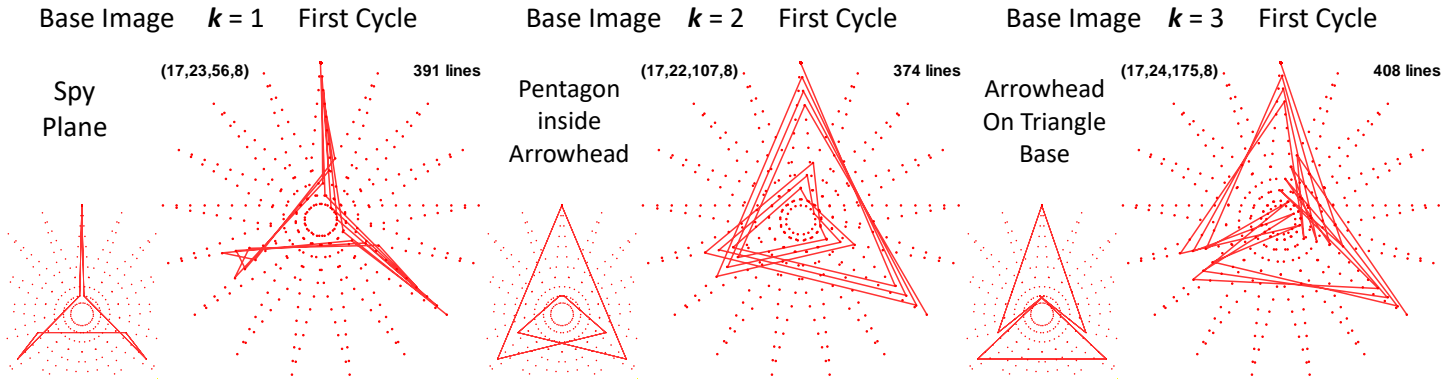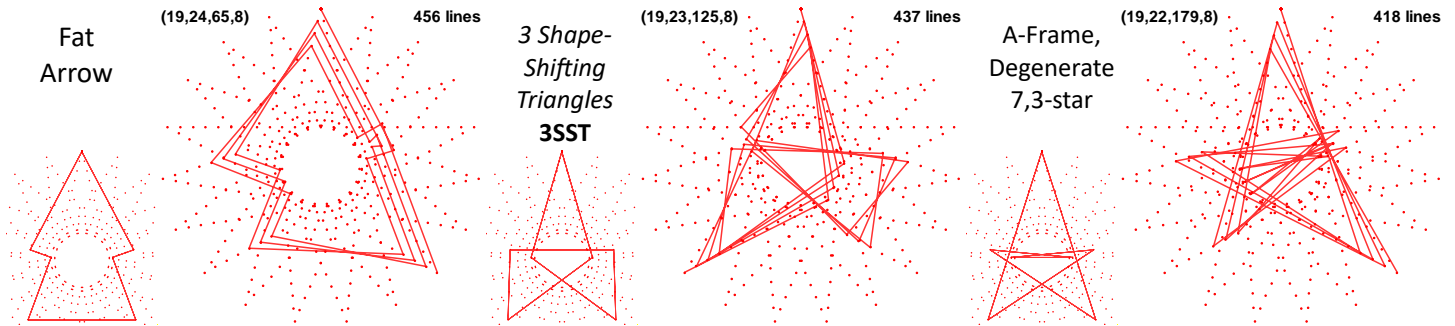# Four Sets of *Single-Cycle* 7-line Images Beyond 7-Point Stars

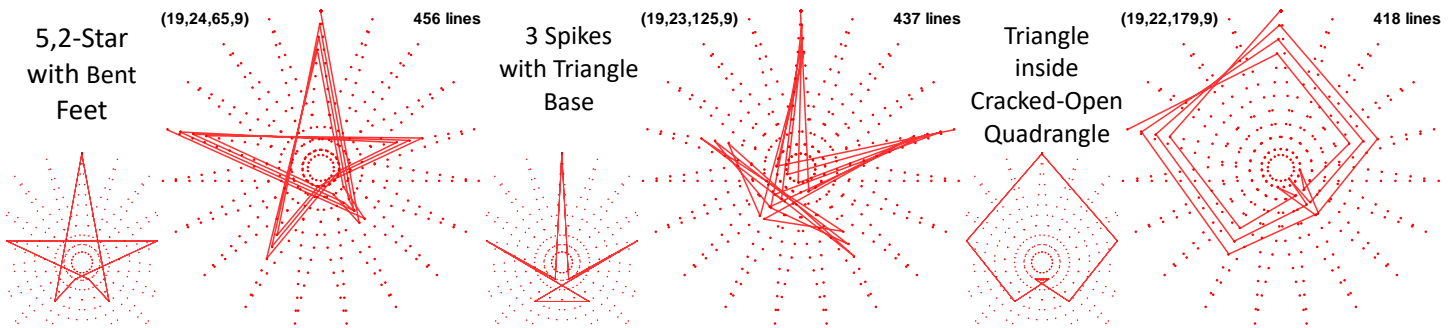When **J** is small relative to **n**/2 we typically see some form of a 7,**b**-star but if **J** is close to **n**/2 more complex images often emerge. These images come in sets of three for reasons discussed [here](#). The **k** = 1 version will not always produce the image shown if **n** and **J** change. Instead, they rotate in a set of three, whichever base image they start from. The first **S** lines (cycle) of the nearest *single-step* **S** > 21 is shown to highlight the structural distortion pattern to the base image.
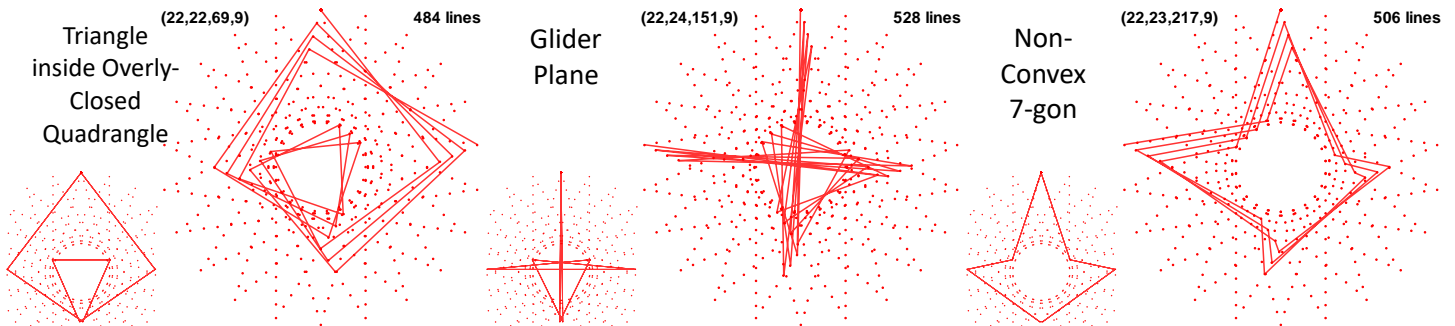
Base Image	**k** = 1	First Cycle	Base Image	**k** = 2	First Cycle	Base Image	**k** = 3	First Cycle

Spy Plane — (17,23,56,8) 391 lines

Pentagon inside Arrowhead — (17,22,107,8) 374 lines

Arrowhead On Triangle Base — (17,24,175,8) 408 lines

This row is like **n** = 3**J**-7 for **J** < **n**/2 and **J** not divisible by 7, starting at **J** = 8. Also (59, 29).

Fat Arrow — (19,24,65,8) 456 lines

3 Shape-Shifting Triangles **3SST** — (19,23,125,8) 437 lines

A-Frame, Degenerate 7,3-star — (19,22,179,8) 418 lines

This row is like (**n,J**) pairs: (8,3), (11,5), (19,8), (25,12), (27,11), (29,10), (30,13), (31,15), (36,17), (53,19), (53,26), (59,23).

5,2-Star with Bent Feet — (19,24,65,9) 456 lines

3 Spikes with Triangle Base — (19,23,125,9) 437 lines

Triangle inside Cracked-Open Quadrangle — (19,22,179,9) 418 lines

This row is like these (**n**, **J**) pairs: (19, 9), (23, 11), (24, 11), (29, 13), (33, 16), (34, 15), (37, 18), (53, 24), (59, 25), (59, 27).

Triangle inside Overly-Closed Quadrangle — (22,22,69,9) 484 lines

Glider Plane — (22,24,151,9) 528 lines

Non-Convex 7-gon — (22,23,217,9) 506 lines

This row is like these (**n**, **J**) pairs: (9, 4), (13,5), (17,6), (22, 9), (24, 11), (31, 13), (43, 16), (53, 22).