

Kryptos 8, Challenge 2: Solution

A few observations:

- The plaintext most likely has something to do with Stephen Hawking.
- The invitation mentions a “grille”, which may look like a typo but a grille is a method of encipherment. In particular, there is an enciphering device called a turning grille.
- The grid is divided into four symmetric regions with each region containing cells numbered 1 – 16. If the grid is rotated 90 degrees (or 180 or 270), the cell numbers match up. This provides further evidence that a turning grille may have been used.
- The “map” has three copies of the shape of the “grid” and if one looks closely, they appear to be numbered 1 [upper left], 2 [lower left], and 3 [right]
- All letters inside these three shapes are in uppercase, leading one to believe they are the ciphertext.
- The directions “1, 1R, 2RR, etc.” could refer to which shape to place the grille over and how many times it should be rotated in order to read the plain text.
- Looking at shape #2, the third and fourth lines appear to contain “Stephen” and one can also find the letters in “Hawking” later in this same shape.

Goal: We expect some sort of turning grille was used, so we need to decide which of the cells in the “grid” are removed so the plain text shows through when the grid (or grille) is placed over top.

Procedure:

1. Focusing on shape #2, which the directions say the grille will be placed with no rotations, there are many ways to construct “STEPHEN” reading left to right (top to bottom, as usual). So, let’s begin with “HAWKING”.
2. There are a couple of “W”s followed by a couple of “K”s followed by a couple of choices for “I” and then possibly just one choice for “N” and “G”.
3. The “N” and “G” are in cells marked 7 and 6. One can choose a “W”, “K”, and “I” in cells marked 3, 14, 18 respectively. This is promising as we know Hawking died on 3-14-18 at the age of 76. Thus we expect that the grille has the following cells removed:

