

SUBJECT: Cipher Printing Telegraph System.

REF ID: A4148858

*file AT&T
Cipher*

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

DEPARTMENT OF DEVELOPMENT AND RESEARCH

TELEPHONE AND TELEGRAPH BUILDING

JOHN J. CARTY
VICE PRESIDENT

195 BROADWAY

NEW YORK June 24, 1920.

LYMAN F. MOREHOUSE
EQUIPMENT DEVELOPMENT ENGINEER
FREDERICK L. RHODES
OUTSIDE PLANT DEVELOPMENT ENGINEER
OTTO B. BLACKWELL
TRANSMISSION DEVELOPMENT ENGINEER
HOWARD S. WARREN
ELECTRICAL INTERFERENCE ENGINEER
GEORGE A. CAMPBELL
RESEARCH ENGINEER

Lieut. Col. J. O. Mauborgne,
United States Army,
Care of Chief Signal Officer,
Washington, D. C.

My dear Colonel Mauborgne:

As agreed in our conference when you were in New York, I am sending you two cipher telegrams which we have prepared merely to illustrate the method of enciphering messages in printed form for transmission by telegraph or cable, and also to test the ability of the Commercial Telegraph Companies to handle such messages without error. One copy of each telegram will be sent by Western Union and another copy by Postal Telegraph. These messages were enciphered by the machine and printed directly on the telegram blanks.

In these messages no attempt has been made to encipher the key indicators; but to avoid having numbers appear in the cipher telegram, the letters A to J have been used to designate the numbers 1 to 0 respectively, e. g. in message No. 1 key tapes settings are 240 and 096 and these settings are designated by the key indicators BDJJIF. In the second message the settings are 366 and 222 which are designated by the letters CFFBBB. The key indicators are also repeated at the end of each message.

Lieut. Col. Mauborgne.

-2-

The body of the message begins directly after the six key indicators. To decipher each message it should first be perforated exactly as written, except that the spaces between five letter groups should be omitted, and whenever the letter "E" occurs, it should be combined with the letter following it, and punched according to the following table.

EL	Line feed	x
EH	Space	
EO	Carriage return	x
EK	Letter shift	
EJ	Figure shift	
ET	Blank tape	
EZ	Letter "E"	

At the end of the message, blank tape signals (ET) have been added to completely fill out one of the five letter groups.

I should be glad to be advised if you experience any difficulty in deciphering these messages.

Yours truly,

L. F. Morehouse
o.s.p.

Equipment Development Engineer.

Under separate cover:

Two key tapes.

GSV:LGH

WAR DEPARTMENT
OFFICE OF THE CHIEF SIGNAL OFFICEREngineering
and Research

WASHINGTON

2 July, 1920

JUL 5 1920

My dear Mr. Morehouse:

Herewith find the copies of the messages as deciphered on our printer. I suppose that by this time you have noted the messages we sent you as a night letter several days ago, and perhaps you have run across still further changes. Those which occurred between New York City and Washington caused us no difficulty at all as you can see from the enclosed.

Sincerely yours,

Captain, Signal Corps.


Mr. L. F. Morehouse,
c/o A. T. and T. Company,
195 Broadway,
New York City.

2 encls.

CLASS OF SERVICE	SYMBOL
Day Message	
Day Letter	Blue
Night Message	Nite
Night Letter	N L

If none of these three symbols appears after the check (number of words) this is a day message. Otherwise its character is indicated by the symbol appearing after the check.

WESTERN UNION



TELEGRAM

CLASS OF SERVICE	SYMBOL
Day Message	
Day Letter	Blue
Night Message	Nite
Night Letter	N L

If none of these three symbols appears after the check (number of words) this is a day message. Otherwise its character is indicated by the symbol appearing after the check.

NEWCOMB CARLTON, PRESIDENT

GEORGE W. E. ATKINS, FIRST VICE-PRESIDENT

RECEIVED AT COMMERCIAL NAT'L BANK BLDG., 14th & G STS., N. W. WASHINGTON, D. C. ALWAYS OPEN

1920 JUN 25 AM 10 42

C
65NY 34 1 EXTRA RUSH

DA NEWYORK NY 1002A 25

LT COL J O MAUBORGNE

7129

U S ARMY CARE OF CHIEF SIGNAL OFFICER WASHINGTON DC

240096

BDJJI FGYAP EOJGP PJNIY EKVKY ZACKQ EZIJC PEJZP CABXI TTXDK

AQACC DUZXE KUBIX VOEHE TZGNE TKETY HEJEH AXOEK HVIBE KUEHE

LVRET IMETP WAFXE LMHGI ETA EJ FEHEJ USEOL HDHJE ZELEZ THLYM

BNKJH NYETB DJJIF

L F MOREHOUSE.

83

13, 523

CHIEF SIGNAL OFFICER
1920 JUN 25 PM 1 55
RECEIVED

POSTAL TELEGRAPH - COMMERCIAL CABLES

RECEIVED AT
EVANS BUILDING
1418 NEW YORK AVENUE
WASHINGTON, D. C.
TELEPHONE: MAIN 6600

CLARENCE B. HICKMAN, PRES. V. L. 4380-100
TELEGRAM

DELIVERY NO. _____

The Postal Telegraph-Cable Company (Incorporated) transmits and delivers this message subject to the terms and conditions printed on the back of this blank.

This is a fast Day Telegram unless otherwise indicated by signal after the number of words:—"N.L." (Night Lettergram) or "Nite" (Night Telegram) 16-50887

269NYTQ 33 1136A

145

NY NEWYORK JUNE 25

LT COL J O MAUBORGNE

US ARMY CARE OF CHIEF SIGNAL OFFICER WASHN DC

BDJJI FGYAP EOJGP PJNIY EKVKY ~~ZXEXE~~ ZACKO EZIJC PEJZP CABXI

TTXDK AOQCC DUZXE KUBIX VOEHE .TZGNE TKETY HEJEH ~~SEE~~ AXOEK HVIBE

KUEHE LVRET IMETP WAFXE LMHGIE ETAEJ FEHEJ USEOL HDHJE ZELEZ

THLYM BNKJH NYETB DJJIF

L F MOREHOUSE

13, 5-20

CHIEF SIGNAL OFFICER
1920 JUN 25 PM 1 55
RECEIVED

Vertical strip of text containing a series of small, illegible characters and symbols, possibly a barcode or a list of data points.

REF ID:A4148858

WESTERN UNION TELEGRAM



CLASS OF SERVICE	SYMBOL
Day Message	
Day Letter	Blue
Night Message	Nite
Night Letter	N L

If none of these three symbols appears after the check (number of words) this is a day message. Otherwise its character is indicated by the symbol appearing after the check.

CLASS OF SERVICE	SYMBOL
Day Message	
Day Letter	Blue
Night Message	Nite
Night Letter	N L

If none of these three symbols appears after the check (number of words) this is a day message. Otherwise its character is indicated by the symbol appearing after the check.

NEWCOMB CARLTON, PRESIDENT

GEORGE W. E. ATKINS, FIRST VICE-PRESIDENT

RECEIVED AT COMMERCIAL NAT'L BANK BLDG., 14th & 6 STS., N. W. WASHINGTON, D. C. ALWAYS OPEN

A299NY 25 1 EXTRA RUSH

DA NEWYORK NY 1002A 25

LT COL J O MAUBORGNE

7124

US ARMY CARE OF CHIEF SIGNAL OFFICER WASHINGTON DC

CFBFB BBXDM EKASA TILAH BLVJU OOKK LJROE ZZZAT BKAHY DKXMA

AXGET LDEOM FGOCT TJEHH SNSRI XEJYD MJDEL LGGDT TTRK LQTI

KSSSEJ BLPTN XUTTC FFBFB

L F MORTHOUSE.

*C.24
E 18.
13, 5-24*

CHIEF SIGNAL OFFICER
1920 JUN 25 PM 1 55
RECEIVED

POSTAL TELEGRAPH - COMMERCIAL CABLES

CLARENCE H. MACKAY, PRESIDENT

RECEIVED AT
EVANS BUILDING
1418 NEW YORK AVENUE
WASHINGTON, D. C.
TELEPHONE: MAIN 8600

TELEGRAM

DELIVERY NO.

The Postal Telegraph-Cable Company (Incorporated) transmits and delivers this message subject to the terms and conditions printed on the back of this blank.

This is a fast Day Telegram unless otherwise indicated by signal after the number of words:—"N. L." (Night Lettergram) or "Nite" (Night Telegram)

18-50887

- 2 -

267NY TQ 1130A 24

NY NEWYORK JUNE 25

151

LIEUT COL J O MAURGNE

US ARMY CARE CHIEF SIGNAL OFFICER WASHN DC

361.022
CFFBB BBXDM EKASA TILAH BLVJU BK OOEKE LJEQE ZZZAE KBAHY DKXMA
AXGET LDEOM FGOCE TJEHH SNSRI XEJYD MJDEL LCGDE TTREK LQEJE

KSSEJ ELPTN XETEC FFBBB

EL

L F MOREHOUSE

CHIEF SIGNAL OFFICER

1920 JUN 25 PM 1 55

RECEIVED

13,521

Postal copy OK — Western
 Union copy has two
 transposed letters.

1A2W 24

NEW YORK NY 25

LIEUT COL J O MAUBORGNE

US ARMY CARE CHIEF SIGNAL OFFICER WASHINGTON DC

OFF BB. THIS SAMPLE MESSAGE IS PRINTED WITHOUT SPACES TO
 DECREASE THE NUMBER OF WORDS
 IN THE CIPHER TELEGRAM

18 W - L F MOREHOUSE

% 34

Western Union Copy correct
Postal one typographical error

A-1 3411 EXTRA RUSH

DA NEWYORK NY 1002A 25

LT COL J. O MAUBORGNE

U S ARMY CARE OF CHIEF SIGNAL OFFICER WASHINGTON DC

BDJJIF MESSAGES CAN BE RAPIDLY AND ACCURATELY ENCIPHERED AND DECIPHERED BY
MEANS OF THE A T & T CIPHER PRINTING TELEGRAPH SYSTEM

Ency 21
Cipher 33
% 57

L F MOREHOUSE

By overland

