# Three if by Flagship

<div align="right">by Eli Barrieau</div>

One possible way to deduce the positions of all of the stars is as follows (in the following, columns are lettered *a–j* left to right, and rows are numbered *1–10* top to bottom):

1. By Clue 3, *a1, b1, d1, e1, f1, g1, h1, i1, j1, c2*, and *c3* are empty, and by Clue 9, *a8, a9*, and *a10* are empty.

2. The star mentioned in Clue 1 can only be at *j10* (*i1* and *a10* are empty, and any other location would prevent Vantage Point 1 seeing 17 empty squares). Thus, by Clue 1, *i2, i3, i4, i5, i6, i7, i8, i9, b10, c10, d10, e10, f10, g10*, and *h10* are empty.

3. By Clue A, since column *i* is empty and column *j* is not, *h* must be the other empty column, so *h2, h3, h7, h8*, and *h9* are empty. So the stars Vantage Point 4 sees are to its right at *j4* and to its left at either *d4, e4, f4*, or *g4*, and the latter implies that Vantage Point 6 sees a star to its right, so by Clue 6 *a4* and *b4* are empty.

4. Column *j* now has two stars (at *j4* and *j10*), so by Clue E, *j2, j3, j5, j6, j7*, and *j9* are empty.

5. The only square adjacent to Vantage Point 7 that it can't see and that is not known to be empty is *c8*, so by Clue 7 there is a star there, and by Clue B, *b7, c7, d7, b8, d8, c9*, and *d9* are empty.

6. To let Vantage Point 2 see to the bottom of the swath *f7, f8*, and *f9* must be empty, and to let Vantage Point 5 see ten empty squares *e8* and *g8* must be empty. Thus, the two stars Vantage Point 10 sees are at *e9* and *g7*.

7. The two stars Vantage Point 2 sees must now be to its left, at *e6* (so *e5, f5*, and *e7* are empty by Clue B), and above it, at *f4* (so *e3, g3, e4*, and *g4* are also empty by Clue B). We now know the two-star columns and row from Clue A are column *e*, column *j*, and row *4*, so to avoid having others *f2, g2, a6*, and *b6* must be empty, and to avoid having three stars in a column or row *e2* and *d4* must be empty.

8. By Clue C, the left hole has another star touching it other than the one at *e6*, so there must be a star at *b5*, and *a5* is empty by Clue B and *b2* and *b3* are empty to keep column *b* from having two stars. So the second star adjacent to Vantage Point 6 is in *d3*, and *d2* and *a3* are empty to keep column *d* or row *3* from having two stars. Thus, the second star Vantage Point 9 sees is at *a2*, and we are done.

Hence, the stars are at the locations shown here; the letters in these locations (read left to right and top to bottom) spell out the answer:
**USED SHEARS**

|    | a | b | c | d | e | f | g | h | i | j |
|----|---|---|---|---|---|---|---|---|---|---|
| 1  | S | H | 3 | A | R | K | S | K | I | N |
| 2  | ☆U | L | T | R | A | S | U | E | D | E |
| 3  | W | A | I | ☆S | T | 8 | B | A | N | D |
| 4  | C | A | 6 | R | P | ☆E | T | 4 | E | ☆D |
| 5  | A | ☆S |   |   | C | O |   |   | T | S |
| 6  | O | C |   | ☆H | 2 |   |   |   | R | E |
| 7  | 9 | C | A | S | H | M | ☆E | R | E | S |
| 8  | S | P | ☆A | N | G | L | I | N | G | 5 |
| 9  | F | 7 | I | B | ☆R | A | 10 | N | N | E |
| 10 | C | O | R | D | U | R | O | Y | 1 | ☆S |