

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 6161

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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 HLS5K H76TO WY922  
 UHGYS 2GZ7J JJS6Q QPG36 HEK2E UHP2S LERYX 4QUUB 43IPA UTT6B 8OR7D 2PRA0  
 YBILF DJGAL GP7GR BG6NO SYABQ ZUD4Q HJTEP QYQJP YBARU AIQDS 7RYEM 56UOP  
 APYAN KOKTH XQ47E 8ROSF FVINE UIA5J Z2N76 HAZWZ GJKKJ NDJ24 6TQRV 5ZLSH  
 LKGPZ HSNVY HOKK2 H2SYH G7QEK GJLRS YGWSF VSKD7 RYQJ5 IWBH2 QOFBP DCBC2  
 WMYOK 6VJBP EGXVP BQFBS ASQHR BA3PL KPGVX QUAQ6 VZLVA VF47M 6DJQP K700M  
 JEL7C ADDAZ 6JXX5 PIMS1 QM6ZA KYQ55 RHN77 FBIQB QUNGN WDPTX YACAK LEYSY  
 263VR PKWJW 6DSYE FWOY4 H55NK LK5EH GRYS2 YONAH QFL6H DX3GW 6BJK7 HBAVO  
 8OJSP H2YIS JPZGH BSHB5 SLFKQ MQDKZ 4RYPL 62IDF HVODQ H66E UFIFI 6QNSB  
 MWOPP XMRVY 6NOBF H04B7 SIO5J GHFYC 6WHZH 8G0IB 6GZ5D 73L37 2YSEQ NACGP  
 2T400 HLR

3 The above message translates:

BRIGADIER GENERAL BROWN 50 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

6161

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 ferretting out its  
weaknesses, we venture the opinion that the enemy can decipher messages  
sent by this system. ]

Respectfully submitted for your information.

(Signed) Fabyan

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 enc.

bbm