Ciphers - The Teleprinter, the Geheimschreiber, and the ‘basic teleprinter code’.

1 - plain language message (part of serial no. & callsign) to: HZPH/FF1 11905 HEERESGR. KURLAND

2 - operator types in message on teleprinter (or pre-punches on paper tape).

3 - teleprinter inserts punctuation and instructions such as ‘line feed’. ‘Plain’ message now reads in ‘basic teleprinter code’:

   H Z P H + + X - - F F + + Q . Q Q O P T
   H E E R E S G R + + M - - .
   K U R L A N D

4 - Geheimschreiber enciphers plain text including ‘line feed’, shift commands, etc.

5 - transmitter generates radio waves

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1 - Bletchley Park receives intercepted message in cipher from Y station

2 - Bletchley Park works out key and decodes the message into ‘plain language’ in the ‘basic teleprinter code’ format, including ‘line feeds, shift commands, etc.

3 - Bletchley Park removes ‘line feeds’, ‘shift commands’ and converts into original plain language message, translates, annotates and sends out information

4 - teleprinter prints original plain message

5 - Geheimschreiber decipher message

1 - wireless receiver detects radio waves

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4 - teleprinter converts ‘shift commands’, ‘line feed’, etc. into instructions

5 - transmitter generates radio waves

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