MysteryTwister C3

THE CRYPTO CHALLENGE CONTEST

Pigpen with a "twist" – Part 1

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This is part 1 of a challenge involving a polyalphabetic cipher which makes use of the well known Pigpen substitution cipher.

We exploit the rotational relationship between the Pigpen symbols in order to make a nice (and questionably simple) polyalphabetic substitution cipher.

The kind of cipher we are going to use in this challenge could be developed for any substitution cipher in which the ciphertext symbols have similar rotational/reflectional relationships.

The cipher works as follows:

1. Take a plaintext p_1 p_2 ... p_k and encrypt it using the Pigpen cipher to get symbols s_1 s_2 ... s_k.
2. Next choose a string of integers n_1 n_2 ... (either at random or from a specific source). This string should preferably be as long as the plaintext or longer. If it is shorter, repeat the string to get a string that is long enough, in true vigenere fashion.
3. Reduce each n_i modulo 4 to get a number m_i in the set $\{0,...,3\}$. The string m_1 m_2 ... is the "rotation key"
4. Rotate each symbol s_i by $90 \cdot m_i$ degrees anti-clockwise
5. Decrypt the resulting string of Pigpen symbols back into letters. This is the ciphertext c_1 ... c_k

For this part of the challenge we use the standard Pigpen setup and a rotation key that is non-periodic (but has a meaning).
Find the plaintext and the required codeword. Both are in English.
Please enter the codeword in capital letters.

Ciphertext:
VBECOBEXORBFKRVHISCBALJENGEIUUFEAREEORETSELLER
RETENUINCVDEGOLFENIONVUANUZHKSEDAGIVUMQFURMF
OSRRPKUCBETHEPKTATIONMEY