CLAIMS:

What is claimed is:

1. A system comprising:

an unmanned aerial vehicle (UAV);

one or more inner wing panels of the UAV;

one or more outer wing panels of the UAV, wherein the one or more outer wing panels are disposed on either side of the one or more inner wing panels, and wherein the one or more outer wing panels are disposed at an upward angle to a plane formed by the one or more inner wing panels;

at least one inboard propeller attached to at least one engine disposed on the one or more inner wing panels;

at least one tip propeller attached to at least one engine disposed on the one or more outer wing panels;

at least one microcontroller in communication with the at least one engine disposed on the one or more inner wing panels, wherein the at least one microcontroller is configured to:

determine an angular position of the at least one inboard propeller; ~~and~~

send a signal to halt rotation of the at least one inboard propeller such that the at least one inboard propeller is held in an attitude that provides for clearance of the propeller blade to the ground upon landing; and wherein that at least one inboard propeller would strike the ground during rotation of the at least one inboard propeller when the UAV is on the ground.

2. The system of claim 1, wherein the UAV is a high altitude long endurance aircraft.

3. The system of claim 1, further comprising a solar array covering at least a portion of the one or more inner wing panels and the one or more outer wing panels.

4. The system of claim 1, further comprising:

one or more landing pods of the UAV, wherein the one or more landing pods are attached to the one or more inner wing panels of the UAV to assist in landing of the UAV.

5. The system of claim 4, wherein a distance from a center of a propeller hub to a tip of the at least one inboard propeller is greater than a height of the one or more landing pods~~, and wherein the at least one inboard propeller would strike a ground during rotation of the at least one inboard propeller when the UAV is on the ground~~.

6. The system of claim 5, wherein the at least one outboard propeller is identical to the at least one inboard propeller, and wherein the at least one outboard propeller can freely rotate when the UAV is on the ground.

7. The system of claim 1, further comprising:

a position sensor in communication with the microcontroller, wherein the position sensor detects a position of the at least one inboard propeller.

8. The system of claim 7, wherein the position sensor is a Hall-Effect rotary position sensor.

9. The system of claim 1, wherein the at least one microcontroller is further configured to:

determine an altitude of the UAV; and

send the signal to halt rotation of the at least one inboard propeller if the determined altitude is below a threshold altitude.

10. The system of claim 9, wherein the at least one microcontroller is further configured to:

send a signal to adjust rotation of the at least one outboard propeller while the at least one inboard propeller is held in ~~an~~ the attitude that provides for clearance of the propeller blade to the ground.

11. The system of claim 1, wherein the at least one microcontroller is further configured to:

determine an altitude of the UAV; and

send a signal to start rotation of the at least one inboard propeller if the determined altitude is above a threshold altitude.

12. A method comprising:

determining, by at least one microcontroller, an altitude of an unmanned aerial vehicle (UAV);

determining, by the at least one microcontroller in communication with at least one engine of thea UAV, an angular position of ~~the~~ at least one inboard propeller connected to the at least one engine, wherein the at least one inboard propeller is disposed on one or more inner wing panels;

sending, by the at least one microcontroller, a signal to halt rotation of the at least one inboard propeller such that the at least one inboard propeller is held in an attitude that provides for clearance of ~~the~~ a propeller blade to ~~the~~ a ground upon landing if the determined altitude is below a threshold altitude; and

wherein the at least one inboard propeller would strike ~~a~~ the ground during rotation of the at least one inboard propeller when the UAV is on the ground.

13. The method of claim 12, further comprising:

sending, by the at least one microcontroller, a signal to adjust rotation of at least one outboard propeller connected to at least one engine while the at least one inboard propeller is held in ~~an~~ the attitude that provides for clearance of the propeller blade to the ground upon landing wherein the at least one outboard propeller is disposed on one or more outer wing panels.

14. The method of claim 13, wherein the at least one outboard propeller is identical to the at least one inboard propeller, and wherein the at least one outboard propeller can freely rotate when the UAV is on the ground.

15. A system comprising:

an unmanned aerial vehicle (UAV);

at least one inboard propeller attached to at least one engine of the UAV,

wherein at least a portion of the at least one inboard propeller would contact a surface during rotation of the at least one inboard propeller when the UAV is located on the surface;

at least one tip propeller attached to the at least one engine of the UAV,

wherein the at least one tip propeller can rotate freely without contacting the surface during rotation of the at least one tip propeller when the UAV is located on the surface;

at least one microcontroller in communication with the at least one engine,

wherein the at least one microcontroller is configured to:

determine an angular position of the at least one inboard propeller; and

send a signal to the at least one inboard propeller such that the at least one inboard propeller is held in an attitude that provides for clearance of the propeller blade to the surface.

16. The system of claim 15, wherein the at least one microcontroller is further configured to:

send a signal to the at least one tip propeller to adjust a thrust to guide the UAV in for landing while the at least one inboard propeller is held in ~~an~~ the attitude that provides for clearance of the propeller blade to the ~~ground~~surface, wherein the at least one tip propeller retains lateral control of the UAV during landing.

17. The system of claim 15, wherein the at least one microcontroller is further configured to:

send a signal to the at least one tip propeller to adjust a thrust to guide the UAV for take-off while the at least one inboard propeller is in ~~an~~ the attitude that provides for clearance of the propeller blade to

the ~~ground~~surface, wherein the at least one tip propeller retains lateral control of the UAV during take-off; and

send a signal to the at least one inboard propeller after take-off such that the at least one inboard propeller starts rotation.

18. The system of claim 15, further comprising:

one or more landing pods to assist in the safe landing of the UAV at the surface, wherein a distance from a center of a propeller hub to a tip of the at least one inboard propeller is greater than a height of the one or more landing pods, and wherein the distance from the center of the propeller hub to the tip of the at least one tip propeller is greater than or equal to a height from the center of the propeller hub of the at least one tip propeller to a bottom of the one or more landing pods.

19. The method of claim 18, further comprising:

one or more inner wing panels of the UAV, wherein the at least one inboard propeller is attached to the one or more inner wing panels; and

one or more outer wing panels of the UAV, wherein the at least one tip propeller is attached to the one or more outer wing panels, wherein the one or more outer wing panels are disposed on either side of the one or more inner wing panels, and wherein the one or more outer wing panels are disposed at an upward angle to a plane formed by the one or more inner wing panels.

20. The system of claim 15, further comprising:

a position sensor in communication with the microcontroller, wherein the position sensor detects a position of the at least one inboard propeller.