## SYLLABARY (110-154 ciphertext pairs)

As with the ACA's Checkerboard, the row/column coordinates (CT) may be scrambled, the keysquare (pt) may be scrambled (by keyword and/or fill pattern), or the coordinates and Plaintext alphabet may both be scrambled. These variants are identified as "Unknown Coordinates, Known Keysquare," "Known Coordinates, Unknown Keysquare," and "Unknown Coordinates, Unknown Keysquare," respectively. "Known coordinates" should be entered using the sequence 0-9, left to right and top to bottom. A standard syllabary "alphabet" is shown in both mixed and unmixed forms in the appendices. Standard syllabaries for French and German ciphers can also be found in the appendices.

As when using 36-character alphabet in $6 \times 6$ Polybius Squares, digits must be placed immediately following their corresponding letters in the unmixed square. This convention applies to keyed alphabets as well, in which those elements of the "alphabet" not used in the keyword are placed into the square sequentially following the keyword elements.

An important feature of the syllabary cipher is the suppression of letter frequency and word patterns that are produced by many simple substitution ciphers. This is achieved by means of variant spellings (isologs) of the same plaintext. For example, using the keysquare below the plaintext element ORDERS RECEIVED could be encrypted in several ways:

|  | 6 | 7 | 1 | 9 | 4 | 3 | 2 | 5 | 0 | 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | C | 3 | H | 8 | AR | M | ING | P | RI | N |
| 5 | CE | A | $\mathbf{1}$ | AL | AN | AND | ARE | AS | AT | ATE |
| 0 | ATI | B | 2 | BE | CA | CO | COM | D | 4 | DA |
| 2 | DE | E | $\mathbf{5}$ | EA | ED | EN | ENT | ER | ERE | ERS |
| 3 | ES | EST | F | $\mathbf{6}$ | G | $\mathbf{7}$ | HAS | HE | I | $\mathbf{9}$ |
| 4 | IN | ION | IS | IT | IVE | J | $\varnothing$ | K | L | LA |
| 1 | LE | ME | ND | NE | NT | O | OF | ON | OR | OU |
| 6 | Q | R | RA | RE | RED | RES | RO | S | SE | SH |
| 7 | ST | STO | T | TE | TED | TER | TH | THE | THI | THR |
| 9 | TI | TO | U | V | VE | W | WE | X | Y | Z |

Unknown coordinates, Unknown Keysquare

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pt: o r d e r s r e c e i v e d
CT: 13 67 05 27 67 65 67 27 86 27 30 99 27 05
pt: or de r s re ce ive d
CT: 10 26 67 65 6956 44 05
pt: or d er s re ce i ve d
CT: 10 05 25 65 69 56 30 94 05
pt: o r de r s r e c e i v ed
CT: 13 67 26 67 65 67 27 86 27 30 99 24
```

