

In replying refer to

4131-526
M.I.8.

WAR DEPARTMENT
OFFICE OF THE CHIEF OF STAFF
WASHINGTON.

April , 1919.

MEMORANDUM FOR THE CHIEF OF STAFF.

Subject: The T. and T. Cipher System.

1. Attached is a letter to the Secretary of War from Mr. George Fabyan, of Geneva, Illinois, in which Mr. Fabyan transmits a decipherment of a cipher message which he asserts was submitted to him by the American Telephone and Telegraph Company as a test message "for the purpose of ascertaining the possibility of its decipherment by the enemy" and on the basis of this decipherment asserts that "the enemy can decipher messages sent by this system."

2. Inasmuch as the A. T. and T. system has been and is used for Army messages of the highest importance and is regarded by Army experts as absolutely indecipherable, a careful investigation of Mr. Fabyan's claims has been made.

3. It appears:

a) That the message deciphered was not submitted as a test message but as one of two concerning which it was expressly stated that they undoubtedly could be deciphered and that they did not represent the system in use.

b) That of the four messages submitted to Mr. Fabyan on June 11, 1918, as test messages, not one has been solved.

4. It is recommended that the attached letter, signed by the Acting Secretary of War, be sent to Mr. Fabyan.

M. Churchill,
Brigadier General, General Staff,
Director of Military Intelligence.

2 enc.
bbm

Riverbank Laboratories

Geneva, Ill.

APR 23

4131-526 661

3

WAR DEPARTMENT
March 25, 1919.

Department of Ciphers

From: George Fabyan, Riverbank, Geneva, Illinois.
To: The Secretary of War, Washington, D. C.
Subject: The dangers of the so-called indecipherable Machine Ciphers.

1 We are informed that a great many ciphers were submitted to the Department for its use and, undoubtedly, the best one was THE AMERICAN TELEPHONE AND TELEGRAPH COMPANY'S CIPHER PRINTING TELEGRAPH MACHINE, which, we understand, was adopted by the Department after the Department had been assured by its experts that this cipher was indecipherable.

2 The American Telephone and Telegraph Company submitted the following test message to Riverbank for the purpose of ascertaining the possibility of its decipherment by the enemy:

DAPPP PPJPP SAFMI RT3IO SPSVT TUJ54 4NJ6X 73CHI LQ2XH KLS5K H76TO WY922
UHGJS 2GZ7J JJS6Q QPG36 HEK2E UHP25 LERYX 4QUUB 43IPA UTT6B 8OR7D 2PRA0
YBILF DJGAJ GP7GR BGGNO SYABQ ZUD4Q HJTEP QYQJP YBARU AIQDS 7RYEM 56UOP
APYAN KOKTH XQ47E 8ROSF FVINZ UIA5J Z2N76 HAZWZ GJKKJ NDJ24 6TQRV SZL5H
LKGPZ HSNVY HOKK2 HZSYH G7QEX GJLRS YGWSF VSKD7 RYQJ5 IWBH2 QOFBP DCBC2
WNYOK 6VJBP EGXVP BQFBS ASQSR BAZPL KFOVX CHAQ6 VZLVA VF47M 6DJQF K700H
JEL7G ADDAZ 6JXX5 PIMS1 QMGZA KYQ53 RHHF7 FBIQB CUNGN WDPTX YAOAX LEYSY
263VR PKQJW 6DSYE FWOY4 K55NK LK5SH GRY52 YONAH QFL6H DX3GW 6BJK7 NBAVO
BOJSP HZYIS JPZGH BSHB5 BLFKQ MQDKZ 4RYPL 62IDF HVODQ FH65E UFIFI GQNSB
MWOFP XMRVY 6HOBF KO4B7 SIO5J GHFYC 6WHZH BGOIB 6GZ5D 73L37 ZY5EQ NACGP
2T40G RLR

3 The above message translates:

BRIGADIER GENERAL BROWN SO TRANSPORT LEVIATHAN IS EXPECTED TO ARRIVE AT CALAIS
SATURDAY APRIL 2 WITH DIVISIONS 305 249 AND 467 AERIAL SQUADRONS 11 12 AND 13
SIGNAL BATTALIONS 25 26 AND 27 ARTILLERY SECTIONS 40 41 AND 42 HOSPITAL SECTIONS

APR 23

WAR DEPARTMENT

49 TO 91 INCLUSIVE ALL OF THE ABOVE UNITS ARE TO ENTRAIN AT ONCE AND PROCEED
TO AMIENS UNDER YOUR CHARGE AT AMIENS DETRAIN AT DEPOT NO TWO AND MARCH TO
CAMP NO SIX TEN MILES EAST OF THE CITY PROPER THERE ENOCAMP AND REPORT YOUR
ARRIVAL AT ONCE TO HEADQUARTERS

4 [We have other test messages which have also been deciphered
in spite of being complicated by the use of numerals instead of spel-
ling them out.

5 In analysing the work of this machine and in ferreting out its
weaknesses, we venture the opinion that the enemy can decipher messages
sent by this system.]

Respectfully submitted for your information.

(Signed) Fabyan

6161

4131-526
M.I.S.JMM
M.I.D.-8WAR DEPARTMENT
OFFICE OF THE CHIEF OF STAFF
WASHINGTON.

(11)

April , 1919.

Mr. George Fahy,
Riverbank Laboratories,
Geneva, Illinois.

Dear Sir:

Your letter of March 23 expressing the opinion that the enemy can decipher messages sent by the system devised by the American Telephone and Telegraph Company in conjunction with experts of the War Department has received careful consideration.

Are you not laboring under some misapprehension? The message you have solved was submitted to you, I am informed, not as a test message but as one of two in regard to which you were expressly told that they could undoubtedly be solved and that they did not represent the system in use.

Four messages representing the system in use were, I understand, submitted to you as test messages. If you succeed in deciphering any one of those, you will demonstrate the insecurity of the system. I should be interested to know whether you have done this.

Yours very truly,

Benedict Crowell,
Acting Secretary of War.

no encs.

dbm