

MysteryTwister C3

A CRYPTO CHALLENGE BY CRYPTOOL

KU KLUX KLAN CIPHER

A cryptogram from 1923

Klaus Schmeh

In 1923 a member of the Ku Klux Klan sent an encrypted telegram to one of his colleagues. The content of this telegram is still known.

More than 60 years later the US mathematician Cipher Deavours examined the telegram, and he could decipher it. 1989 he published details about the solution in the magazine Cryptologia („A Ku Klux Klan Cipher“, edition 3/1989). However, he didn't tell the complete solution – the last part is left to the reader as an exercise.

Here is the message:

XGQIP ZWWLJ YKOLC IFLJH UFXFL
RGWZY WLLAY DHUYL IPIQG HLRLJ
PUFWO TKKAO UJRBJ SLJHA CRMLG
MNBMW JWJUJZ MXXJV MMKXB KMRRC
XBQTF YYUJJ JNJVL TIFLJ FUFXF
MRGWG QWLLA DDHUY MSLSH RRMLD
EWMXR AQJTX XLCKY SCGSH ZLWCO
MYIVE OKDPU NJFUJ WBQBH SGXLZ
RPTMP JSAOH EYHUX MKBJW ZXFUX
IXYFK KSAQO LYASV SELNS MSOLC
WRPWS ZAKJQ BBKMK SHMMI DLLRR
RFIPW LWWVU DDUJJ ANTJM PLMSO
MXEJF ZLQHK CKYHB XJBKB FXQGW
PSBPF IZOWS SAAJV AMTJM TCQSQ
XREYF EWTSB JMWBS KMTBL SDCQF
XTWZI WZIKA AJHVVY NSKCC

XGQIP	ZWWLJ	YKOLC	IFLJH	UFXFL
RGWZY	WLLAY	DHUYL	IPIQG	HLRLJ
PUFWO	TKKAO	UJRBJ	SLJHA	CRMLG
MNBMW	JWJUJ	MXXJV	MMKXB	KMRRC
XBQTF	YYUJJ	JNJVL	TIFLJ	FUFXF
MRGWG	QWLLA	DDHUY	MSLSH	RRMLD
EWMXR	AQJTX	XLCKY	SCGSH	ZLWCO
MYIVE	OKDPU	NJFUJ	WBQBH	SGXLZ
RPTMP	JSAOH	EYHUX	MKBJW	ZXFUX
IXYFK	KSAQO	LYASV	SELNS	MSOLC
WRPWS	ZAKJQ	BBKMK	SHMMI	DLLRR
RFIPW	LWWVU	DDUJJ	ANTJM	PLMSO
MXEJF	ZLQHK	CKYHB	XJBKB	FXQGW
PSBPF	IZOWS	SAAJV	AMTJM	TCQSQ
XREYF	EWTSB	JMWBS	KMTBL	SDCQF
XTWZI	WZIKA	AJHVY	NSKCC	

Deavours explained the following:

- The telegram is encrypted with five monoalphabetic substitution ciphers.
- The substitution ciphers are rotated (they switch after each five letters). This means that the first column (yellow) is encrypted with the first cipher, the second column (blue) with the second cipher and so on.
- Anyway, the message must be read in complete lines (not one column after the other).
- In the fourth column (purple), the ciphertext C stands for the cleartext X. The last two letters of the telegram (XX) are filling material without a meaning.
- SCGSH in the fourth column stands for EXTEN, EXPEN, EXPEC, EXCEP or EXCEL. Therefore, the S in the fourth column stands for the E.

This is all that Deavours told his readers. A complete solution has never been published – neither on the internet nor in Cryptologia. However, this problem should be solvable, as it was only meant as an exercise.