Some Thoughts On Contesting Speed

Version 1.0 (Draft)

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Code speed used in a contest varies as conditions change. In general, being able to copy code faster results in more QSOs. Up to a point. I sometimes think the high speed guys, >40 wpm, might be going too fast. There clearly is some sort of optimum speed which changes during the contest. I generally run between 28 and 35 wpm or so. Conditions affecting the optimum code speed include:

- Time in the contest: In the beginning all the guns are on and running as fast as they can copy. The first hour of the contest is often the best rate (if band conditions are open). Later on in the contest, when the casual contesters are coming on, it may pay to slow down so as not to scare the slower speed operators off.
- Pileup conditions: If you are a multiplier and contending with an unruly pileup, speeding up can tend to weed out some of the slower operators and thin the pileup to a manageable state. As the pileup thins, slow down again.
- Your own copying ability: It's ok to send a little faster than what you can comfortably copy. When you get into the >30 wpm speeds, a lot of stations will be sending slower than that, making them easy to copy. Sometimes speed demons come along and you will have to ask them to repeat. Working on getting your code speed up > 30 wpm should be a goal (that you can accomplish with the contest simulators below).

You can change the code speed in N1MM by clicking on the code speed up and down arrows (under the running box) or by any of these keys:

- **PgUp/PgDn**: Adjusts the active radio's speed up or down by the Primary CW Speed Step (see *Config -> Configurer -> Other* tab). The default is 2 wpm.
- **Shift + PgUp/PgDn**: Adjusts the active radio's speed up or down by the Secondary CW Speed Step (default is 4 wpm).
- **Alt + PgUp/PgDn**: Adjusts the inactive radio's speed (SO2V/SO2R) up or down by the Secondary CW Speed Step (default is 4 wpm).

Getting Better at It

A goal should be to get to being able to run at 32 – 34 wpm, and like when you were first learned the code, it takes practice. Fortunately there are two good simulator/trainers that can help you get better.

To run fast it really helps to be a proficient touch typist. To speed up your exchange, practice (using Morse Runner, below) hitting the enter key to start sending the call BEFORE you have finished entering the call. You can usually type the last character (or a ? if you are not sure of the call) while N1MM is starting to send the call. If you listen carefully when you are S&Ping you will hear that many people don't do this. There is a definite lag between when you are done sending your call and when the other station comes back to you. Saving a second on 600 contacts while you are running is the same as adding 10 minutes to the contest.

Being familiar with the editing keys helps too:

- CTRL-W or ALT-W: Wipe or unwipe entry fields.
- SPACE or TAB: Move between logging fields.
- CTRL-Q: Quick edit the previous QSO.
- CTRL-D: Delete the previous QSO.
- Enter: Enter Sends Mode (ESM)

ESM – Enter Sends Message Mode

A great feature of N1MM that CT didn't have is the Enter Sends Message mode. When this is set up and activated (see *Config, check Enter Sends Message (ESM mode)*) typing enter will automatically select the correct function key to send as you progress through the QSO. The function key to be sent on the next Enter is highlighted in the Data Entry Window.

The *Configurer Function Keys* screen allows you to configure what key gets sent in the ESM sequence. You can map those however you wish, but if you have multiple operators it is best to settle on one scheme.
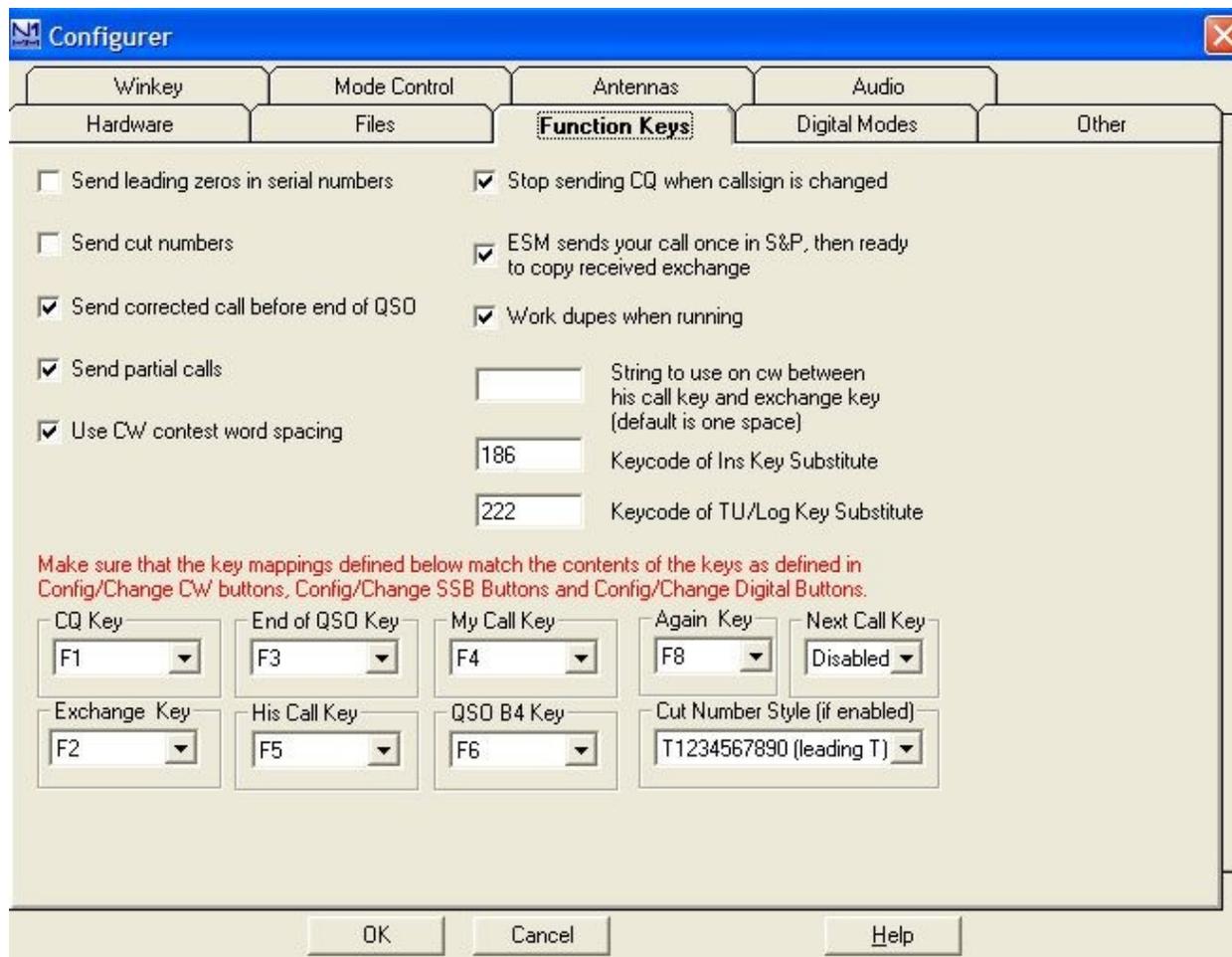

Figure 1. N1MM function key definitions for enter sends message mode.

Enter Sends Message Enter Key Actions					
Callsign Field	**Exchange Field**	**In Run, Enter Sends**		**In S&P, Enter Sends**	
Empty	Empty	CQ (F1)	Running. Enter sends F1. CQ repeat sends F1.	My Call (F4)	You are S&P and you run across a call to work before entering it in the Callsign Field. Enter sends F4.
New Call (1st time)	Empty or invalid	His Call (F5) + Exch (F2)	Somebody comes back. Enter sends his call and the exchange.	My Call (F4)	You are S&P and you run across a call to work that you have entered in the Callsign Field. Enter sends F4.
New Call (repeat)[1]	Empty or invalid	Again? (F8)	A call in the Callsign Field but no or invalid exchange. Enter sends F8.	My Call (F4)	You are S&P and you run across a call to work that you have entered in the Callsign Field. Enter sends F4 if *Config ESM sends call once* is not checked.
New Call (before sending exchange	Valid	His Call (F5) + Exch (F2)	You have entered a call and tapped space or tab to go to the exchange field. Enter sends his call and the exchange.	Exchange (F2) + Log It	You have entered a call and tapped space or tab to go to the exchange field. The station comes back to you, you type a valid exchange. Enter sends the exchange and logs it.
New Call (after sending exchange)	Valid	End QSO (F3) + Log It	You have entered a valid exchange. Enter sends the TU and logs it.	Log It	You have entered a valid exchange and sent your exchange. Enter logs it.
Duplicate Call	Empty or invalid	QSO B4 (F6)	If *Config -> Configurer -> Function Keys Work Dupes when running* is not checked enter sends the QSO B4 message.	Do nothing.	N1MM won't let you try to work a dupe if the exchange is blank or invalid.
Duplicate Call	Valid	His call (F5) + Exch (F2)	N1MM lets you work a	Exchange (F2) +	N1MM lets you work a dupe if

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[1] When *Config ESM sends call once* is checked, instead of My Call (F4) it sends AGN? (F8). This is the "Big Gun" mode where it assumes that station you are calling will come back to you after you have sent your call once. It sends AGN? If the exchange field is empty or invalid.

				Log It	there is a valid exchange.
(before sending exchange)			dupe if there is a valid exchange.		
Duplicate Call (after sending exchange)	Valid	End QSO (F3) + Log It.	If you sent an exchange to a dupe, enter sends TU and logs it.	Log It	If you sent an exchange to a dupe, enter logs it.
Duplicate Call	Empty or invalid	His call (F5) + Exch (F2)	If *Config -> Configurer -> Function Keys Work Dupes when running* is checked, the dupe is worked normally.	Do nothing	N1MM won't let you try to work a dupe if the exchange is blank or invalid.
Duplicate Call repeat	Empty or invalid	Again? (F8)	If *Config -> Configurer -> Function Keys Work Dupes when running* is checked and the exchange is empty or invalid, enter sends AGN?.	Do nothing	N1MM won't let you try to work a dupe if the exchange is blank or invalid.
Duplicate Call before sending Exch	Valid	His call (F5) + Exch (F2)	If *Config -> Configurer -> Function Keys Work Dupes when running* is checked, the dupe is worked normally.	Exchange (F2) + Log It	If *Config -> Configurer -> Function Keys Work Dupes when running* is checked, the dupe is worked normally.
Duplicate Call after sending Exch	Valid	End QSO (F3) + Log It.	If *Config -> Configurer -> Function Keys Work Dupes when running* is checked, the dupe is worked normally.	Log It	If *Config -> Configurer -> Function Keys Work Dupes when running* is checked, the dupe is worked normally.

Code Practice Programs

There are two code practice programs that I have been using to increase code speed.

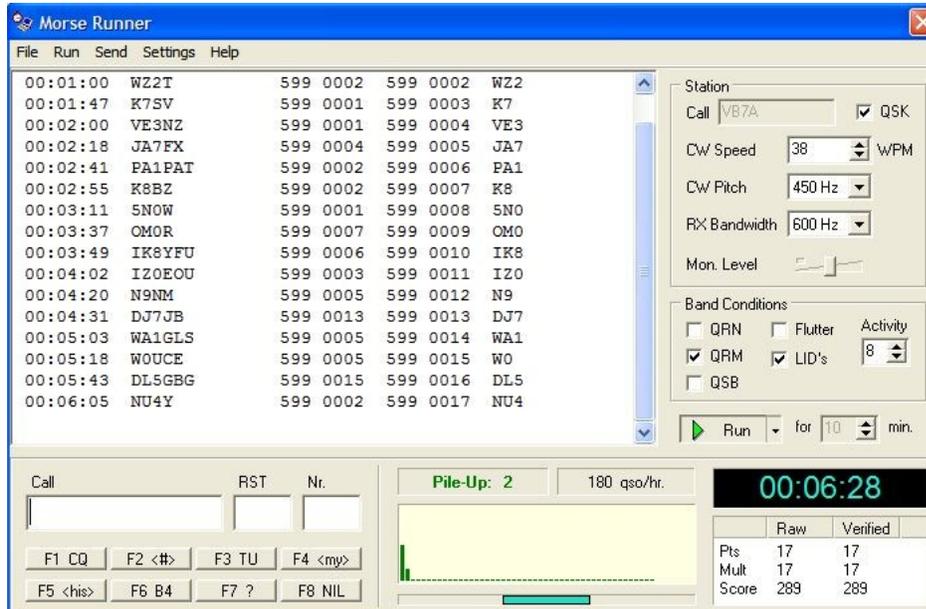## Morse Runner

http://www.dxatlas.com/morserunner/

Figure 2. Morse Runner.

Morse runner is a great contest pileup trainer. It simulates a WPX contest giving you call sign and number copying practice. You can set the number of stations in the pileup and band conditions. Figure 2 shows how I often run it showing a nice, clean 6 min run for 180/hour rate. You can set the run duration.

In addition to increasing code speed and copying calls in a pile up, the thing to practice with this simulator is learning how to hit enter before you type in the last letter of the call. Start off slowly to get your muscle memory trained and as you speed up it will just become a natural way to enter the calls.

RUFZ

http://www.rufzxp.net/

RufzXP is another great trainer. It's completely different than Morse Runner in that it presents you with one call sign at a time. Each time you copy the call correctly, the speed increases 1 wpm. If you don't copy it correctly, the speed drops 1 wpm. There is a website that you can log onto to record your score.

The great value of this training is that it not only increases your copying speed, it helps train you to type the calls after they have gone by. At >35 wpm I find the call is finished before I can enter it and being able to pull the pattern out of your brain to your fingers is pretty valuable. A good thing to try is to wait until the call is completed and then type it in.

One caveat is, don't look at the screen when you are entering the call. After you have typed the call and hit enter, the sent call and your version of it is shown on the screen. Errors are red! I find if I am looking at that and evaluating how I just did, I blow the next call. So I keep my head down for the next call and then look up to see what I did on the previous call before entering the present call.
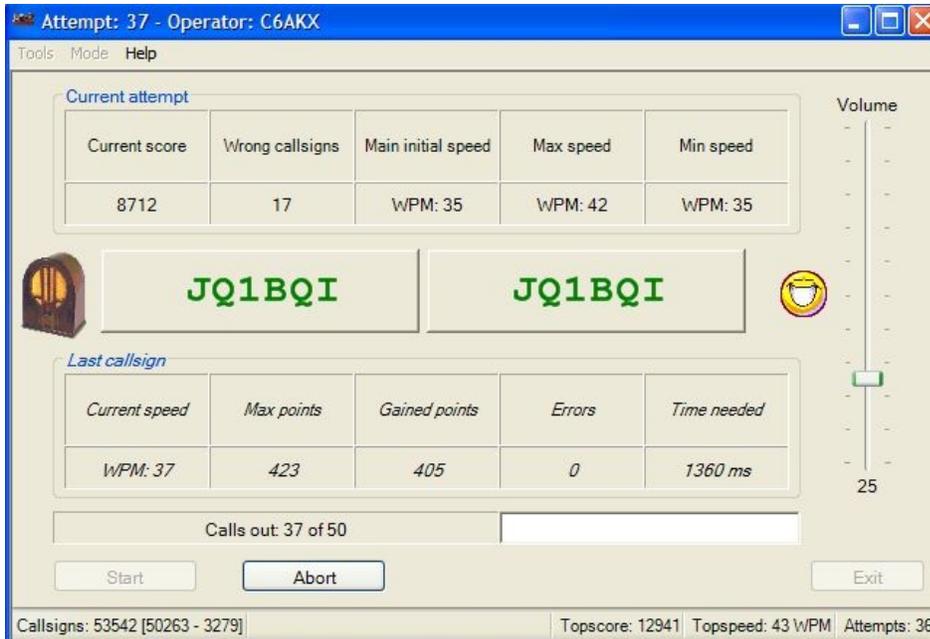

Figure 3. RUFZ.

Pileup Runner

http://www.dxatlas.com/PileupRunner/

Pileup runner is another pileup program that simulates a Skimmer display. It does offer some pileups and a display so people can visually decode signals. Although it does have some function keys and enter send message mode, it seems to require you to use the mouse to log the contact which is entirely the wrong muscle memory to train. I don't see it as being a valuable trainer.