SLIDEFAIR (key length times 10-18 lines deep)
Enciphering is done in pairs. A keyword is used to fix the period. Period length is the length of the keyword. The first plaintext letter is found in the top alphabet and the second in one of the lower alphabets, depending on which letter of the keyword is in use. The plaintext pair is thought of as forming diagonally opposite corners of a rectangle. The letters from the other corners are the substitutes, that from the top taken first. If the letters form a vertical pair in the alphabets, the cipher equivalent is the pair just to the right.

## Abbreviated Vigenère Table:

A ABCDEFGHIJKLMNOPQRSTUVWXYZ
B BCDEFGHIJKLMNOPQRSTUVWXYZA

## Abbreviated Variant Table:

> A A B CDEFGHIJKLMNOPQRSTUVWXYZ

B Z A B C DEFGHIJKLMNOPQRSTUVWXY

## Abbreviated Beaufort Table:

A ABCDEFGHIJKLMNOPQRSTUVWXYZ
B B A ZYXWVUTSRQPONMLKJIHGFEDC
For example: Using the abbreviated tables found above, if the key letter is $\mathbf{B}$, then

|  | Vigenère CT | Variant CT | Beaufort CT |
| :--- | :---: | :---: | :---: |
| pt ca becomes | ZD | BB | BZ |
| pt de becomes | EF | FC | XY |

The following example uses Vigenère encipherment.

## Key: DIGRAPH

pt: The Slidefair can be used with Vigenère , Variant or Beaufort.

K: $\quad$| D | $\mathbf{I}$ | $\mathbf{G}$ | $\mathbf{R}$ | $\mathbf{A}$ | $\mathbf{P}$ | $\mathbf{H}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

pt: th es li de fa ir ca
$n b$ eu se dw it hv ig
en er ev ar ia nt or

CT: |  | EW | KM | CR | NU | AF | CX | TJ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | YQ | MM | YY | FU | TI | GW | ZP |
|  | KH | JM | PK | BS | AI | EC | KV |
|  | CF | MI | IL | CI |  |  |  |

CT:
EW KM CR NU AF CX TJ YQ MM YY FU TI GW ZP KH JM PK BS AI EC KV CF
MI IL CI.

