

# **MysteryTwister C3**

THE CRYPTO CHALLENGE CONTEST

## **DOUBLE COLUMN TRANSPOSITION – RELOADED (PART 3)**

Authors: A. Wacker, B. Esslinger, K. Schmeh

December 2013

# Introduction

After the level X challenge "Double Columnar Transposition" was solved for the first time (using some remarkable new ideas), we decided to create a series of new double columnar transposition challenges. In these new level III challenges we considered the newly discovered vulnerabilities and created three new ones with increasing difficulty.

# Challenge

LEHHRGNHTOSHRNCUHRPEAIENLUNUGGANIADIEGFNEEHMGSIISGGIDSNZINHETSH  
UOMSELLRTSIZ EORMEZBEEZPLPEODETTEINIBNNHINUTKASSMTCIICSFTBEDSFTENB  
UERNPLMEFEUEUCENDEIRRLNEZUEAMETUESDAENRTCUZUMZCRNPRETIDUUOBCTEEJT  
NEILCDGFRMASIMHEULEZENNUGEMRTNEWMHUTGTEKGDNTZNDIEEEEEDINSCELRABKN  
TBGIEATSDHEAEBTBOFWVLNECNUUSZUHSNESDHBNIIGHHRZTUEESEZOAEGSSSELTMEN  
EESEUMIEERHKAIRBSNNEIEUEDLAOEKREEUONHANNEEPINECTENMKITREGUIHCTWRN  
FUHDAIUBAKLIREZNEEWREEMEUDDUATEPCUNKDBFSESFSEEDSTTCERMSREAZLRLUEU  
EITFNHSBFBRIDBDANPGEEEDDTOBASLENGEERMPCEBUNETTNHATTLHREEEREPNEEMU  
AEENSIKELUMMSELRGWEZNEHEIZILEZENBEISSKWZSSGTCCKDTZIELRHTHERESIRG  
GUKSFLMEABLUINDIANLZEWLEUADSFENNIENLNCNTRHSCAEUMEBECFEEHWEUETNBRG  
WEEMHAILLRORUEIEETGTAILNNILSBLUEIKNNHNKSIUCUNNTAFICUEHRTEOLAZEKW  
SETSEDIAGIESKLGEIEIEFESZGAEETAEKGBEAEEELSEEDOEINVNFUHAHRAITEHTCIHO  
AERNRTTETZUNDTNIKNVCITFBNLBTROEOCNENLZHLZMEEHCAEUSKEEEZZWESEDTDU  
RBDMSLIRTRTAZNGITNEIDRTAAMTLEGOLSSBESFIKEESHRTAEGRUWREFTREZSUBHBE  
HDEGLHCLUELRLFSITIERETRGRSDNNIIGOURETEERBDRLGLRLZLNTSNRNERNCPSDB  
OUEEEEISMINHEHHFEHMIICIINAHOFONM

The solution consists of the first 48 characters of the original German plaintext in capital letters without any spaces.

# Hints

- ▶ The key length for both keys is 27 - 34 characters.
- ▶ The key lengths are co-prime (as with the original level X challenge).
- ▶ Both keys are chosen randomly.
- ▶ The plaintext is in German.
- ▶ You can download an additional file that contains only the ciphertext.
- ▶ As an exercise, consider the following level I challenge: [1].
- ▶ The original level X challenge can be found under [2].

[1] <https://www.mysterytwisterc3.org/en/challenges/level-i/double-columnar-transposition>

[2] <https://www.mysterytwisterc3.org/en/challenges/level-x/double-column-transposition>