details.

The North American CW QSO Party is always a very popular event for CW operators. Possibly the most "fun" of all CW events, it's certainly is one of the high points of the month. Unfortunately, many operators miss out on one of the key features of this contest, the team competition. What's special is that there are no distance or club requirements ... just two to five single operator stations combining their scores to give added interest to the affair. You might want to gather up a few other CWOps and see how well your team can do. Teams should be pre-registered at:

<http://www.ncjweb.com/cwnaqpteamreg>

The ARRL Rookie Roundup, CW and the ARRL Kid's Day Contest are excellent opportunities for the more experienced operator to encourage both the newer and the younger players to take part in contesting style events. Consider opening your station up to a rookie and then later gather up several

of the younger set for some on-the-air "kids" time. And remember, the more operators who are on the air, the more fun there will be for everyone.

Finally, don't forget "Straight Key Night" on New Years Eve/Day. It's a day dedicated to celebrating our CW heritage. Participants are encouraged to get on the air and simply make enjoyable, conversational, CW QSOs. The use of straight keys or bugs to send CW is preferred. There are no points scored and all who participate are winners.

DECEMBER / JANUARY EVENTS

ARRL 10-Meter Contest http://www.arrl.org/10-meter	0000Z, Dec 10 th to 2400Z, Dec 11 th
RAC Winter Contest http://wp.rac.ca/	0000Z-2359Z, Dec 17 th
ARRL Rookie Roundup, CW http://www.arrl.org/rookie-roundup	1800Z-2359Z, Dec 18 th
RAEM Contest http://raem.srr.ru/en/main/	0000Z-1159Z, Dec 25 th
ARRL Straight Key Night http://www.arrl.org/straight-key-night	0000Z-1159Z, Jan 1 st
Kid's Day Contest http://www.arrl.org/kids-day	1800Z-2359Z, Jan 7 th
North American QSO Party, CW http://www.ncjweb.com/NAQP-Rules.pdf	1800Z, Jan 14 th to 0559Z, Jan 15 th
NCCC Sprint	0230Z-0300Z, Dec 16 th
NCCC Sprint	0230Z-0300Z, Dec 23 rd
NCCC Sprint	0230Z-0300Z, Dec 30 th
NCCC Sprint	0230Z-0300Z, Jan 6 th
NCCC Sprint http://www.ncccsprint.com/rules.html	0230Z-0300Z, Jan 13 th
SKCC Weekend Sprintathon	1200Z, Dec 10 th to 2400Z, Dec 11 th
SKCC Sprint	0000Z-0200Z, Dec 28 th
SKCC Weekend Sprintathon http://www.skccgroup.com/operating_activities/weekday_sprint/	1200Z, Jan 7 th to 2400Z, Jan 8 th
NAQCC CW Sprint	0130Z-0330Z, Dec 14 th
NAQCC CW Sprint www.naqcc.info/	0130Z-0330Z, Dec 22 nd

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