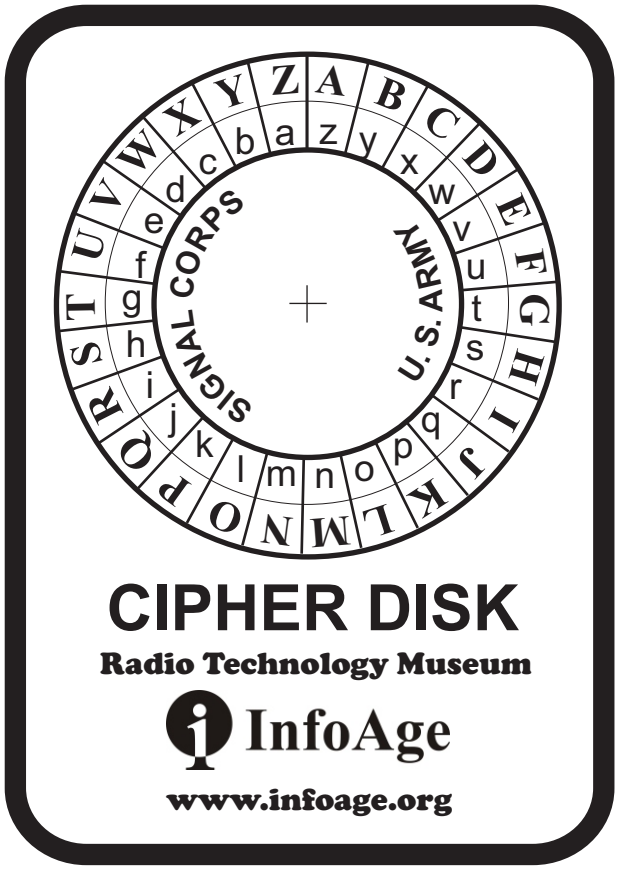
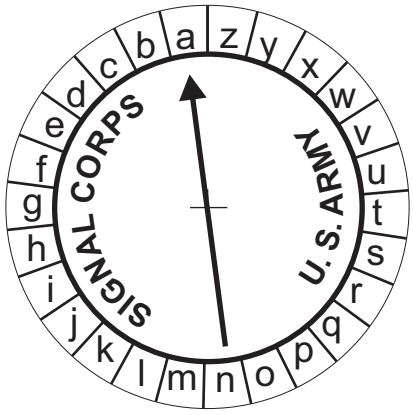
U. S. Army Signal Corps Code Wheel - 1912

Here's a reproduction of an actual code device used by the U. S. Army in the early Twentieth Century. It was based on a device made by J. Hicks in London in the 1890's. It's simple to build, and quick and easy to use, but don't count on it providing anything but the lowest level of security.

Glue the artwork to a piece of thin cardboard. Cut out the code card and the disk. Push a thumbtack through the center mark on the card from the back, and install the disk on the tack. Push a small piece of wood or a pencil eraser on the end of the tack.





To encode a message, point the arrow to the Key Letter of the Day. Find the letter to be encoded on either the inside or outside circle, and write down the adjacent letter. Then move on to the next letter. Because of the way the device is laid out it doesn't matter whether one works from the inner circle to the outer circle, or *vice versa*.

To decode a message, point the arrow to the Key Letter of the Day. Then look up and write down the decoded letters.

Here's a test message. The key is "M" for Marconi:

REUET EZHYMGI UYYZ

This is a simple transposition cipher. For better security research **Vigenère cipher**.
A .pdf of this document is on the "resources" page here: **www.rtm.ar88.net**

DECIPHER SECRET MESSAGES

Using the InfoAge Cipher Disk

MESSAGE 1 – A simple “Caesar Cipher”

KEY = M

1. Set the pointer on the cipher disk to “M,” and keep it there
2. Translate each encoded letter and write it down.
3. It makes no difference whether you work from the inner ring to the outer or *vice versa*.

CIPHER TEXT: Q I B K Y A I T Y E Z H Y M G I

PLAIN TEXT: _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

MESSAGE 2 – A Vigenère (running key) cipher that’s much more secure. Spaces are omitted to further hide the contents.

KEY = INFOAGE

1. Set the pointer on the cipher disk to the first letter of the key “I”
2. Decode the first letter.
3. Set the pointer to “N,” the next letter in the key
4. Decode the second letter.
5. Continue as above repeating the key as often as necessary.

KEY: I N F O A G E I N F O A

CIPHER TEXT: I U M O Y W E P K F S N

PLAIN TEXT: _ _ _ _ _ _ _ _ _ _ _ _ _