Excerpt of the TM 11-380, March 1944

9. INDICATORS.

a. *General*. Every message encipered with Converter M 209-(*) will be accompanied by certain indicators which are transmitted with the message. The purpose of these indicators is to show the deciphering operator what settings to make on his machine before deciphering that message. The various methods of determining and using the indicators are described in system publications.

b. *Types*. Three types of *indicators* are used. The number required will depend upon the system.

(1) The *system indicator* discloses to the receiving operator system which is in use. It will appear in the system publication or the signal operation instructions.

(2) The *message indicator* reveals to the deciphering operator the inital key wheel alignment which was used to encipher the message (par. 7a). In some systems this indicator will be enciphered before transmission to provide additional security.

(3) The *cipher-key indicator* designates the particular cipher-key list which was in effect at the time of encipherment. This indicator will appear in the SOI with the cipher-key lists.

c. *Use*. The following method of using the indicators is intended as an example for training purposes only:

(1) The system indicator is composed of two letters, such as FW. This system indicator desigates the method of cryptographing, and is placed as the first two letters of the first group of the indicators.

(2) The message indicator is taken from the six key wheels before encipherment is begun, by reading the letters which are aligned with the white bench mark. These six letters are divided in half, the first half forms the last three letters of the first indicator group, and the second half forms the first three letters of the second indicator group. These appear as

the first two groups of a message, and are sent in the clear. Assume, for example, that the initial key wheel alignment is QAHNKE. These letters make up the message indicator, and are wirtten in the form shown below.

(3) The cipher-key indicator will appear as two letters, such as LP, accompanying each cipher-key list. These letters are inserted as the last two of the second indicator group.

(4) The two indicator groups would be made up and transmitted as follows:

FW <u>QAH</u>   NKE <u>LP</u>
(1)   (2)   (3)

This is only a sample method of showing the indicators.

  d. The indicators will always be placed in the order shown above, and will be inserted before the first group of cipher text. They also appear (in the same order) as the last two groups of the message, following the last group of cipher text. The indicators must be added in pencil in both cases.