

OPERATING INSTRUCTIONS FOR LOCAL OPERATING SETSPreliminary.

1. See that paper is in printer and tape in keyboard and machine perforator.
2. Observe time and number stamps and see that they are properly set.
3. Turn on power by pushing white button of switch marked "T10-V" mounted in front of box attached to right leg of table.

Handling of Message.

1. Stamp message when received with time stamp.
2. Number message with number stamp just previous to perforating.
3. Count words in message.

Perforating a Short Message.

1. Read the settings of the "A" and "B" tapes.
2. Perforate the message in the following order:
  - (a) 6 line feeds.
  - (b) 6 letters representing the numerals of the tape settings (perforating the setting of the "A" tape first.)
  - (c) Letter designating cipher bureau.
  - (d) Figure shift.
  - (e) Cipher bureau serial number (always three figures).
  - (f) Space.
  - (g) The check (word count).
  - (h) Letters, line feed.
  - (i) Place from.
  - (j) Date
  - (k) Time filed.
  - (l) Carriage return, line feed.

- (m) Name to, destination, body of message, and signature, in accordance with standard operating routine.
  - (n) One line feed followed by 15 carriage returns.
3. Tear off tape.

Perforating a Long Message.

1. Read the settings of the "A" and "B" tapes.
2. Perforate the first sheet of the message in the following order:
  - (a) 6 line feeds. 10 line feeds
  - (b) 6 letters representing the numerals of the tape settings (perforating the setting of the "A" tape first). PPP TWP DCCS
  - (c) Letter designating cipher bureau. W
  - (d) Figure shift. 6
  - (e) Cipher bureau serial number (always three figures). 555
  - (f) Space. (3) Space
  - (g) The check (word count) followed by a space. (6) Figure (10) QR
  - (h) The number of the sheet followed by the sheet check, for example, 1/90. 2
  - (i) Letters, line feed.
  - (j) Place from.
  - (k) Date
  - (l) Time filed.
  - (m) Carriage return, line feed.
  - (n) Name to, destination, party of body of message, in accordance with standard operating routine.
  - (o) One line feed followed by 15 carriage returns.

3. Tear off the tape and encipher the first sheet as described below before perforating the second sheet.

4. After enciphering the first sheet read the settings of the "A" and "B" tapes.

5. Perforate the second sheet of the message as follows:

- (a) 6 line feeds.
- (b) 6 letters representing the numerals of the tape settings (perforating the setting of the "A" tape first).
- (c) Letter designating cipher bureau.
- (d) Figure shift.
- (e) Cipher bureau serial number (always three figures).
- (f) Space.
- (g) Sheet 2.
- (h) The number of the sheet followed by the sheet check, for example, 2/75.
- (i) Carriage return, line feed.
- (j) Part of body of message and if this is the last sheet, signature in accordance with standard operating routine.
- (k) One line feed followed by 15 carriage returns.

6. Tear off the tape.

7. If the message is long enough to require more than two sheets, each sheet after the first should be perforated as described for the second sheet. Each sheet should be enciphered before the following sheet is perforated. The signature will appear only on the last sheet.

Enciphering the Message.

1. Throw left hand key on front edge of shelf to position marked "off" (this switches off the ciphering transmitters handling tapes "A" and "B").
2. Throw right hand key on front edge of shelf to position marked "tape" (this switches on the machine perforator).
3. Insert the message tape in the message transmitter with the first line feed signal over the selecting pins. (The selecting pins in all transmitters should always be in their normal "up" positions before tapes are inserted and the levers on all transmitters should always be turned to the positions marked "start" and "on". Tape covers should be

pushed down gently to prevent puncturing the tape).

4. Pull out the black button at the right side of the key board. This starts the operation of the set.

5. Push in the black button at the right side of the key board when the first of the 6 letters designating the tape settings is over the line scratched on the message transmitter cover.

6. Throw left hand key on front of shelf to position marked "on".

7. Pull out black button at right side of key board (this starts the enciphering operation).

8. While the "carriage return" signals at the end of the message tape are running through the message transmitter, throw the left hand key on front edge of shelf to position marked "off". (This stops the ciphering transmitters).

9. Allow the set to run until at least 10 carriage return signals have been perforated by the machine perforator, then push in black button at right side of key board.

10. If message has only one sheet, tear off machine perforator tape. If message is more than one sheet, encipher the additional sheets in the same manner without tearing off machine perforator tape between sheets.

11. After checking the message by deciphering as described below, write the destination of the message on the outside of an envelope, fold the tape loosely and insert in envelope for delivery to the line operator.

#### Deciphering the Message.

All outgoing messages should be checked by deciphering before they are sent out. An outgoing or incoming message may be deciphered as follows:

1. Set the key tapes in their respective transmitters as indicated by the characters at the beginning of the message tape. (If a change is made from enciphering to deciphering incoming messages, settings of the enciphering tapes should be noted and written down so that they can be

reset to this position after the deciphering has been completed.)

2. Insert the message tape in the transmitter with the letter designating the cipher bureau over the selecting pins. (The selecting pins of all transmitters should always be in their normal "up" positions before the tapes are inserted and the levers on all transmitters should be turned to the positions marked "start" and "on". The tape covers should be pushed down gently to avoid puncturing the tape).

3. Throw left hand key on front edge of shelf to position marked "off".

4. Throw right hand key on front edge of shelf to position marked "print".

5. Observe printer and if necessary operate "C. R" and "L F" keys on printer to restore the carriage, and if the type wheel is in the shifted position restore it to the "letters" position by turning the "110-B" switch off and then on.

6. Pull out black button at right side of key board.

7. Push in black button at right side of key board when the first of the 6 characters designating the tape settings is over the line scratched on the cover of the message transmitter.

8. Throw left hand key on front edge of shelf to position marked "on".

9. Pull out black button at right side of key board and allow set to run until the message or sheet is completed. Push in black button to stop the operation of the set.

10. Feed up the paper on the printer and tear off. In the case of an incoming message, stamp the message with the date and time. In the case of an outgoing message, pin the deciphered copy to the original message and hold.

11. In case of long messages each sheet should be deciphered in the manner outlined above.