**HARDWARE INSPECTION**

*To be completed prior to every flight.*

1. Airframe
2. Wings – Screwed and Taped
3. Nose – Secure
4. Bungee Hook and Padding - Secure
5. Flight controls
   1. Servos – Secure
   2. Control rods - Secure
   3. Clevises/bands – Secure, locked
   4. Control horns - Secure
   5. Servo cables – Recessed/taped
6. Power System
   1. Motor
   2. Propeller
   3. Spinner
7. Airdrop mechanism
8. APM – Secure (if hatch is open)
9. Electronics and wiring – Checked (if hatch is open)

**PREFLIGHT**

*To be completed prior to the first flight of the day,*

*and after any battery change out.*

1. Hardware Inspection – “COMPLETE” (P)
2. Transmitter
   1. Throttle – “DOWN” (P)
   2. Mode Switch – “MANUAL” (P)
   3. Power – “ON” (P)
   4. Battery – “ABOVE 9.5 VOLTS” (P)
   5. Aircraft – “SELECTED <NAME>” (P)
3. Aircraft Battery – “CONNECTED, SECURED” (P)
4. Ground Control Station
   1. COM Port – SELECTED (G)
   2. Baud Rate – 57600 (G)
   3. Connection – “CONNECTED” (G)
   4. HUD – “ATTITUDE INDICATING” (G)
5. Battery Voltage – (ABOVE 16 VOLTS) “CHECKED, \_\_ VOLTS” (G)
6. Flight Modes – “VERIFIED” (G)
7. Home Location – “VERIFIED” (G)
8. Flight Plan – “VERIFIED” (G)
9. Battery Capacity – “SET, \_\_\_\_\_ MILLIAMPS” (G)
10. Autopilot – “BLINKING RED, SOLID BLUE” (P)
11. GPS – “SOLID RED, BLINKING BLUE” (P)
12. Top Hatch – “INSTALLED” (P)
13. Airspeed – “CHECKED” (G)
14. Compass – “CHECKED” (G)
15. Flight Controls – “CHECKED MANUAL” (P)
16. Flight Controls – “CHECKED FBWA” (P)
17. HUD – “CHECKED” (no BAD \_\_\_ HEALTH messages) (G)
18. Aircraft – PLACED ON LAUNCHER (P)
19. Servo 5 – “HIGH” (G)
20. Cargo – “WEIGHED, LOADED” (P)
21. Bungee – “ATTACHED” (P)
22. THROTTLE – “IDLE” (P)
23. Transmitter Mode Switch – “MANUAL” (P, G)
24. Area – “CLEAR” (P, G)
25. Motor – “ARMED” (G)
26. Propeller – “CHECKED CLOCKWISE” (P)
27. Transmitter Mode Switch – “AUTO” (P, G)
28. Launcher – Aircraft Released
29. Takeoff Time – Logged (G)

**POSTFLIGHT**

*To be completed immediately after landing,*

*before retrieving the aircraft*

1. Throttle – “IDLE” (P)
2. Transmitter Mode Switch – “MANUAL” (P)
3. Motor – “DISARMED” (G)
4. Land Time – Logged (G)
5. Ground Station – DISCONNECT (G)
6. Ground Station – CONNECT (G)

**THRU FLIGHT**

*To be completed after the postflight checklist and before*

*commencing another flight when no battery change is required.*

1. Hardware Inspection – “COMPLETE” (P)
2. Battery Voltage – “ABOVE 16 VOLTS AND 20%” (G)
3. Flight Plan – “VERIFIED” (P)
4. Mission Restart – “RESTARTED” (G)
5. Active Waypoint – “SET 1” (G)
6. Airspeed – “CHECKED” (G)
7. Compass – “CHECKED” (G)
8. Flight Controls – “CHECKED MANUAL” (P)
9. HUD – (no BAD \_\_\_ HEALTH messages) “CHECKED” (G)
10. Aircraft – PLACED ON LAUNCHER (P)
11. Cargo – “WEIGHED, LOADED” (P)
12. Bungee – “ATTACHED” (P)
13. THROTTLE – “IDLE” (P)
14. Transmitter Mode Switch – “MANUAL” (P, G)
15. Area – “CLEAR” (P, G)
16. Motor – “ARMED” (G)
17. Propeller – “CHECKED CLOCKWISE” (P)
18. Transmitter Mode Switch – “AUTO” (P, G)
19. Launcher – Aircraft Released
20. Takeoff Time - Logged

**ACCIDENTAL LAUNCH**

*An emergency procedure to be used if the plane is accidentally catapulted before the motor has been armed.*

1. Transmitter Mode Switch – (AS REQUIRED) “SET \_\_\_\_” (P, G)
2. Motor – “ARMED” (G)

**Transmitter/Receiver Binding**

1. Receiver preparation
   1. Jumper – REMOVED
   2. ESC Servo Connector – CONNECTED TO CH1
2. DIP Switches on back of transmitter – BOTH OFF
3. White button on back of transmitter – PRESS & HOLD
4. Transmitter – ON (while holding white button)
   1. Transmitter will make a repeated beep at power-on if in binding mode
5. Transmitter white button - RELEASE
6. Receiver button – PRESS & HOLD
7. ESC battery cable – CONNECTED (while holding receiver button)
8. Receiver lights – SOLID GREEN/FLASHING RED
9. Receiver button - RELEASE
10. Turn off hardware to exit binding mode
    1. ESC battery cable – DISCONNECTED
    2. Transmitter – OFF
11. Restore normal power to ensure binding
    1. Transmitter – ON
    2. ESC Battery – CONNECTED
    3. Receiver light – SOLID GREEN