



GET

ON THE AIR

MORSE PRACTICE PAGE USER GUIDE

VERSION 2.0

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REVISION HIGHLIGHTS:

Version 2.0

- The User Interface has been updated to group related settings together
- The User Interface now fits phones and tablet better
- Speed Racing has been added
- A dark mode has been added

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GENERAL

Next to the LICW logo you will find two boxes.

Dark Mode – Turns Dark Mode on and off.

Click here for help - Leads to the Help and Information section at the bottom of the MPP. Here you will find keyboard shortcuts, credits, and links to this User Guide, a way to email questions to the team, and other information.

MAIN MENU

Setting the speed

The first settings presented on the page are for the CW speed. By default, the **Character Speed** and the **Effective Speed** are locked in step but if you want to introduce some Farnsworth spacing, simply click on the padlock next to Effective Speed to unlock it. Now you can modify **Character Speed** and **Effective Speed** independently.

Character Speed (WPM) 	23 	Effective Speed (FWPM) 	23 		10 
Character Speed (WPM) 	23 	Effective Speed (FWPM) 	18 		10 

You can set the sidetone volume here but, by default this is set to max (10) and you can simply use your computer volume control to adjust volume. You may wish to modify this in conjunction with the 'voice' volume to get the volume levels of CW and voice correct (see below).

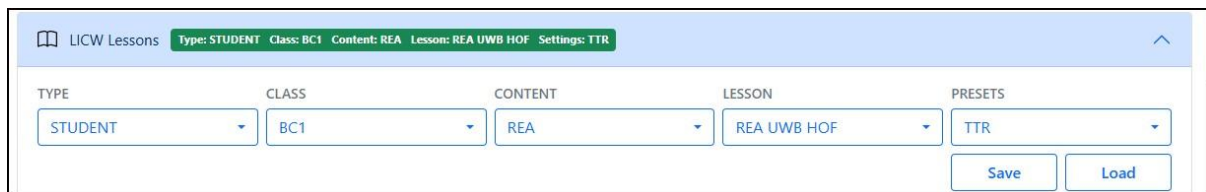
LICW Lessons Group

Selecting preloaded training material

Selecting the "LICW Lessons" group gives you access to the various options for selecting the exercise to be used. The MPP comes with a range of training material preloaded. To view and select a file select either **STUDENT** or **INSTRUCTOR** under 'TYPE' then one of the 'CLASS' levels **BC1**, **BC2**, **BC3**, **INT1**, **INT2**, **INT3**, **ADV1**, **ADV2**, **ADV3**, **TTR+**, or **OVERLEARN**. Next, from the **CONTENT** dropdown list select the lesson you wish to study, for example, **BC1** will list the classes by the characters introduced that week. Next select the specific text file you wish to practice from the ones listed under **LESSON**.

The final step is to select which type of exercise you want to use while playing these characters. You can select any of the preprogrammed exercise set ups from the **PRESET** list. Please refer to the **CURRICULUM GUIDE** that can be found on the LICW webpage under Academic Downloads for information on all the different exercises.

In the example below we have chosen STUDENT, BC1, REA, REA UMB HOF to practice nine characters used in the REA BC1 class using the TTR Preset.



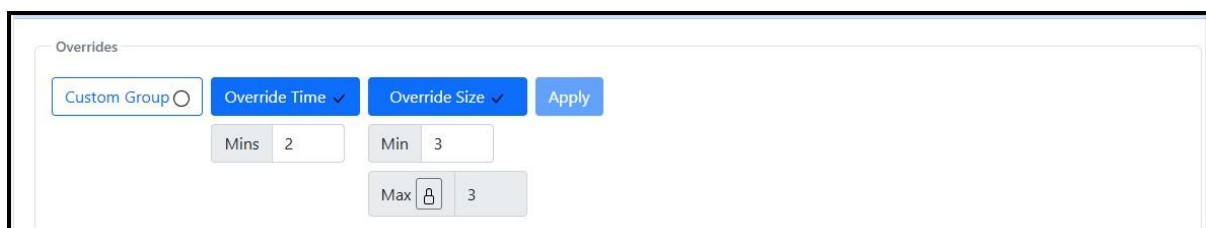
SAVE and **LOAD** – You can create your own Preset if we wish. First set up the MPP the way you want it and play a file to make sure all the settings are correct. Then go to **SAVE** (located under the Presets dropdown) and click it. This will save a file called “LICWSettings.json” to your desktop.

When you want to play another file with these same settings, you can do it by using the **LOAD** tab. First select the content file you want to play and then click the **LOAD** tab.

Important: Please keep in mind that the saved .json file does NOT save the content file with the character sets that were going to be played when you saved it; only the MPP settings!

Lessons Options Group

Overrides



The **Custom Group** is where you can enter specific characters or character groups that you are struggling with to focus your practice. Selecting this button opens a box under the Custom Group button where you can enter as many characters as needed. Then click on **APPLY** button. You will see these turned into your source file in the input pane and also in the cards at the bottom of the screen.

The default duration for exercises is 2 minutes. Selecting **Override Time** enables the user to set the training length to a duration that suits their needs. Press **Apply** to apply this new duration to the currently selected class file

By default, each groups size is 3 characters, but you can select **Override Size** here and set your own minimum and maximum grouping. **Min** and **Max** size are initially locked together

but clicking on the padlock allows them to be modified independently. Select **Apply** to apply the changes to the text to be sent (this does not affect the source data).

Class files will generally load with these settings optimised but you may need to select a **PRESET** depending on the exercise you wish to use. You will need to either select a **PRESET** or play with these settings if you load your own text file.

Playback



The Playback settings panel contains five buttons: 'Randomize' (checked), 'Auto Close', 'Sticky Sets', 'Keep Lines', and 'Shuffle Intra-group'.

Randomise is normally enabled so that the MPP presents strings of characters to you in random groups. Uncheck this if you want the same groups played each time.

Auto Close simply collapses the LICW Lesson pane after a change is made. The user then has to select the pane header to open it again.

Most prosigns are sent as a single character e.g. <BT> however there are a few that are not, for example BK and KN. If you find the training tool is splitting these up, then select **Sticky Sets** and add the letter pairs to the list. The default set is BK

Keep Lines keeps each line of text together. This ensures that the tool sends a whole line rather than splitting the line up into individual words.

Shuffle Intra-group keeps all the words in a set together while shuffling the sets each time **Shuffle** is clicked

Timing

Speed Intervals



The Timing settings panel includes a 'Speed Intervals' button (checked), a 'Timings' section with a clock icon and the values '30, 30, 30, 30', a 'WPM' section with the value '12', and a 'FWPM' section with the values '8, 10, 11, 12'. Below these are 'Repeats' (0) and 'Repeat Spacing' (0) fields.

Activating Speed Intervals will automatically turn off Speed Racing and vice verses.

Speed Intervals – This control is used when you need to vary either the wpm or fwpm speed during the exercise. It is normally turned off except for the Variable Speed Training and the Variable Effective Speed Training.

Timings – this determines the length of time between speed changes. A comma is inserted between the time periods.

WPM – this set of speeds determines the character speed associated with each time period. This can be a set of speeds separated by a comma or a single speed for used for all the time periods.

FWPM - this set of speeds determines the effective speed associated with each time period. This can be a set of speeds separated by a comma or a single speed for used for all the time periods.

Either the WPM or the FWPM must be set to a single value while the other one can be a set of speeds.

Note: There are presets for the VST and VET with appropriate settings for each class level. There are also what are called Reverse VST and Reverse VET which change the speed setting from high to low or low to high depending on the exercise. Try them both ways!

Repeats

Repeats 	0	Repeat Spacing 	0
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Repeats – This determines how many times a card will be replayed. If this is set to “0”, then you will hear it played once. Setting it to “1” will play it twice, “2” will play it three times, etc.

Repeat Spacing - This determines the amount of additional time between each repeat in increments of word spacing. The default of “0” is normal word spacing. Setting this to “1” would result in the space between repeats being twice as long as normal.

Speed Racing

 Speed Racer ☒	Sequence: 30 → 27 → 24 → 20 → speak → 30 wpm	Advanced
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Turning on Speed Racing shows the present speed setting and whether VOICE is active. Activating Speed Racing will automatically turn off Speed Intervals and vice verses. Clicking “Advance” opens the Speed Racing settings as shown below.

Multipliers – This is where the speed ratios are entered. These can be any number but must be separated by commas. They can also be both ascending or descending. These are a percentage of the WPM speed entered at the top of the MPP page and that the FWPM must be locked to the WPM speed

Replay at First Multiplier – If this is turned on, the code will be played again at the first speed after the sequence of ratios are played.

Speak Before Replay – If this is turned on, VOICE will be activated and the code group will be spoken after the sequence is played and then the code will be played again at the base speed. The Voice Options group will be opened and all the setting are available.

Reset to defaults – Clicking this will enter the default ratios into the Multipliers box

Overlearn – Clicking this will enter the default Overlearn ratios into the Multipliers box.

Trail

Selecting **Trail** results in the card being revealed after the ‘card’ has been sent.

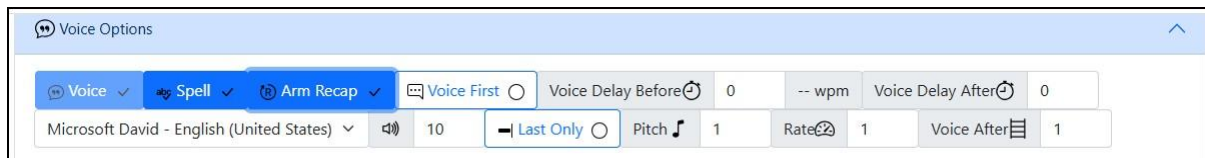
Selecting Trail unlocks the Pre Delay, Post Delay and Final timers.

Pre Delay – this introduces a longer pause between hearing the character sounds and having the word on the card revealed, useful if you want some thinking time.

Post Delay – this introduces a longer pause after the characters on the card have been revealed before playing the next character sound.

Final – this introduces a longer pause after the characters of the last card are revealed before resetting the play head back to the start and hiding the contents of the cards. This should normally be kept set to 1.

Voice Options Group



Voice – When turned on this tab controls the settings for the speaking of the word(s) or characters after you have heard them sent in CW. This allows the user to close their eyes or look away from the computer and still get a clear indication of what has just been sent. Note that introducing the voice annunciation of the words after they are sent will naturally introduce a pause between words.

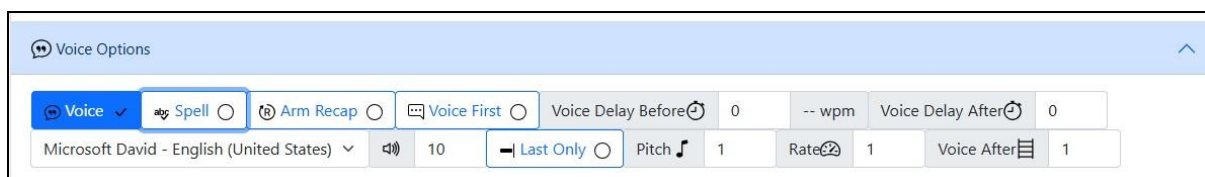
Note also that the voice will annunciate abbreviations and prosigns as the full word or meaning so ES = “and”, <AR> = “End of message”.

Voice Not Activated First notice that Voice is dimmed by default. This is because Arm Recap is checked and is the default condition. In this configuration, character sets will NOT be spoken after each card nor will they be spoken after all the cards have been played unless Voice Recap (in the Play Controls area) is clicked. The purpose of this configuration is to allow the playing of ALL the cards after the sequence has been completed. You can pause the file being played at any point and then click Voice Recap to have it speak the cards up to that point.



Voice Activated

Now note that Arm Recap is turned off and Voice is turned on (dark Blue).



Spell – this determines whether the characters within a card are spoken character by character or as a word/phrase. This should be turned on when practising characters and turned off when practising words/phrases.

Voice First – this makes the voice speaks the characters before the code is played.

Delay Before – this introduces a pause between hearing the code played and the voice spoken. There are up and down arrows to change the time in quarter second intervals. Note that if you have **Trail** selected the text on the card will be revealed at the same time the word is enunciated.

wpm – This indicates the effective wpm for the selected Voice Delay Before when using TTR exercise. A Voice Delay Before of 0.3 will give you an effective speed of 12 wpm.

Delay After – adds a delay after the enunciation before sending the code in CW. Again, there are up and down arrows to change this time.

Choose speaker – this drop down provides different voice options for you if your computer and software support them. Many times, there is only the default voice available. You can download additional voices depending on your operating system and browser.

Volume – the voice annunciation has a separate volume control to the CW Side tone to allow an even mix to be achieved.

Last Only – this will play the full CW for the card, but the voice annunciation will only be the final (full) word.

Pitch – Alters the pitch of the voice annunciations.

Rate – Alters the speed of the voice annunciations.

Voice After – This is used to speak the cards after “x” number of cards have been played.

Important: Remember that **WORD SPACE** and **CARD WAIT** can influence the timing of Voice and should be set to their default values (1 and 0) for best results.

Tone Options Group



DIT and **DAH** are simply the sidetone frequency you hear. The two are locked together but, if you find you are having issues hearing the difference between a DIT and a DAH one approach is to change the frequency of the two symbols slightly to enhance the difference. If you need to do this, click on the padlock symbol after DAH and this will allow you to alter the sidetone frequency of the DITs and DAHs independently.

ZERO BEAT sends a steady tone at the selected frequency for setting up the haptic device for hearing impaired students.

Input Options Group

These settings give you options around what will be played. The default is determined by the exercise you select.

View text - This determines whether the text used in the exercise is shown or hidden. The default is hidden. When activated, the screen will show the text as shown below.

Clear – Deletes all text from the input area.

Insert File – This is where you can insert your own text. You will need to make a text file (.txt) with no formatting. When you are ready to use it, click on Insert File and go to where you saved it. Click on your file and it will be copied into the input area. You can also just copy it and paste it into this area.

Flagged Cards Pane

While practising, if the content of a particular card proves tricky and you wish to do some further study with it, simply left click (or double click) on the card in question and the content of the card will be added in the Flagged cards text window. You can also simply type

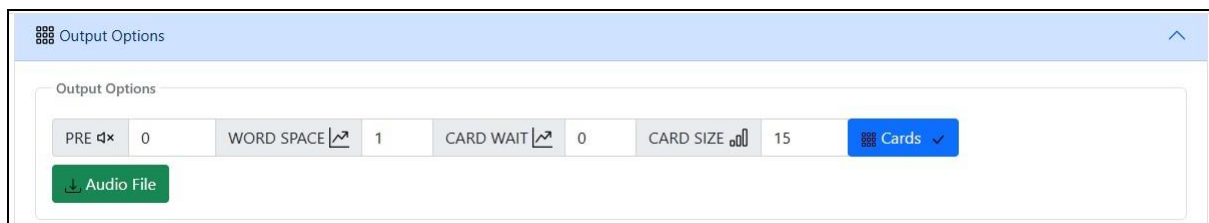
directly into the text window if you spot a character or prosign you would like to focus on more.

Load As Text - When you are ready to work on the characters listed in the Flagged cards window simply press Load As Text and they will appear in the Practice text pane and the characters/words will appear on cards at the bottom of the screen ready to play:

Clear – Deletes all text from the Flagged cards area.

Output Options Group

These settings give you options around how the exercise will be played



PRE – This delays the start of the first character after you click **PLAY**. It can be used to give you time to get ready for the first character. If you are using a Bluetooth headset and find you are missing the first symbol of the first character on a card, try using this control. The silent space prior to sending the first character helps with Bluetooth headsets which do not allow the first element to be heard. This time is in seconds.

WORD SPACE – Adds 'Wordsworth' spacing (extra space but just between words). There are the equivalent of 7 dits between words. That means that a 1 is normal spacing between words, 2 is twice the normal spacing (14 dits), 3 is three times the normal spacing (21 dits), etc.

Note that if you have **Voice** turned on it is best to have this set to 1 as it will interact with the **Voice** settings.

CARD WAIT – Once the characters on a card have been played the trainer jumps to the next card. The **CARD WAIT** setting will add a delay between the card being just played and the next one.

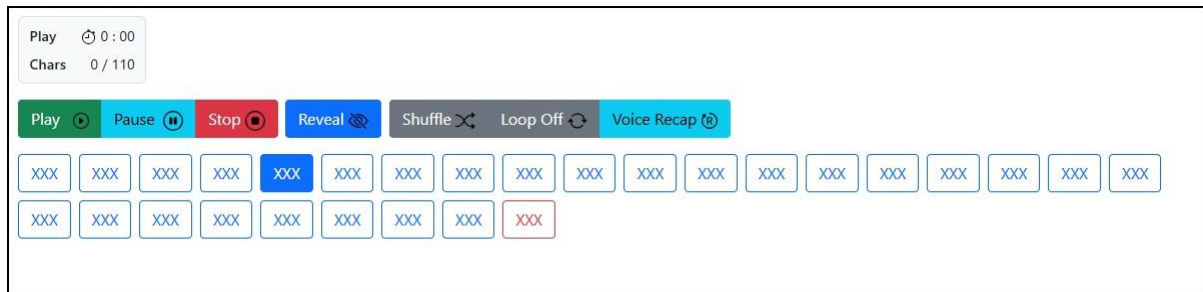
Note that if you have **Voice** turned on it is best to have this set to 0 as it will interact with the **Voice** settings.

CARD SIZE – Each set of characters that the tool sends are grouped together on a 'card' at the bottom of the page. This control allows the size of the card to be modified. Below a certain size the card size remains constant, but the text continues to get smaller.

Cards – The blue **Cards** button toggles the output view at the bottom of the screen where your character groups, words or sentences are be listed (either hidden or in shown).

Play Controls

The final section on the page is the Play Controls where the user can Play, Pause or Stop the playback of a lesson. You may or may not see Voice Recap depending on whether Arm Recap is on or off.



Play – Clicking on this tab starts the sequence of cards being played. Once **Play** has been clicked, there will be a time shown which is the amount of time that has elapsed. Chars also shows the number of characters played and the total number of characters in the exercise. This is updated at the end of each card being played.

Pause – clicking this will pause the playing of the file at any point. Clicking it again will resume playing. It is important to click **Stop** if you don't resume before trying to play another file.

Stop – this will stop the playing of the file and rewind to the beginning.

Reveal – this switch toggles between being able to see the text on the cards and having it hidden. When hidden, the letters on a card are replaced with Xs. If you sometimes see you have more X's than you expect, it is likely due to the fact that some characters aren't played. eg.: <SK> will show up a four X's even though it is played as one character.

Shuffle reorders the cards randomly so you can hear the same file sent multiple times but the order of the cards can be different. Once shuffled, pressing the button again unshuffles the cards back to the order defined in the source text file. Pressing **Shuffle** again will get a new random order.

Loop – Loop has three states. The default is Loop Off. If you click it once, it will change to Loop Shuffle where the cards will be shuffled after each loop. The third state is Loop On which will play the cards again but in the same order as originally presented.

Output Area – The space below the Play Controls where the cards for the currently loaded lesson are displayed.

Help & information

Keyboard shortcuts

Keyboard shortcuts help. These keys work while you are practicing, as long as focus is not in a text field. Press the letter P to play or pause practice. Press the letter S to stop playback and rewind to the first card. Press the comma key to go back one card. Press the less than key to rewind to the first card. Press the period key to go forward one card. Press the letter F to flag the current card. Press the letter C to reveal or hide the card text. Press the slash key to shuffle or unshuffle the practice cards. Press the letter L to change the loop mode. Press the letter Z to reduce effective speed by one word per minute. Press the letter X to increase effective speed by one word per minute.

Use these keys while practicing (focus is not in a text field).

Key	Action
p	Play / Toggle pause
s	Stop playback and rewind
,	Back 1
<	Full rewind
.	Forward 1
f	Flag current card
c	Toggle card visibility
/	Toggle shuffle
l	Toggle looping
z	Reduce Farnsworth WPM
x	Increase Farnsworth WPM

Credits & help

Morse Practice Page by KN4YRM, with assistance from AB5TN, KN6WKV, KQ4NKF, N1CC, VE3QBZ, VK5PL, WO6W, W4EMB, and W6JY.

- Audio engine adapted from SC Phillips morse-pro.
- Source code: [Long Island CW Club GitHub](#)
- Questions, bugs, or feature requests: [email the team](#).
- Video walkthroughs: [YouTube playlist](#).
- User guide: [LICW academic downloads](#) or [longislandcwclub.org](#).