



BREAKING THE *FRAKTUR* CODE

A Non – German Reader’s Guide to Understanding *Wireless for the Warrior* Compendia 3 & 4

Readers without a command of the German Language have two problems to contend with; firstly they do not understand German and secondly they have to be able to read the original letters, many of which do not directly correspond to the alphabet now encountered on a day – to day basis. While a translation website (e.g. that offered by Google) is able to convert German words to English (or another language) it can only do so if the letters entered into it are correct. So the first part of the conversion process is to be able to recognise the original characters in a *Fraktur* font and replace them with “normal” ones.

Upper Case Characters:



Lower Case Characters:



(The kerning process results in characters not quite aligning vertically in either of the above.)

The lower case alphabet has two additional characters; ſ (“long s”) and ſſ (“ss”) The “long s” used to be used in English, albeit a very long time ago, and ſſ will appear in modern German script as ß, which may look like a “B” but isn’t. Note that “s” and “long s” will both be encountered; in modern applications “s” should be used for long s. For ß (“eszett”) use “ss”.

Some letters in the original may be very close together, to the point where they appear to be a single character; the correct term for this is *ligature*. Examples are:



These are not new characters; they are simply ch, (long) sz and tz. ß, being a modern version of (long) sz, is also a ligature.

Vowels, and “y”, are sometimes used with *umlauts*:



Umlauts are important; although they principally affect the pronunciation of a word if they are omitted from an entry into a translation webpage then the word in question may either not translate or translate incorrectly.

Confusing Characters

It is clear from the foregoing that several characters are of similar appearance; examples where confusion is likely are as follows:

Upper Case:

(A & U) (B, P, & V, and possibly ß from Lower Case) (C, E, G, & S) (I & J) (M & W)

Lower Case:

(f, k, & long s) (k & t) (r & x)

Confusion between other letters is possible; additionally some letters bear no obvious similarity to their modern versions. (e.g. X & Y)

So the first stage in translating any particular word is to convert the *Fraktur* font into a modern equivalent. It may then be entered into the translation website of the reader's choice. Google's Translation Website (<http://translate.google.com/>) has an optional "virtual keyboard" which allows all characters to be entered using a mouse; this is very helpful when *umlauts* are involved as keys are provided for that purpose. However, if for any reason characters have to be entered from a keyboard the following shortcuts should be of help:

For a lower case vowel with an *umlaut* press **CTL SHIFT :** (Colon) together then release and enter the required vowel. For an upper case vowel *hold* **CTL SHIFT :** together while entering the required vowel.

To enter ß (although this should not be necessary) press **CTL SHIFT &** together then release and enter **s**. ß is a lower case character only. (Discussions about introducing an upper case form appear to be ongoing.)

(The above shortcuts are valid for Microsoft software; they may or may not work with software from other sources.)

Not using *umlauts* may result in translation failures; in some instances the translation page may detect a missing *umlaut* and ask "**Do you mean...**" but this process is not entirely reliable; sometimes the error will be noticed, sometimes it will not.

The same **Do you mean...** may appear when a compound noun is entered. While in English we would talk about an Antenna Coupling Unit (or "Device") the German equivalent would be *Antennekopplungsgerät*, using just one word. In some cases the original word may not translate but splitting the word into its component parts may well produce a satisfactory result.

It must be realised that a translation may not make *complete* sense even when strictly correct. Where uncertainty arises a more suitable expression may be interpreted from the context in which the original word was used.

This guide was compiled using the **SchmaleAngzeigenschrift** font as a very close approximation to that used in the original documents replicated in Compendia 3 & 4; small differences may exist. This font (in common with some other *Fraktur* fonts) provides the "long s" by using the \ key.

It was prepared with the support of Louis Meulstee (the owner of *Wireless for the Warrior*) so that readers could understand more of Compendia 3 & 4 than might otherwise be the case.

The "WFTW" Logo has been used with his kind permission.

This Guide may also be downloaded in pdf format from the *Wireless for the Warrior* or the Wireless-Set-No19 Group WEB site, www.royalsignals.org.uk