Morse Runner tips (Jim Carson WT8P)

Morse Runner is used to practice contest exchanges (call sign and serial number), with optional noise conditions (fading, weather, pileups, user mistakes). It will vary the speed and tone within a specified range.

General advice to get started on single call mode:

- Accuracy is more important than speed.
- Wait until the sending station is done transmitting before you respond. If you respond over him, immediately hit the escape key to stop.
- Scoring increases as you go along (see above).

If you receive the call correctly, type in the call sign and hit enter. It will fill in the QSO sequence automatically. Listen for an "R," followed by "599" and, finally, the sequence number. Type that sequence number in, hit enter, and the new one will come almost immediately.

Sometimes, it will ask for a repeat of your exchange (599 #), confirm twice (e.g., 599 # 599 #), or use a numeric abbreviation (see above) just like real-life.

If you only got part of the call sign, you can wait until it's resent, respond with a ? (F7, below), or, if you're in a pile-up, do a partial and hit F5. Most time, there will be three attempts before it gives up. If you respond with an incorrect call sign, you will either hear nothing – because the sending station does not recognize you're talking to *it* – or it will do a full sequence with the "de". This will consume valuable time.

If the remote station abandons, simply hit Control-W (wipe) and wait for the next one to start. Or send CQ (F1) again.

To start a contest, set the duration of the exercise in the Run for NN Minutes box (*only for Pile-Up and Single Calls modes*), and click on the desired mode in the Run button's menu. In the Pile-Up and Competition mode, hit F1 or Enter to send a CQ.

KEY ASSIGNMENTS

• F1-F8 - sends one of the pre-defined messages:

| F1 C | Q F | 2 # | F3 TU | F4 <my></my> | F5 <his></his> | F6 B4 | F7 ? | F8 NIL |
|-------------|-----|-----|--------------|--------------|-----------------------|--------------|-------------|---------------|
|-------------|-----|-----|--------------|--------------|-----------------------|--------------|-------------|---------------|

- "\" equivalent to F1.
- Esc stop sending. This is very important if he's sending stuff back.
- Alt-W, Ctrl-W, F11 wipe (erase) the input fields.
- Alt-Enter, Shift-Enter, Ctrl-Enter save QSO.
- <Space> auto-complete input, jump between the input fields.
- <Tab>, Shift-<Tab> move to the next/previous field.
- ";", <Ins> equivalent to F5 + F2.
- "+", ".", ",", "[" equivalent to F3 + Save.
- Enter sends various messages, depending on the state of the QSO;
- Up/Down arrows RIT;
- Ctrl-Up/Ctrl-Down arrows bandwidth;
- PgUp/PgDn, Ctrl-F10/Ctrl-F9, Alt-F10/Alt-F9 keying speed, in 5 WPM increments.

WPX COMPETITION RULES

The exchange consists of the RST and the serial number of the QSO.

The score is a product of points (# of QSO) and multiplier (# of different prefixes).

The bottom right panel shows your current score, both Raw (calculated from your log) and Verified (calculated after comparing your log to other stations' logs). The histogram shows your raw QSO rate in 5-minute blocks.

RESPONSES YOU MAY RECEIVE

Note that <his>, <my> and <#> are determined at runtime.

| T or $0 \rightarrow 0$ | N → 9 | 5NN → 599 |
|-------------------------------|-------------------------------------|----------------------|
| <#> | CQ CQ TEST <my> <my> TEST</my></my> | QRL? QRL? |
| <his></his> | DE <my></my> | QSO B4 |
| <his> QSY QSY</his> | DE <my> <#></my> | R <#> |
| <my></my> | DE <my> <my></my></my> | R <#> <#> |
| <my> <my> <#></my></my> | DE <my> <my> <#></my></my> | TU |
| ? | NIL | |
| AGN | NR? | |
| CQ <my> TEST</my> | QRL? | |
| | | |

Notes from the Morse Runner site:

DOWNLOAD: http://www.dxatlas.com/MorseRunner/

CONFIGURATION

Station

- Call enter your contest callsign here. (Later referenced as <my>)
- **QSK** simulates the semi-duplex operation of the radio. Enable it if your physical radio supports QSK. If it doesn't, enable QSK anyway to see what you are missing.
- **CW Speed** select the CW speed, in WPM (PARIS system) that matches your skills. The calling stations will call you at about the same speed.
- **CW Pitch** pitch in Hz.
- RX Bandwidth the receiver bandwidth, in Hz.
- **Audio Recording Enabled** when checked, MR saves the audio in the MorseRunner.wav file. The file will always be overwritten.

Band Conditions

I tried to make the sound as realistic as possible, and included a few effects based on the mathematical model of the ionospheric propagation. Also, some of the calling stations exhibit less than perfect operating skills, again to make the simulation more realistic. These effects can be turned on and off using the checkboxes described below.

- **QRM** interference from other running stations occurs from time to time.
- QRN electrostatic interference.
- **QSB** signal strength varies with time (Rayleigh fading channel).
- Flutter some stations have "auroral" sound.
- **LIDS** some stations call you when you are working another station, make mistakes when they send code, copy your messages incorrectly, and send RST other than 599.
- Activity band activity, determines how many stations on average reply to your CQ.

The default duration of a competition session is 60 minutes. You can set it to a smaller value by changing the CompetitionDuration entry in the MorseRunner.ini file

STARTING A CONTEST

The contest can be started in one of four modes.

- **Pile-Up mode:** a random number of stations calls you after you send a CQ. Good for improving copying skills.
- **Single Calls mode:** a single station calls you as soon as you finish the previous QSO. Good for improving typing skills.

- **WPX Competition mode:** similar to the Pile-Up mode, but band conditions and contest duration are fixed and cannot be changed. The keying speed and band activity are still under your control;
- HST Competition mode: all settings conform to the IARU High Speed Telegraphy competition rules.