

# LEARNING TO RUN...

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## IS THAT RACKET CW?

As a novice Amateur operator first licensed in 1988 with the call VE3HCK, I confess I was always fascinated with the different types of chatter on the CW portion of the bands. Early on I primarily did CW ragchew at a modest pace (5 to 10 wpm). I did weekdays because on the weekends there was usually a "racket" going on. I had no clue what was going on.

Over time I learned that the weekend racket was a contest. I could not believe how fast these ops were. I hypothesized that no human was actually behind the sending or receiving – it must be a machine.

In a CW contest you will hear a calling station known primarily as the "run" station. He is sitting on a frequency calling for stations to respond. In most contests the responding stations known as "search and pounce" (S&P) or "hunt and peck" station simply responds with their call. The run station will respond with the call of the S&P station and the report. The S&P station will then respond with their report and the contact is complete signaled by the run station either sending "tu" for "to you", QSL, CFM or 73.

My first exposure to contesting was through Field Days. It was there I found out that real people copied fast CW. We had a mix of young and old as well as retired railroad ops.

Over time, I grew into an S&P CW op on Field Days. I would listen to a calling station repeatedly to get their call and report in the log. Once I was confident I had it in the log correctly, I would throw out our station call and I was shocked by how fast some ops would come back with our call and their report. It seemed they must be superhuman. Then I saw Tony, VE3RZ, work our Field Day station. He seemed greased lightning fast and used no external devices to decode. Clearly this was a mortal possibility. I wanted to see if I could be that op.

Tony, VE3RZ, introduced a number of us to contesting. Peter, VE3HG and I were not far apart and set up modest stations with a triband and wires. We ran several contests from both Peter and my QTH. Greg, VA3GGF, Dennis, VE3JAQ, Ian, VE3ESH and others participated. At that time, neither Peter nor I could run on CW. Dennis, VE3JAQ, could run and he was the youngest of us; he inspired me, he gave me hope.

*I dreamt about running but how could you get to be that fast?*

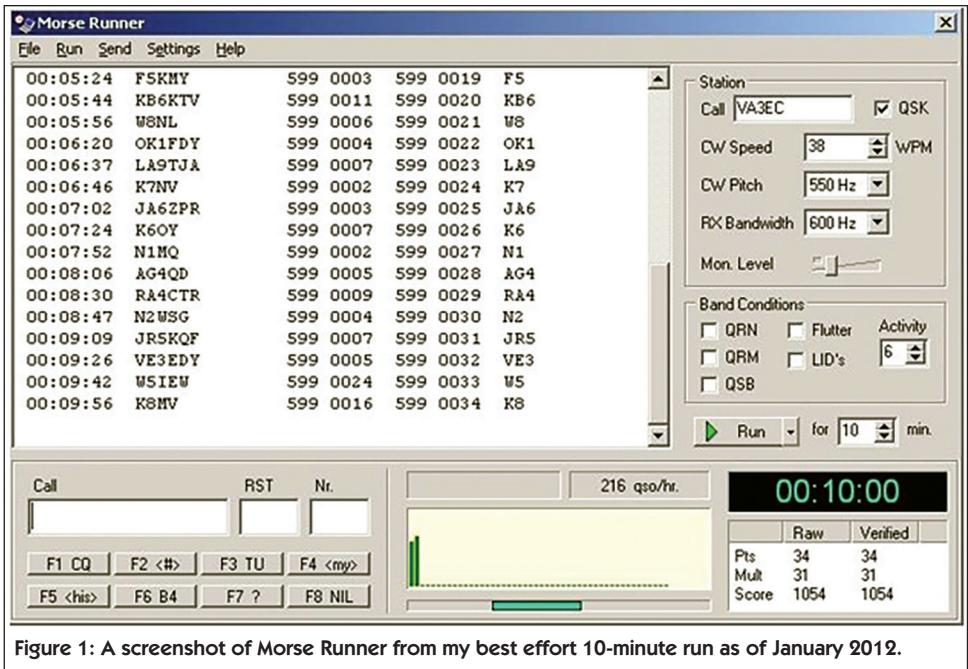


Figure 1: A screenshot of Morse Runner from my best effort 10-minute run as of January 2012.

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Peter, VE3HG and Greg, VA3GGF, attended the Dayton Hamvention in 2010 and took in a presentation from a young Amateur (Calvin Darula, K0DXC) on how to get your CW up to 50 words per minute. At the time I was the tender age of 55. The old adage of "you can't teach an old dog new tricks" haunted me. We have all heard this, however I believe the old dog chooses not to learn. I decided I needed to eat my own cooking.

Calvin's presentation stated a commitment of 10 minutes a day on a Morse trainer program was all that was required to achieve 50 wpm. He recommended two programs; one was Morse Runner, a public domain program. I downloaded it, opened my calendar and put in a 10-minute segment after dinner every day *forever*.

I started off as prescribed and did 10 minutes a day. I set the speed initially at 18 wpm and the activity level at 4 in June 2010. (You can start at whatever you like down to 10 wpm.) I ran for 10 minutes and crept along with lots of errors.

The next day I went at it again with fewer mistakes. After about a week, I ran the 10 minutes and then I raised the speed. By August 8, 2010 I was running at 28 wpm with a rate of 142 QSOs per hour. Wow, I picked up 10 wpm in two months! This was a milestone since most running stations in contests average around 28 wpm. However, most running stations can copy faster.

Figure 1 shows a screenshot from my best effort 10-minute run as of January 2012.

To be really committed to improving, I stopped using spots in contests. Spots are contact information about remote stations shared on the web. Most contest programs, such as N1MM, enable you to post a spot and use a posted spot on the band map just by clicking on it. Clicking on those postings sets your rig to the right frequency (assuming you have a rig interface) and puts the call in the log window. I chose not to use this feature to force myself to get the call from my head on my own.

There were a number of things I experienced as I continued to practice. First, practice became a habit. If I missed my practice on any given day, I felt something was missing. When practising, I can't do anything else. It became an escape. It's amazing how in the real world you can get stuck on a problem, stop, do 10 minutes of Morse Runner and go back and see a solution to that same problem that prior to practising seemed unsolvable.

As a result of practice, I got better working pileups – with as many as 10 deep on the simulator – and with my ability to pick out one call and work it. I found myself picking off the "Low and Slow" or the "High and Fast".

When in a real contest, this became very handy in search and pounce mode. I assumed the op might respond like I did to the simulator. I would drop 50 or 75 hertz below the pileup or go up the same and throttle the speed and often break the pileup.

My search and pounce performance improved in real contests with rates of over 100 QSOs (contacts) per hour for over an hour because I could get the run stations call the first time I heard it. This helped me to identify dupes (duplicate log entries; you are only permitted to work a station once per mode per band) quickly and for the big gun stations, who identify once after a number of QSOs, I could get their call in one shot.

Through practice, I developed techniques to manage zero beat situations when running. Zero beat is when two or more stations at exactly the same frequency appear on top of one another responding to your call as the run station.

I developed two responses in this situation: first, I would simply wait for one of the stations to send their call sign again; hopefully only one would send ahead of the other and I would grab at least two characters to send back to isolate that stations. Morse Runner requires at least two characters in sequence to be correct before a station will respond. It can be any two characters sequentially correct at the beginning, middle or end of the call.

If waiting resulted in stations coming back at identical times such that I could not separate them, then I would call again over top of them to keep my rate up on the simulator. This may sound brutal but there is no protocol to tell these stations (who likely can't hear each other) they are on top of one another. Fortunately, in real contests I have not had to resort to this technique and I only use it as a last resort if the stations simply remain in step and can't be isolated after several tries.

If you have searched and pounced and can't believe a loud running station can't hear you, it is likely you are zero-beat with others; try TX offset.

Dealing with the zero beat dilemma when running also helped me understand how some running stations react to this situation. With as little as 10 to 15 hertz difference, you can distinguish yourself from the pileup and be heard. Most people who work spots have synthesized rigs with excellent frequency accuracy. With a newly posted spot, several stations routinely land on the exact same frequency trying to work the running station. If you don't use Tx offset, you will not stand out from the crowd.

In contests, I almost always run low power and, on rare occasion, I use high power.

With a beam and half decent conditions, you can work the world. I was able to run on 15 metres in the ARRL International DX CW Contest in February 2012. I ran for about an hour at a rate over 200 per hour – a personal best!

Now in contests, I am amazed at the multipliers I get when running, especially in the North American contests. Multipliers are assigned for the first contact in a unique location – for example the first contact in a state in either a QSO Party contest or Field Day.

I believe more contestants search and pounce than run, likely because they are comfortable not running.

If the only station on in South Dakota does not feel like dealing with a huge pileup or can't run – or wishes only to search and pounce – you may never get him if you don't run. Even if you never run, I believe learning to run will definitely improve your S&P speeds.

The letters S and H are still a challenge, but practice makes perfect. I can get the call and an exchange very reliably, but don't ask me a question. I ain't that good... yet!

Ten minutes a day pass quickly. If you get past the first three weeks of daily practice, you will have established a solid habit. Use headphones or earbuds. Set the speed and activity so you are successful and don't beat yourself up. Raise the speed when you run error free for a few days and take baby steps.

I use the software on my work laptop and with earbuds while travelling. I have practised in restaurants during lunch, on airplanes and whenever I need to escape reality.

As of June 2015, five years after hearing how to get my speed up, I am now at 47 wpm practice speed with activity level 8 on Morse Runner. I still do at least 10 minutes a day.

I worked over 1,200 QSOs and a million points in the ARRL DX CW Contest. Last fall I worked CQWW CW Multi-2 (two continuous run stations) with Tony, VE3RZ and Darrel, AB2E, at VE3RZ's QTH. We did over 5,000 QSOs as a team. That was my second year at VE3RZ and I am confident he would not have invited me back if I had not carried my weight.

Many thanks to Alex Sovkopyas, VE3NEA, for developing Morse Runner and distributing it freely. It is an incredible contribution to the Amateur Radio community!

Special thanks to Calvin Darula, K0DXC, the young ham who presented at 2010 Hamvention. Here is a link to his presentation: [http://www.kkn.net/dayton2010/How\\_to\\_Become\\_a\\_50\\_wpm\\_CW\\_Wizard-K0DXC.pdf](http://www.kkn.net/dayton2010/How_to_Become_a_50_wpm_CW_Wizard-K0DXC.pdf)

In conclusion, I believe old dogs can learn new tricks (old hams too). You just have to see yourself accomplishing them and resolve to pay the price, which in this case is 10 minutes a day.

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