

MysteryTwister C3

THE CRYPTO CHALLENGE CONTEST

ENIGMA MESSAGES WITH REPEATED LETTERS – PART 1

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Introduction

This series of Enigma challenges is about messages which contain only repeated single letters ("GG") or repeated groups of letters (like "ALPHAALPHA"), encrypted by the Enigma I, which uses 3 rotors selected out of 5.

The challenges of this series are of an increasing level of difficulty, the easiest is pen-and-paper only, others may be solved using existing tools, the most difficult one may require programming and/or special adaptations of existing tools or software code available on the Internet.

Challenge and Hint

The attached ciphertext is the result of encrypting a plaintext message consisting of repeating the same letter with an Enigma machine.

What is the (repeated) letter in the plaintext message? The answer is a single capital letter.

Hint with a fictive example:

If the original message was a series of 45 time "G" the correct solution would be G.

This challenge is quite easy if you understand how the Enigma works.

Useful links

1. A general description of the Enigma and successful attacks in WWII:
http://en.wikipedia.org/wiki/Enigma_machine
2. Another informative site about the Enigma and its internal functioning:
<http://users.telenet.be/d.rijmenants/en/>
3. An Enigma simulator:
<http://users.telenet.be/d.rijmenants/en/enigmasim.htm>
4. Ideas (and code) for cryptanalysis of the Enigma using modern methods:
<http://practicalcryptography.com/cryptanalysis/breaking-machine-ciphers/cryptanalysis-enigma/>