

### **34. Security Precautions for the Operator**

To maintain the security which Converter M-209 (\*) provides, the converter must be used in strict accordance with *all* prescribed procedure. The following rules must be carefully observed :

a. Select at random a new *message indicator* and system indicator for each message or message part enciphered.

(1) Never use an alinement found on the converter.

(2) Never use an alinement which results from returning the letter counter to zero.

(3) *Never use a message indicator which has been used on any other message.*

(4) *When a message must be re-enciphered for a service of for any other reason, never use the same message indicator or message alinement that was used for the first encipherment.* When a message has once been transmitted, it will never be re-enciphered unless the entire message is paraphrased according to instructions contained in AR 380-5; a new message indicator and system indicator must be selected.

b. Be very careful to avoid errors while deriving the message rotor alinement.

c. Never transmit the message rotor alinement.

d. Vary the space between words by omitting Z

between some words and enciphering one or two Z's between others.

e. Destroy all printed tape not pasted to a message blank.

f. To fill an incomplete final group, encipher a Z followed, if necessary, by different enciphered nulls.

g. If a message has stereotyped phraseology at the beginning or end, use authorized means of avoiding stereotypes.

h. Messages exceeding 100 groups in length must be divided into two or more approximately equal parts so that no part exceeds 100 groups.

i. Converter M-209-(\*) will never be used for SECRET traffic except when a system normally authorized for SECRET traffic is not available. When a SECRET message must be enciphered by means of Converter M-209-(\*), the CONFIDENTIAL key will be used and the word SECRET, set off by two X's on each side, will be buried in the text before encrypting.

j. Converter M-209-(\*) will not be used for CONFIDENTIAL traffic above the level of corps or comparable organization except as authorized by the Army Security Agency of the theater or the War Department.

k. Separate keys and separate key-list indicators will be provided at all times for CONFIDENTIAL and RESTRICTED traffic except within a division (or smaller tactical unit) preparing its own pin and

lug settings. In such units, the same pin and lug setting may be used for CONFIDENTIAL and RESTRICTED traffic and the key-list indicators omitted; all traffic will be considered CONFIDENTIAL unless otherwise specified within the body of the message. If a message is RESTRICTED the designation XX RESTRICTED XX Will be buried in the text before encrypting. When the key-list indicator is omitted, the system indicator will be substituted in its place, and will thus appear twice in the two five-letter indicator groups.

## **Section V. CAUSES AND CORRECTION OF GARBLES**

### **35. General**

Every code clerk should be acquainted with errors likely to occur in enciphering and handling messages, as an insurance against their occurrence in outgoing traffic; and every deciphering clerk should be able to test for these errors and correct them. In Converter M-209 messages, many of the more likely errors are easy to correct. Therefore, a reasonable amount of time spent in trying to decipher messages, which contain such errors, will prevent many services and result in increased communications efficiency and cryptosecurity. In the following paragraphs, the procedure to be applied in deciphering a