



HEADQUARTERS

TREASURY DEPARTMENT
UNITED STATES COAST GUARD

CONFIDENTIAL

WASHINGTON

15 July, 1941.

MEMORANDUM FOR DR. KULLBACK:

Three more of the messages in the BRAJOB-VOLCO system have been solved by this section, and are inclosed herewith along with indicators and keys. I am glad to say that I can now add some information to that given in my memorandum of 4 April, 1941.

A revised grill is also being inclosed, which shows more accurate location for cells into which nulls are written. My earlier guess has been proved correct--i.e., that the last letter of the indicator group signifies the corner of the grill (B, D, F, or H) which constitutes the upper left corner of the diagram. The two corners which have been identified so far are marked with the proper letter.

It is now fairly apparent that the first three letters of the indicator give the key to be used, either from a numbered list of keys, or, what is more probable, the page of a book from which the key is derived in a manner familiar to you. The letters are numbered in accordance with their position in the alphabet, "A" being "One", "B", "Two", etc.; and quite probably all letters beyond "I" represent zero. If this is not true, the fourth letter of the indicator is entirely meaningless, as it will be noted that all three messages read by the same key, although all three indicators show a different fourth letter. Message 1 and 2, although having the same key as No. 3, used the grill with corner "B" in the upper left-hand position, whereas message No. 3 had corner "D" in this position.

It is possible that a general solution for this type of message, where the grill and its position are known but the key unknown, can be worked out, similar to the general solution of the double columnar transposition. Any ideas you may have along this line would be appreciated.

R. E. Gordon.
R. E. GORDON

18 March, 1941.

TO VOLCO, MEXICO CITY

Indicator: B D B Y B

Key : 5- 7- 1-12- 8- 2-13-10- 6- 3-11- 4- 9

X S P R U Q V O M X Z W O F U E N F X Z W O X D E R D O R T
M I T Z U E N T S Q L U E S S E L N W A R X N E U V E R S G
L U E S S E L U N G X E R S T E N S X R E A K T I V I E R U
N G E N B I S K R I E G S E N D E A U S G E S E T Z E X E N
T D G E I D U N G E R S T N A Q K R I E G S E N D E X Z W O
T E N S X S W E D I S Q E D E C K A D R E S S E T F R O E K
E N X F R O E K E N X U L L A X U L L A X G E I N R I H X M
O B E R G X M O B E R G X S T Y R M A N N S G A T A N X S T
Y R M A N N S G A T A N X Z W O E I N S X S T O C K H O L M
X S T O C K H O L M X D R I T T E N S X F R A U U N D J U N
G E L A S S E N G R U E S S E N S X

REF ID:A69051

MESSAGE NO. 1

18 December 1940.

TO BRAJOB, BERLIN

Indicator: B D B T B

Key : 5- 7- 1-12- 8- 2-13-10- 6- 3-11- 4- 9

NRXZWOXUNSENDERXGLENNXWIRDX
ABXAUFBITTEXHILGERTXAUFUERANR
UFXNEWYORKXUNTERXGBOXZURVERFUE
GUNGSTEHEXGLENNKANNXZZTXNURSE
NDENAUFXVIERZEHNFUENFNULLAQTXA
NRUFENNYXAMXZWONULLUNDZWOEINSX
DEZXDREIUNDZWANZIGUHRXMEZVERST
AENDIGTDAHERXHBGXWEGENXTRAMPXM
AXUMORIS

MESSAGE NO. 3

25 March, 1941.

TO VOLCO, MEXICO CITY

Indicator: B D B Z D

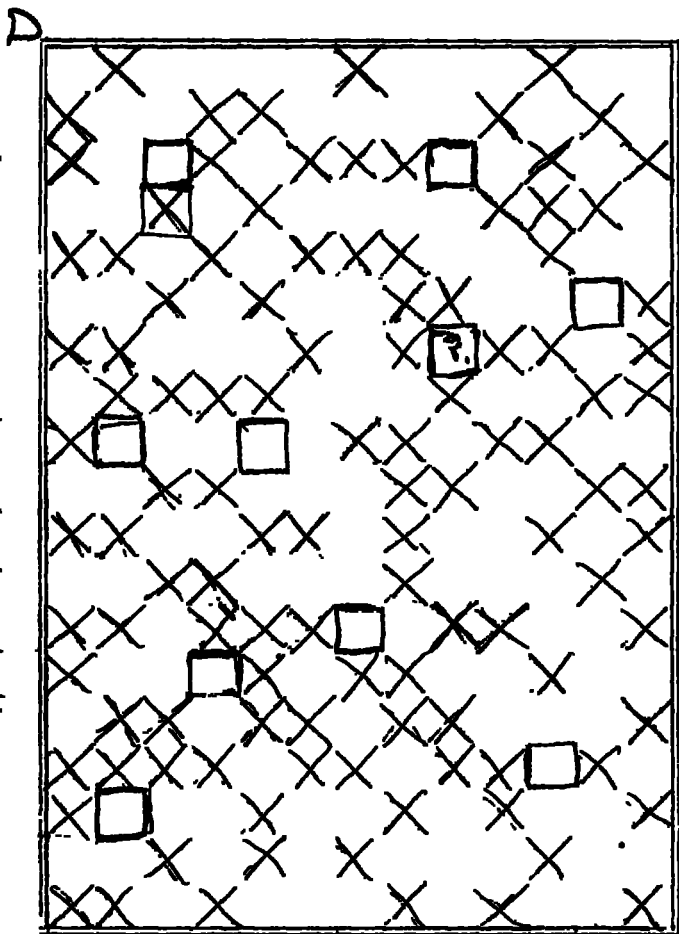
Key : 5- 7- 1-12- 8- 2-13-10- 6- 3-11- 4- 9

WEITEREFESTSTELLUNGENUEBAERZE
ITZUENDERBOMBDEACUFXF OFRISBANK
XFORISBANKXINSBESONDEREURHGEBE
RIMEINZELNENDRYINKGENDBERIQTEN
X

BDFH

5
2 and 82.
82
5
450

1 2 3 4 5 6 7 8 9 10 11 12 13



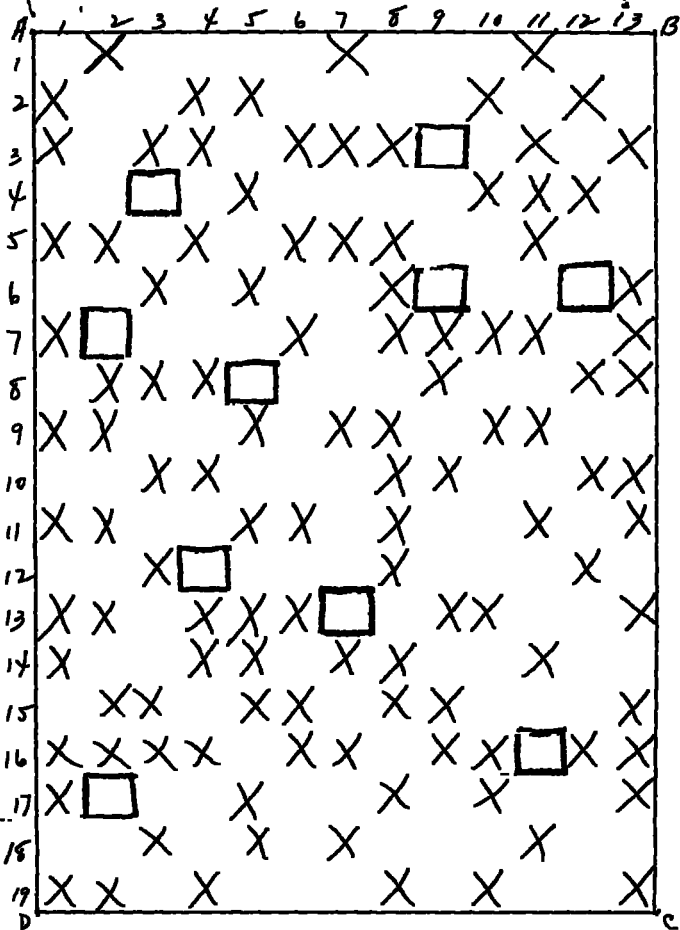
1
2
3
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19

A B C D E F G H

NOTES ON ATTACHED GRILL:

This is the grill used by the B R A J O B -
V O L C O people. The cells outlined in red indicate
that nulls are written into these places. The cells
crossed out indicate those in which letters cannot be
written. The bonifide letters of the message are writ-
ten in the diagram horizontally from left to right in
the cells not crossed out, and taken out in the manner
described in my memorandum of 4 April, 1941.

R. W. Gordon



1-4

B R A Z I L - G E R M A N Y

WAR DEPARTMENT INTERCEPTS OF BRAZILIAN END OF CIRCUIT

<u>Date</u>	<u>Key:</u>
May 24	?
26	?
28	14 17 8 4 15 16 9 10 1 3 11 12 13 7 18 5 19 6 2 20
29	
30	16 3 6 7 20 8 17 4 5 1 2 11 12 9 10 18 13 19 14 15
June 2	1 13 18 4 16 12 6 5 19 20 10 7 2 8 11 9 14 15 3 17
3	
4	
5	
6	13 5 1 20 6 2 16 14 17 7 8 3 11 18 15 4 12 9 19 10
9	9 10 3 13 1 12 4 19 20 14 5 17 7 2 11 15 8 16 18 6
10	6 4 11 13 19 16 14 20 7 9 1 12 17 2 8 10 3 15 5 18

First 20 letters are preamble.

<u>date</u>	<u>Time</u>	<u>NP LPT.</u>	<u>Page No.</u>
X X 1 X null	1	X X X	. . X

date

 ten