

The *KOB Morse Course*: easing the transition from CW to conversational Morse

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Before you get too confused by the title of this paper, I'd better explain the terms I'm using. By *CW*, I mean International Morse using a CW tone; and by *Morse*, I mean American Morse on a telegraph sounder. The aim of this course is fluency in *conversational* Morse, by which I mean the ability to recognize ordinary, everyday words and phrases by ear, rather than writing down each letter by hand.

The *KOB Morse Course* takes advantage of learning features provided by the Morse KOB program. For information about the KOB program, please visit www.morsekob.org.

This course assumes you're already comfortable copying CW at, say, 20 or 25 wpm. If you're not that fast at CW yet, don't despair! The *KOB Morse Course* can help raise your CW code speed at the same time as you're learning Morse.

"But will learning American Morse affect my CW ability," you ask? Good question! The short answer is, "Maybe." No controlled studies have been carried out, to the best of my knowledge, so all the evidence is anecdotal. Certainly there are many examples of operators who are equally proficient at both codes.

I can tell you what my own experience has been. Now that I've become reasonably fluent in Morse, I do have a tendency to make occasional sending errors in CW. More often, this tendency manifests itself as a slight hesitation, rather than an actual error. I can always avoid this problem by thinking more carefully about my sending.

The good news is that the confusion factor has not been as issue for me when copying CW, and in fact my ability to copy International Morse has actually improved as a result of learning the American code. Why this should be I can only guess. It might be because I used better learning methods the second time round, and my proficiency in Morse had a spillover benefit in my ability to copy CW.

Many operators who are skilled in both codes recommend using International only with a CW tone and American only with a sounder. That way, it may be easier to keep the two codes straight in your mind.

The philosophy

A fundamental premise of the *KOB Morse Course* is that you're learning Morse for fun. You're not planning a career as a professional telegrapher; such jobs are scarce nowadays anyway. You just want to chat informally in Morse, perhaps using the Morse KOB system over the Internet.

As already mentioned, I also assume that you're familiar with CW – maybe you've used it on the ham bands – and you'd like to use that knowledge as a springboard to become proficient at Morse.

I'm a big fan of the Koch and Farnsworth methods. I'm not a fan of tedious code practice sessions where you copy strings of random characters. Repetition definitely is important while you're learning the code, but boredom is the student's worst enemy.

I believe you should pick your target speed and start learning at that speed from the very beginning: 20 wpm minimum, 25 would be better. I also believe you should be copying real words sent at full speed right from the start. How this is possible is addressed in the following sections.

When I talk about "copying", I really mean reading Morse in your head, the same way you'd listen to a conversation rather than writing down a transcript of the conversation like a stenographer. It's much more pleasant to learn while you're relaxed and with your eyes closed, instead of being tense and gripping a pencil in your hand.

Step 1: Getting used to the sounder

To the experienced CW operator, the clicks and clacks of a sounder can be totally incomprehensible at first. With surprisingly little practice, however, the sounder will seem just as natural as a tone. To help make the adjustment, you can start by listening to a tone and sounder simultaneously. It'll sound like CW with a serious case of key clicks, but you should be able to copy it easily enough. Then you can drop the tone and use the sounder alone.

Exercise 1a: CW tone only

1. Set the WPM setting on the main KOB window to your normal CW code speed or 20 wpm, whichever is *greater*.¹
2. Open the Preferences window by clicking on the Tools menu and selecting Preferences, or by pressing Ctrl-P.
3. Set Internal Sounder to *Tone*.
4. Set Repeat Group to *Word* and Times to 2. This causes each word to be sent twice.
5. Set Farnsworth Type to *Word* and Space to 300. This adds an extra 300 ms to the space between words.
6. Click on the OK button.
7. Click on the File menu and select Open, or press Ctrl-O.
8. Select the *Getting started* file and click on the Open button.
9. Start the code sender by pressing the Pause button on the keyboard.

You will hear some common English words – *the*, *and*, *a*, *in*, *that*, *it*, and *is* – sent at the selected code speed using a CW tone. Each word is sent twice, with a pause between each word (the "Farnsworth" space). Do you find it easy to copy? Good, then run the file again at a higher speed.² Keep increasing the code speed until you can copy most of the words when they're sent the first time. You should be doing this in your head, not writing anything down.

¹ You may want to have two copies of the KOB program on your computer, one with preference settings for using the program with the KOB server on the Internet and a separate one set up just for code practice.

² You can press Pause to stop the code sender, Home to reset the sender's cursor to the beginning of the file, and Pause again to restart the sender. The code speed can be increased by pressing function key F5, or reduced by pressing F4.

Exercise 1b: Mixed tone and sounder

1. Open the Preferences window (Ctrl-P) and change the Internal Sounder setting to *Mixed*. Click on the OK button to close the Preferences window.
2. Set the code speed to the target speed you established in Exercise 1.
3. Listen to the *Getting started* text again, just like you did in the previous exercise.

This time you'll hear the clicks and clacks of a sounder along with the CW tone. It should be just as easy to copy as it was before. If not, spend some time with it until you get used to it.

Exercise 1c: Sounder alone

1. Open the Preferences window again and change the Internal Sounder setting to *Normal*.
2. Set the Code Sender Loop checkbox on the main KOB window to cause the text to be sent over and over again repeatedly.
3. Listen to the *Getting started* text once again, still at your target code speed.

Spend as much time as you need with this exercise. Sooner or later, the sounder becomes second nature and is just as easy to copy as a CW tone.

Step 2: Reviewing the familiar letters

More than half the letters of the alphabet – 15 of them, to be exact – are exactly the same in the American and International codes. These letters are *e, t, a, i, n, s, h, d, u, m, g, w, b, v,* and *k* (in decreasing order of frequency in the English language).

Many common words can be formed from these 15 familiar letters. Starting with just the first six letters, for example, there are words such as *at, in, eat, tin, ate, seat,* and *stain*. An effective way of reviewing these letters – or relearning them, as the case may be – is to listen to words sent at your full target code speed right from the beginning. Rather than writing them down, just listen to them and see if you can recognize them. Having the program repeat each word two or three times and adding extra space between the words will make it a lot easier.

Exercise 2: The familiar letters

1. Set your KOB preferences for word repetition x2 and 300 ms word Farnsworth spacing, as in the previous exercise.
2. Open the Lesson window by clicking on the File menu and selecting Lesson, or by pressing Ctrl-L.
3. Set the Level to 6. This will produce words consisting of six of the most common letters in the English language: *e, t, a, i, n,* and *s*. Click on OK to generate the lesson.
4. Press the Pause button on the keyboard to start the code sender.

If you feel overwhelmed at first, try a longer word Farnsworth setting on the Preferences window, or perhaps more word repetitions on the Lesson window. *Try to resist the temptation to lower the code speed.*

When you can recognize most of the words the first time they're sent, and the repetition just confirms that you got them right, then go from level 6 to level 7, and so on, until you reach level 15.

If one or two letters are causing you particular trouble, then you can enter those letters into the Required Letters field in the Lesson window. That will force the lesson to contain only words that contain at least one of those “problem” letters.

If your target speed for Morse is about the same as your current code speed in CW, this step should go fairly quickly. There’s no reason why you shouldn’t use this as an opportunity to increase your code speed, however, and if you’re like me you’ll find that this kind of practice with American Morse on a sounder will have immediate benefits for your CW copying ability.

Step 3: Adding some new letters

The letters *o*, *r*, *l*, *c*, *y*, and *z* have a unique sound in Morse that’s not like anything you’ll hear in CW. The letter *r*, for example, sounds like *dit-didit*, with a short space between the first dot and the next two, while the letter *l* is *daah*, a dash that’s longer than a *t*.

The process for Step 3 is identical to Step 2, although it probably won’t go as quickly. When you do finish Step 3, however, you’ll be able to recognize words formed from 21 of the 26 letters of the alphabet at your full target code speed.

Exercise 3: The “Morse” letters

1. Use the same Preferences settings as for the previous exercise.
2. Press Ctrl-L to open the Lesson window.
3. Set the Lesson to 16. This adds the letter *o* to the mix.
4. Type the letter *o* in the Required Letters field. This will cause each practice word to contain an *o*.
5. Click on the OK button to generate the lesson.
6. Press the Pause key to start the lesson.

Once you’re comfortable with the letter *o*, go from level 16 to level 17, and so on until you’ve done Level 21.

If one or two of these new letters are causing you trouble, then concentrate on copying words that contain those letters. For example, if you find you’re getting *c* and *r* confused (I sure did at first), then concentrate on words that contain those letters – such as *there*, *core*, *race*, etc. – by specifying *c* and *r* as required letters.

By the time you’re done with Step 3, you’ll be well acquainted with the unique sound and rhythm of American Morse.

Step 4: Tackling the “false friends”

You still have five more letters to learn to round out the alphabet. These letters are *f*, *p*, *x*, *j*, and *q*, and I call them the “false friends” because their sound in American Morse means something different in International. The more familiar you are with CW, the more of a problem this can be.

Fortunately, *x*, *j*, and *q* are among the least frequently used letters in the English language (along with *z*), so their potential confusion with *l*, *c*, and *f* tends not to be a serious obstacle in following a normal conversation in Morse. Similarly, even though the letter *p* sounds like the numeral 5, that shouldn’t cause too much confusion either.

If you're like me, though, you're going to have a terrible time getting used to the idea that *didahdit* in Morse is *f* and not *r*. The frequency of the letter *f* in such common words as *of*, *for*, *if*, and *from* means that you're going to run into this problem all the time. The good news is that this also gives you plenty of practice to help you get over the problem.

To confront this issue head on and get past it as quickly as possible, you can use the KOB program to generate code practice sessions only using words that contain the letter *f*.

Exercise 4: the "F" words ☺

1. Open the Lesson window by pressing Ctrl-L.
2. Set the Level to 26.
3. Type the letter *f* into the Required Letters box.
4. Click on the OK button to generate the lesson.
5. Press the Pause key to start the lesson.

Step 5: The finishing touches

If you've made it this far in the *KOB Morse Course*, then undoubtedly you're already communicating with other operators in Morse using the KOB system over the Internet, or maybe even using one of the dialup hubs. Most likely you already know what else you want to learn about American Morse and how to go about learning it without any further help from me.

For completeness, however, I'd like to touch on four remaining topics: *punctuation*, *numbers*, *"phrasing"*, and *abbreviations*.

Punctuation

As this paragraph demonstrates* even though a period in Morse sounds like a question mark in CW* a question mark sounds like a slash* and a comma has no equivalent in CW* you dont really need to know the punctuation in order to follow the conversation? As long as you dont get hung up when you hear a long string of dots and dashes* the meaning will be clear from the context? Dont you agree/

So I wouldn't spend a lot of time in formal practice with punctuation. The only ones in common use are the period (.), comma (,), question mark (?), and paragraph separator (=). In spite of the fact that the period sounds like a question mark at first, and the question mark like a slash, you'll quickly get used to them.

Numbers

You already know one of the numerals: 4. The others you'll have to learn from scratch. Unfortunately, some of them turn out to be "false friends" – especially 8, which sounds like 6 in International.

How quickly you learn the numbers in Morse will depend largely on your motivation and patience. And you can always fall back on the KOB program's code reader to help copy numbers that are sent over the wire.

“Phrasing”

Morse sent by experienced operators tends to be sent with slightly shorter word spacing than standard CW. If you’ve been using the “word Farnsworth” method for learning Morse, however, your ear has become accustomed to hearing a prolonged space between words. Because of this, you may get in the habit of sending Morse with too much space between your words.

To help overcome this tendency, the KOB program has an option of sending code with “phrase Farnsworth” spacing instead of character or word spacing. With this option, the extra spacing is inserted between phrases, where for this purpose a phrase is delimited by two consecutive spaces in the text.

Exercise 5: “Phrase” Farnsworth

1. Press Ctrl-P to open the Preferences window.
2. Set Repetition Group to *Phrase* and Times to 2.
3. Set Farnsworth Type to *Phrase* and Space to 300.
4. Click on OK to close the Preferences window.
5. Press Ctrl-O to open the file browser dialog box, select the *Beaufort scale* file, and click on the Open button.
6. Press the Pause key to start sending the text.

By using the “phrase Farnsworth” method, you’ll get used to hearing letters and words sent at their natural pace, but you still get occasional breaks in the code stream to give your brain a chance to catch up and reset.

Phrase Farnsworth is still an experimental concept. Whether it should be used from the very beginning of the course, as an advanced feature at the end, or not at all is an open question. Feedback from you, the student, will be very much appreciated.

Abbreviations

If you’ve used CW on the ham bands, then you’re already familiar with the use of abbreviations. Landline telegraphers also made extensive use of abbreviations, and you’ll still hear these traditional abbreviations in use on the KOB wires and on the dialup hubs.

Many of the landline abbreviations will sound familiar to you: *vy*, *gud*, *73*, etc. Others, like *gg* for *going*, *tt* for *that*, and *smg* for *something*, may take some getting used to, but the meaning should be clear from the context. Some common ham abbreviations, on the other hand, such as *fb*, *om*, *xyl*, and Q signals like QTH and QSO, are rarely heard on the wire. You’ll often hear *tk*s instead of *tnx*, and the traditional wire code *30* is used as a substitute for *SK* or *QRT*.

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