

ADFGVX Cipher - Germans in WWI

Originally it was ADFGX (5x5 grid not 6x6)
 6x6 allows for 36 symbols (26 letters, 10 digits)

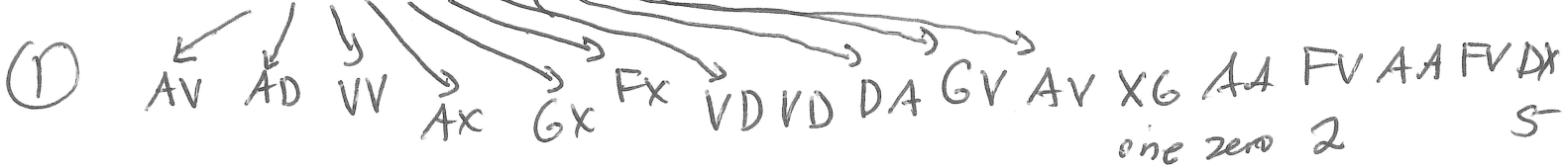
Part I to encrypt
 6x6 box key

	A	D	F	G	V	X
A	zero	O	H	9	T	A
D	E	C	W	Z	V	5
F	R	8	4	G	2	I
G	K	J	U	X	P	Y
V	6	S	B	N	D	Q
X	F	3	M	one	7	L

When transmitted via Morse code/Radio these letters were least likely to be confused with each other.

has all 36 symbols once

TODAY IS SEPT 10 2025



Substitute based on 6x6 secret key grid

AVADVVAXGXFXVDVDDAGVAVXGAAFVAAFVDX

Step 2: Transposition w/ keyword

KNIGHTS

④	⑤	③	①	②	⑦	⑥
<u>K</u>	<u>N</u>	<u>I</u>	<u>G</u>	<u>H</u>	<u>T</u>	<u>S</u>
A	V	A	D	V	V	A
X	G	X	F	X	V	D
V	D	D	A	G	V	A
V	X	G	A	A	F	V
A	A	F	V	D	X	

Read the columns in number order:

DFAAV

Col label
1

ADAV

6

VXGAD

Col label
2

VVVFX

7

AXDGF

3

AXVVA

4

~~V~~VGDKA

5