<u>WØXI's 100</u> Most Common Words, Q-sigs, Pro-signs, and Abbreviations for CW Practice

November 11, 2010

<u>50 top spoken words in usage order (ref 1):</u> I and the you that a to know of it yeah in they do so but is like have was we its just on or not think for well what about all thats oh really one are right uh them at there my mean dont no with if when can.

***<u>12 top written words not in spoken list</u>* (ref 2):** as his from had by some were out other where your up.

<u>9 commonly used Q signals with abbreviated meaning in quotes:</u> QRL "BUSY" QRM "INTERFERE" QRN "NOISE" QRQ "FASTER" QRS "SLOWER" QRZ "WHO" QTH "LOCATION" QSB "FADING" QSY "CHANGE FREQ"

<u>24 commonly used word abbreviations</u>: r [roger], tu [thank you] rtu tnx [thanks] name rst cq agn [again] ant [antenna] dx es [and] fb [fine business] gm ga ge hi hr [here] hw nr [number] om pse [please] pwr wx 73.

<u>5 common pro-signs:</u> AR BT SK KN BK.

Discussion: Since just 100 spoken words account for about 66% of words in conversation (ref 1), using a portion of these in a starter word list for CW practice makes sense. Since CW conversations use unique Q signals, pro-signs and word abbreviations, our top 100 "words" ought to include a portion of these in common use today. An important twist of the compiled word list is that the spoken words portion of the list (about 50%) comes from a recent study by Steven Greenberg, a linguist. Many enthusiasts have obtained their 100 word list from William Pierpont's (NØHFF) famous "Art and Skill of Radio-Telegraphy." His compilation (some 50 years back?) was sourced from government text. Language and word usage have changed. I've assumed since QSOs are dialogues that CW practice words should come more from conversations rather than text.

Another important starting point for CW practice is speed. At what words-per minute (WPM) should one start? There are many opinions on this, of course! Many support the Koch Method, wherein the <u>desired WPM goal</u> determines the initial character speed used, say 20 or 25 WPM, while substantially slowing down the intra- and inter-word spaces (ICS & IWS). The idea here is to give the listener time

to hear and record (copy) a letter or word before the next one comes along! This procedure may cause difficulties later for some to transitioning from hearing dots and dashes to hearing a whole letter or from hearing letters to hearing whole words. The problem might manifest itself this way: having learned to collect a word by listening and recording it character by character, you can't stop using that learned process as speed is increased slowly from session to session. For the word NAME, you'd hear N and then write or say N, hear A and then say A, etc. However, listening to the whole word first and then recording it is more efficient, using fewer "buckets" of your short term auditory memory. My experience is that copying words is easier than copying letters first for words at somewhere around 18 to 22 WPM; let's call that the word threshold. While the Koch Method stresses word copy, strictly coded, the word is spread out a bit below full character speed when the ICS is reduced. That's why I like to practice with a program that can maintain ICS and character speeds equal while allowing for IWS adjustment.

The idea behind varying just IWS is this: starting at about 25 WPM for words but with an IWS six times normal, one has time to copy/say a whole word out loud before receiving the next word. Start by using a small portion of the 100 common words compiled. As your score reaches 80 to 90% correct, increase the word count and/or decrease the IWS a bit. Eventually you'll reach normal spacing, your overall goal speed. NuMorse Pro, see the resources list below, supports separate IWS spacing.

If time allows in 2011, we'll attempt to monitor 100 QSOs on the air and generate statistics on frequency of words, speed, etc.

References: (1) The spoken list is compiled from Steven Greenberg's "Speaking in Shorthand – A Syllabic-Centric Perspective for Understanding Pronunciation Variation." His top 100 spoken word list is obtained from one of the primary sets of material used to assess the reliability and accuracy of automatic speech recognition systems. The set is taken from a compilation of unscripted telephone dialogs.

(2) Twelve text-based words not in (1) are added from William Pierpont's top 100 text-based words from "The Art & Skill of Radio-Telegraphy"

Resources: There are many fine CW Software Programs available. Here are a few of my favorites: NuMorse Pro: It's full featured, including character, word, sentence and QSO practice and a Koch trainer. *A unique feature is adjustable inter-word spacing for text files*. If you are reading this on the 4SQRP website, there may be attached a zip'd file that contains a number of notepad generated text files NuMorse can read. NuMorse and ebooktoCW, among other programs, can generate CW audio files from text.

JustLearnMorseCode: It's also full featured and includes the Koch method. The G4FON Koch Method CW Trainer is also a fine program. RufzXP is well know and concentrates on call sign copy, supporting high speeds! 73, Phil, WØXI.