

## **MORSE CODE INSTRUCTIONS**

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**Learning to receive Morse Code is the first step; sending** is quickly learned once you master receiving.

The **paired order** for learning the characters in the **Practice Sessions** has been developed to overcome issues with similarities in character sounds/rhythms - - you will be learning some of the more challenging characters first. Initially the characters to be learned will be sent in blocks of five. Use the **Block of Five** form to write down the practice code which will help you keep track of any characters you may have missed. Once the 43 FCC Morse Code characters are learned we will proceed to learning abbreviations, Call Signs and practice actual QSO's.

**Never** write ••• (Di's/Dit's) or --- (Dah's) as placeholders...only write the actual characters. The reason for using Di's/Dit's and Dah's is because their sound closely simulates the actual Morse Code sound you hear from an oscillator/radio. Why are there Di's and also Dit's? Because when you sound out a series of Di Di Dit you actually finish the last Di as a Dit automatically - - listening carefully, try it out!

Write characters consistently...the same way every time. Your character writing should be automatic. If you have to think about how you are going to write the character, you will lose valuable time. Cursive is faster than block printing for most people.

It is important to write down the characters as part of the learning process. In short order, you will make an automatic tie between the characters you hear and what you copy on the paper. In essence your hand will be "linked subconsciously" to your brain without even thinking about what you are hearing!

Be sure your writing is recognizable by others...if others can't read your writing...a lot of time will be wasted asking questions! This is especially important when handling Emergency Traffic and Radiograms.

If you don't **instantly** recognize and write down the character when receiving, **immediately** write an     (underline) as a placeholder and get ready for the next character. If you don't do this, you will lose many characters trying to remember the character you thought you heard. You will be able to go back after a practice session and determine which characters need extra attention by looking at the placeholders. With practice you will be able to copy a number of characters behind those that are actually being sent and you will progress to hearing complete words.

If you have to think about how many Di's/Dit's & Dah's you are hearing or if you are counting them - - **immediately stop!** You must hear the **complete character sound and its rhythm** - - this takes concentration and practice. Sounding out loud (or in your mind) the Di's/Dit's & Dah's is a good way to overcome this problem.

Avoid listening to the imperfect code that you hear on the bands until you have mastered Morse Code. Your task is to learn the "perfect" Morse Code.

If you have a hard time hearing the code or are easily distracted by your surroundings, then use a headset. Other learning methods are available for those with hearing/vision/physical disabilities.

Use a code oscillator (or your rig) to practice sending and hearing the code. Use a Straight Key initially to learn sending - - the process of forming the characters, developing the timing and spacing actually reinforces receiving and learning. In short order it will become automatic - - like another language. Once you master the straight key, you can experiment with the other sending methods (Bug, Paddles/Iambic Keyer and Keyboard).

Maintain the character speed of 15 wpm, the pitch of about 800 cps and the "Farnsworth" method of spacing. The "Farnsworth" method has longer spacing between characters to arrive at the overall speed of 5 wpm. By using this method, you will be able to increase your speed by simply reducing the space between the characters, since you have learned the actual characters at 15 wpm.

Record the ARRL code practice sessions and try to duplicate the sounds, spacing and speed on your code oscillator/rig to verify that it closely matches the practice sessions.

Once you have learned all of the 43 FCC characters, sound out characters by reading from signs and printed material using Di's/Dit's & Dah's as practice.

Practice on a **daily basis**. Try to complete one or two 20-minute practice sessions every day. Until you master all of the characters, missing even one day of practice may require you to start all over. Daily reinforcement by practicing is the key to learning Morse code efficiently and effectively. **Also do not over practice**, you will do more harm than good when you cannot concentrate and are tired. Good Luck and 73!