WHAT IS CLAIMED IS:

1. A system, comprising:

   at least one unmanned aerial vehicle (UAV) (101);

   at least one flight control computer (FCC) (110) associated with each UAV of the at least one UAV, wherein the FCC controls movement of each UAV of the at least one UAV;

   at least one computing device (108) associated with a ground control station (104), wherein the at least one computing device is in communication with the at least one FCC;

   wherein the at least one FCC maintains a first flight pattern (103) of a respective UAV of the at least one UAV above the ground control station;

   wherein the at least one computing device is configured to transmit a transition signal (168) to the at least one FCC to transition the respective UAV of the at least one UAV from the first flight pattern to a second flight pattern (105) in response to a wind speed exceeding a set threshold relative to a flight speed of the respective UAV of the at least one UAV;

   wherein the first flight pattern is a D-loop flight pattern; and

   wherein the second flight pattern is a figure-eight flight pattern.

2. The system of claim 1, wherein the FCC is further configured to transition the respective UAV of the at least one UAV from the first flight pattern to the second flight pattern by generating a connecting flight path (182) between the first flight pattern and the second flight pattern.

3. The system of claim 2, wherein the connecting flight path allows for a constant turn rate over most of the connecting flight path.

4. The system of claim 2, wherein the connecting flight path allows for gradual banking maneuvers over most of the connecting flight path.

5. The system of claim 1, wherein the first flight pattern and the second flight pattern are station keeping patterns over the ground control station.

6. The system of claim 1, wherein the transition signal comprises a set of spatial coordinates for the FCC of the respective UAV of the at least one UAV to follow.

7. The system of claim 1, wherein the at least one computing device is configured to transmit an exit command signal (168) to the at least one FCC to transition the respective UAV of the at least one UAV from the second flight pattern to the first flight pattern in response to a wind speed falling below the set threshold relative to the flight speed of the respective UAV of the at least one UAV.

8. The system of claim 7, wherein the exit command signal comprises a set of spatial coordinates for the FCC of the respective UAV of the at least one UAV to follow.

9. A method comprising:

maintaining, by at least one flight control computer (FCC) (110) associated with each unmanned aerial vehicle (UAV) (101) of one or more UAVs, a first flight pattern (103) above a ground control station (104), wherein the FCC controls movement of each UAV of the at least one UAV;

determining a wind speed relative to a set threshold, wherein the set threshold is relative to a flight speed of the respective UAV of the at least one UAV;

transmitting, by at least one computing device (108) associated with the ground control station, a transition signal (168) to the at least one FCC in response to the determined wind speed exceeding the set threshold; and

transitioning, by the at least one FCC (110) associated with the respective UAV of the one or more UAVs, the respective UAV from the first flight pattern to a second flight pattern (105);

wherein the first flight pattern and the second flight pattern are station keeping patterns over the ground control station.

10. The method of claim 9, wherein transitioning the respective UAV from the first flight pattern to the second flight pattern further comprises:

generating, by the at least one FCC associated with the respective UAV of the one or more UAVs, a connecting flight path (182) between the first flight pattern and the second flight pattern.

11. The method of claim 10, wherein the connecting flight path allows for a constant turn rate over most of the connecting flight path.

12. The method of claim 10, wherein the connecting flight path allows for gradual banking maneuvers over most of the connecting flight path.

13. The method of claim 9, wherein the first flight pattern is a D-loop flight pattern.

14. The method of claim 13, wherein the second flight pattern is a figure-eight flight pattern.

15. The method of claim 9, wherein the transition signal comprises a set of spatial coordinates for the FCC of the respective UAV of the at least one UAV to follow.

16. The method of claim 9, further comprising:

transmitting, by the at least one computing device associated with the ground control station, an exit command signal (168) to the at least one FCC in response to the determined wind speed falling below the set threshold; and

transitioning, by the at least one FCC associated with the respective UAV of the one or more UAVs, the respective UAV from the second flight pattern to the first flight pattern (105).

17. The method of claim 16, wherein the exit command signal comprises a set of spatial coordinates for the FCC of the respective UAV of the at least one UAV to follow.