

TOPSECRET

TOP SECRET

ANALYSIS OF CCM KEYS

Case A: All wheels except right-hand wheel return to starting point after 338 steps. (Short cycle to left.)

Case B: All wheels except left-hand wheel return to starting point after 338 steps. (Short cycle on right.)

Case AB. All wheels return to starting point after 338 steps. (Short cycle.)

These cases occurred on the following dates:

| <u>Case A</u> | <u>Case B</u> | <u>Case AB</u> |
|---|--|-------------------|
| Feb. 13, 16, 19, 22, 26, 27. | Feb. 12, 17, 18, 19, 24, 28. | Feb. 19. |
| Mar. 3, 8, 10, 11, 15, 16, 21, 22, 24, 27, 29. | Mar. 1, 2, 7, 10, 12, 14, 19, 20, 24, 26, 30. | Mar. 10, 24. |
| Apr. 3, 4, 5, 8, 9, 13, 17, 20. | Apr. 2, 3, 4, 7, 9, 11, 12, 13, 18, 19. | Apr. 3, 4, 9, 13. |

In case A, it will be seen from consultation of CSP 1842(B) that key gives either

81R, 88, 89

(List A 1)

in middle or

80, 82R, 83, 87, 88

(List A 2)

on left. In case B it will be seen that the key gives either

81, 88R, 89R

(List B 1)

on middle or

80R, 82, 83R, 87R, 88R

(List B 2)

on right. Each case under AB involves either an A2 on left with B1 in middle or B2 on right or else B2 on right with A1 in middle or A2 on left.

ENCLOSURE (A)