To 20 WPM and Higher - Here's some ideas
By Jim Reid KH7M

OK. Here you go. Some stuff I wrote up a couple of years ago.
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column, around Sept or Oct 1996, have forgotten tehe exact date,
Doesn't matter, as I gave them permission, but not copyright, hi !

You can become a high speed CW operator! How?
Practice. What kind of practice? Read on, if,
and only if, you really WANT to become a good
QRQ CW operator; that is, one who is comfortable
working DX at 30 to 40 wpm, and want to try to
compete in contests with the real ops who whistle
along at 40 to 50 wpm, and sometimes even faster.

Nose, KH6IJ, could accurately read calls during contests sent
above 75 wpm, so it is said. (By the way, his daughter, Frances has
just picked up his call via the new Vanity Call program.
She is living in Honolulu, as did Nose in his later years,
after having been a teacher here on Kauai for many years.)

Tree, N6TR, reports that to be a good SPRINT CW
contest operator, you had better be comfortable in a
CW rag-chew at 50 wpm! And a lot of ops score pretty
high in the CW Sprints.

So back to the topic: what is the best, most efficient
way to get up to those sorts of operating speeds? How
best to use the practice time?

First, lets assume you are at least at around 13 wpm
now, and licensed as either General or Advanced.
Both classes of license have access to the same CW
bands in all nine of our HF bands. The Extras have
some 25 kHz more spectrum on down to the lower end
of "only" four of these nine bands: 15, 20, 40, and 80;
pretty good incentive for upgrading, should DX'ing and
contesting be of motivating interest to you.

So, here is how, and how much to practice.

PRACTICE METHODS

1. Experience on the Air -- QSO's

Lots of CW QSO'ing outside of contest times works wonders.
Put the microphone away for several weeks, put SSB, SSTV,
digital mode operation, or whatever else out of your mind
for the same time period. This is to be a time of pure CW
skill improvement.

Contesters use computer logging programs which do most of the
transmitting for them, as well as the log tasks and duplicate
checking; some programs do even more! But to use them
efficiently to contest, you better be a pretty good keyboard
operator as well, and also know the use of the function keys,
without using crib notes or key overlay guides during the 'test.

In what follows, both CW and keyboard skills will be addressed.

2. QRQ Receiving Practice

While waiting to acquire and set up some of the practice programs,
do on-the-air receiving practice. Find QSO's in progress at a speed
you can comfortably pencil/pen copy. Now, put the pen/pencil down,
and just start listening. Yes, try to recognize the letters as they
come along, and group them into words on your minds "blackboard".
Not easy to do, well keep trying anyway. It is going to take awhile,
maybe even three or four weeks before you can follow these easy speed
QSO's in your head without writing everything down! Jot down the call,
the ops name, QTH and report, while just listening to the rest.

While doing this, if you can find a willing friend, there is a way
to augment this sort of practice completely away from CW. Have your
friend/spouse/relevant-other spell words from a story or newspaper
article to you! He is to read the story to you, but not the word
sounds, but spelling the words to you out-loud. This is what is going
on when one is "reading CW in his head"; words are being spelled to you
"out-loud", and you must form these spelled words into meaningful thoughts.
Start at, one letter/word space every second sounded by your helper.
Have a letter spoken every tick of the clock. This is a speed of 12 wpm
(at the Paris standard, of 100 letters/workspaces per minute equaling
20 wpm CW speed). Tune in WWV to get exact beats every second.

When you have no trouble forming the thoughts of the story/article in your
mind as the words are spelled to you at this rather slow pace, then have
your friend double his rhythm, that is, two letters/word spaces per second
spoken two per tick. This, of course, doubles your word
reading rate to 24 wpm. A big jump for CW, but not for learning to read
words spelled out to you in clear, plain English!! When you know the story

comfortably at this rate, your actual in the head CW reading speed should be close behind, and you may be well on your way to QRQ operation.

At QRQ, you will be receiving letters/word spaces at 3 per second at a 36 wpm CW rate.

Maybe your friend can get the rhythm going at 3 letters/spaces per clock tick, and you will know exactly what 36 wpm CW sounds like, this is a typical QRQ DX and contest operation speed. Of course, using a musician's metronome would allow you to exactly set the number of beats per minute; 20 wpm being 100 beats, 36, 180 per minute, 50 wpm, 250 letters/spaces, etc. My mechanical metronome has a highest beat rate of 208 per minute, or a bit over 41 wpm.

The best RUFZ scores are being posted up around the 450 plus letters/numbers/spaces per minute! Of course, call signs only are being sent, and these guys already know all the prefix CW sounds! You will learn more about the RUFZ call sign/typing practice program below.

Computer aided CW training programs are available. They will send code groups, random words, text and typical QSO's. They are all advertised, nearly monthly, in the ham magazines. Morse Academy is good, as is Code Master V. All of the included CW tests which come with MA can be sent by the computer at very high speeds, not just the speeds intended. Of course, they don't last long at high speed, but are very helpful for in-the-head CW reading practice. Using Code Master V, you can input via the keyboard, or text (.txt) file input, kilobytes of text for very long high speed CW listening practice runs. I have taken lots of long text files directly from various Internet sites, and copied it directly into a CM V text file for this sort of high speed practice. I edit out a lot of punctuation marks from the text; I don't want to learn or know the code for quotation signs, semicolons, etc.!

An excellent internet URL to get all these programs, either directly or info about them is:
http://www.dutch.nl/wilbwk/

once there, click on CW software, and CW links.
RUFZ, PED, NuMorse are all available from there along with CM V.

Morse Academy is free from: http://www.speroni.com/AH0A.html

3. Using the Computer for Practice

The apparent purpose by the authors of MA and CM V is to teach the code, from A on up to text speed, assuming you want to use the keyboard to copy what is rcv'd. So if you really want to write down what is being rcv'd, then by all means use these programs to build up your keyboard skills, ear to key stroke response, to copying behind. These programs can do that for you, just fine! But I will show you how to use them to get up to 50 wpm, copying in your head.

Now that you have CM V or MA, or another, here is how to use it
to become QRQ qualified.

We are still talking about methods to read the code mentally, not
writing or typing anything down as you receive it. That comes later.

With lots of CW text available in the computer program, you are ready to
begin. Once you have determined your present 100% comfortable hand copying
speed using pencil or pen, set your computer program to send clear text
at about 5 wpm faster than your hand copying speed. Turn on the sending of the
text at this speed, sit back, and just listen for 30 minutes, twice per
day. First you will only be catching a letter every now and then; when you
do, you will, without effort, congratulate yourself. While this happens,
you will miss the next several letters! But keep at it. Soon you will get
all the letters of a single word, again congratulations as you say the word
to yourself, and again a lot of letters/words go on by, unrecognized!
But you are making progress. In a couple of weeks, or so, especially if
you were able to get a friend to spell the words of stories/text to you,
you will be understanding the text being sent. As soon as you do, up the
speed another 5 wpm. Keep it up, and in 3 or 4 months, you may be up to
40 or more wpm! Try it, it works, and you will be amazed.

At some point, you must add in the typing and contest program use practice.
The RUFZ program already mentioned will send the call signs of the world to
you at ever increasing speed; you must enter them correctly via the keyboard
to score. PED is a CT simulating pile-up training program. Both TR and NA
logging programs have simulator programs built in for training in the use
of the program. As said, PED does the same for CT. These programs you
may download at no cost from other sites listed here at the KA9FOX web page
for example, from the VE7TCP web site; PED411.zip is available at
oak.oakland.edu in the SimTel\msdos\hamradio file.

All four of these programs will improve your contest typing skills.

4. CW Sending Practice Helps Loads

Don't practice sending using the keyboard for these practice ideas!

Use a bug, or preferably an electronic iambic keyer and paddle set up.
The electronic keyer sends "perfect" CW characters, spacing and rhythm, a big
help in your mental training activity.

Adjust the paddle to very light action. You don't want to be slapping
the key all about the table top! Good paddle keys are heavy for this
reason; put it on a mouse pad also to help keep it put.

Now begin practice to send FAST. This sending practice also works
wonders on the way to becoming a QRQ operator. Why? Because, now
you must form words to express ideas in your mind, while simultaneously
sending the thoughts out as CW. This inverts what has been going on
in your mental processes to receive CW. As you increase your speed
ability, you will not even be thinking "letter to CW" translation,
but will be mentally and automatically sending CW as if it were
another language with which you have become quite comfortable.
Your mind will be training on CW in such a way that when it
can send fast, it will use the same subconscious patterns to
also receive fast. KE7V has told me he raised his QRQ speed
to 55+ wpm (275 letters/word spaces per minute) using this method
specifically!

There is more to encourage you to practice. Once you are going
QRQ mentally, and sending QRQ, and typing accurately to a contest
logging program, you may want to also practice clear text copying
to the keyboard, and copying behind many, many words. Certainly, both
MA and CM V are designed to teach just that skill.   And then
your QRQ mental rate will increase even more, and you can then
be a competent, competitive CW Sprint Contest op!! All by
accomplishing Tree's 50+ wpm ragchew rate.

Have fun, keep the practice up daily, hold daily CW QSO's;
you will get there. I am still working on it, but I
am probably older than 90% or more of you reading this!

73 and Good Practice,
Jim, **KH7M**
On the Garden Island of Kauai
Hawaiian Islands