

Problem of the Week #26

Assigned: 28 APR 11, 1300

Due: 05 MAY 11, 1300

The Cryptographer

MAJ Vanatta has just finished a groundbreaking paper on cryptography and needs to send a hardcopy of the final draft to her advisor in California. She knows there are other, lesser cryptographers closely monitoring her communications and would love to obtain her work and attempt to take credit for it before it is published, so she purchases a huge, impenetrable lock box (made from depleted uranium) with multiple lock hasps to provide maximum security to her document for the shipment.

Her problem is that, while plutonium locks that are impossible to pick are widely available, she has no secure way to get the keys to her advisor (any keys she sends will, no doubt, be copied by her enemies).

It is the middle of the academic year and neither she nor her advisor can take leave of their professional duties. How can MAJ Vanatta securely send her document?

Email solutions to Christopher.marks@usma.edu with subject line: POTW.

Solutions can be emailed in the form of: an email (plain text) no attachment, a word document, a mathematica file, an excel workbook, or a scanned adobe file of your work.

If none of these options work for you, you may drop a hardcopy off at my office TH239C, just annotate the time of submission.