Young Tyros Newsletter
April 2011

IRS April Foolery in Ciphertext   *Contribution of Personal Solving Technique

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*<u>C</u>ontribution <u>O</u>f <u>P</u>ersonal <u>S</u>olving <u>T</u>echnique – Unknown Cipher Types   GGMA

Larry Mayhew (AAHJU) Cm Computer Columns, 2001-2002. This list contains several key articles that have taught me a lot concerning unknown ciphers and the Period Determination of cipher types. I pulled this list from the Cm CD doing a search on "Mayhew." MA2001 - Phillips Cipher, MJ2001 - Digraphs - Amsco and Portax, JA2001 - Identifying Portax Unknown, SO2001 - Diagnosing unknowns, Vigenere, Slidefair, and Autokey. ND2001 - Loose ends, MA2002 - Identifying and solving progressive ciphers, MJ2002 - Identifying Nicodemus, ND2002 - Identifying an unknown Amsco.

(Editor's Note – Do not ignore *The ACA and You Handbook* guidelines as an excellent reference point for Cipher Period requirements. The JF, E-20 Myszkowski length reveals only one possible Period size.

Crypto Web Site – Learning About Cryptography http://www.ciphersbyritter.com/LEARNING.HTM ZANAC

Free Code and Cipher Books

Publications in our Young Tyro Library, available to new Young Tyro members, free of charge. Send LIONEL, name, address, age and three Nom choices of the new member. You may select a book, or we will pick one suitable for age. Members under twelve years of age will receive the bimonthly Junior Newsletter edition with cipher solving prize opportunities; twelve years and older will receive this Newsletter and its referenced constructions, upon request.

Alvin's Secret Codes – Hicks	*Codes and Ciphers* - Callery	*Codes and Secret Writing* – Zim
Cryptanalysis – Helen Gaines	*Crypto & Spygrams* – Gleason	*Codes, Secret Writing* – Gardner
Cryptography – Dwight Smith	*Find Out About Secret Codes* – Beal	*Fun with Secret Writing* - Lamb
Invitation to Cryptograms –Williams	*Mad Scientists Club* – Brinley	*Mathemagic* – Heath
Mental Magic – Martin Gardner	*Mysterious Messages* – Blackwood	*Perplexing* Puzzles – Gardner

Gimme A Break – JF Aristocrats   (may be digraphs / trigraphs)   (1) unless otherwise stated

A-1, that, the (4), A-2, the (3), A-3, the (2), A-4, the (4), A-5, the (3), A-6, the (2), A-7, the (3), A-8, the (2), A-9, that, the (2), to (2), A-10, Famed sleuth, A-11, Pattern words (PW) lead to alliteration, A-12, th (3), A-13, PW, A-14, PW, A-15, a, the, when, A-16, PW, YFOOFC, A-17, PW, CRRCZJ, A-18, ing (3), A-19, ing, I'm, A-20, change, A-21, with, A-22, er(2), A-23, er (3), A-24, among, on (2), A-25, biker, er (2)

JF Patristocrat Ciphers – (may be digraphs / trigraphs)   (1) Unless **otherwise stated**

P-1, you (2), P-2, who (3), P-3, the (3), P-4, th (4), that, P-5, the (3), P-6, th (2), that, P-7, that, the, P-8, the (2), P-9, our (2), P-10, er (3), P-11, er (2), in (3), P-12, it is (2), th (3), the, P-Sp-1, I = o, P-Sp-2, in (6), inc (2), ins (2)

JF A-11. The Marrying Kind. K2 (78)   DYETI

Only one pattern word for each of the first two plaintext words will allow all common letters to fit both words.

JF P-8. They're All Heart. K3. (104/21) (ZLIMN)   **OZ**
 Crib indicates the possibility that quotation might be in order. Fit at beginning or end of plaintext.

JF X-7. ??? K2 (101)   Winter on the farm.   **GGMA**

X-Sp-1. Navajo K2. Big Tower. (178) (English Key) (ayooatejj)   BION   Analyst   GGMA
The crib fits in only one place and is a lead to the deciphering of ciphertext CJF, a highly common English three letter
word. The key to solving this one is the K2 English keyword alphabet. The crib provides:

Pt: T_____OY_A____E___I_____   PQRST is a given. KLMNOP is an almost given.
K2:K###P###T#####H####B####I#   English key a single word beginning with H.

JF E-1. Complete Columnar. (certain) Check *ACA and You Handbook* guidelines for proper Period. **AURION**

JF E-2. Railfence. Legal Origins.   (except)   Many rails, no offsets.   **RIG R. MORTIS**

JF E-7. Unknown. Perspective. (animus) Vigenere type cipher.   **SCRYER**

JF E-10. Amsco.   Self-absorption.   (sixty we discover)   Period Seven   **EL CONDOR**

JF E-11. Quagmire I. Most are small. (about a tenth of the thickness)   About cells. Period Nine   **BION**

JF C-11. Cube Root. (Two words, 9-0)   **THE DOC**
Look at how many letters can be recovered without knowing anything about cube roots. O and D must = 4 and 6
because 4 x 4 x 4 = 64. Y = zero since O - O and P – P = zero. T = 2 since D (6) – T (2) = O (4). E = 3 since E – T =
zero. W = 9 since W (9) – D (6) = E (3). Six of the ten letters are simply determined.

JF C-11. Sudoku. (Two words)   Solution in column four.   **APEX DX**

JF AC-972. ??? Sobering thought. (71) Many rails, four offsets, Railfence or Redefence.   **THE RAT**

MA A-22. Insect story. Unkeyed. (93)   **BION**
Most popular digraph appears twice. Concentrate on trigraph ending in ciphertext words SUPER and PER.

MA E-6. Tridigital. Sentimental closure. (ZLWK)   **LIONEL**
Look for the most popular trigraph to occur in the first two words of plaintext.

MA E-8. Redefence. Divine right. (were)   **RIG R MORTIS**
Five rails, two offsets, begins with most popular digraph.

MA E-9. Incomplete Columnar. Non-Euclidean philosopher. (somewhere)   **REVLOS DALG**
ACA and You Handbook defines this construction ciphertext length as a Period Eight or Nine.

MA E-20. Bazeries. Wise words.   (knowledge)   **THE DOC**
Keyblock must begin **SIXT** or **NIET.** P must = k. Only two "k's" in plaintext.

Sunny Ciphering,
            LIONEL   cc: ACA Executive Board