



Agricultural Drone Battery Maintenance And Flight Safety Log 2026 Checklist

Pre-Flight Battery Physical Inspection

Detailed check of battery casing, connector pins, and terminal integrity for any visible signs of swelling, corrosion, or physical damage.

Inspection Date

Battery ID/Serial Number

- ☐ BAT-001
- ☐ BAT-002
- ☐ BAT-003

Physical Damage Findings

- ☐ No visible damage
- ☐ Casing swelling/bulging
- ☐ Connector corrosion
- ☐ Connector dent/deformity
- ☐ Debris or residue present

Current Battery Temperature (°C)

Enter a number...

Detailed Damage Observations

Write something...

Inspector Signature

Battery Charge and Cell Balance Verification

Validation of voltage levels across all cells to ensure uniform charging and verification of the current State of Charge (SoC) before takeoff.

Inspection Date

Enter date...

Battery ID/Serial Number

- ☐ Battery Alpha-01
- ☐ Battery Alpha-02
- ☐ Battery Beta-01

Current Voltage per Cell (V)

Enter a number...

Cell Voltage Variance Status

- ☐ Balanced (<0.02V difference)
- ☐ Warning (0.02V - 0.05V difference)
- ☐ Critical (>0.05V difference - DO NOT USE)

Total Percentage of Charge (%)

Enter a number...

Observation Notes on Cell Health

Write something...

Technician Verification

Drone Hardware and Propeller Integrity Check

Inspection of propellers, motor mounts, and drone chassis to ensure no structural compromises exist that could impact flight stability.

Inspection Date

Enter date...

Propeller Condition Status

- ☐ Excellent (No visible wear)
- ☐ Fair (Minor wear, acceptable)
- ☐ Damaged (Requires replacement)

Detected Issues

- ☐ Cracks in Propeller Blades
- ☐ Motor Loose Screws
- ☐ Debris in Motor Housing
- ☐ Chassis/Frame Stress Marks

Propeller Blade Count Inspected

Enter a number...

Detailed Damage Observations

Write something...

Upload Damage Photos

 Upload File

Technician Verification

Flight Controller and Sensor Calibration

Verification of IMU, Compass, and GPS signal strength, including calibration of obstacle avoidance sensors and altitude meters.

Calibration Date

IMU Status

- ☐ Calibrated & Ready
- ☐ Requires Recalibration
- ☐ Error Detected

Compass/Magnetometer Status

- ☐ Pass
- ☐ Fail

GPS Satellite Count

Sensors Verified

- ☐ Obstacle Avoidance Sensors
- ☐ Barometer/Altimeter
- ☐ Compass/Magnetometer
- ☐ GPS/GNSS
- ☐ Optical Flow Sensor

Calibration Notes & Error Logs

Write something...

Technician Verification

Environmental and Airspace Assessment

Review of real-time weather conditions, wind speed, visibility, and checking for any temporary flight restrictions (TFRs) in the operational area.

Inspection Date

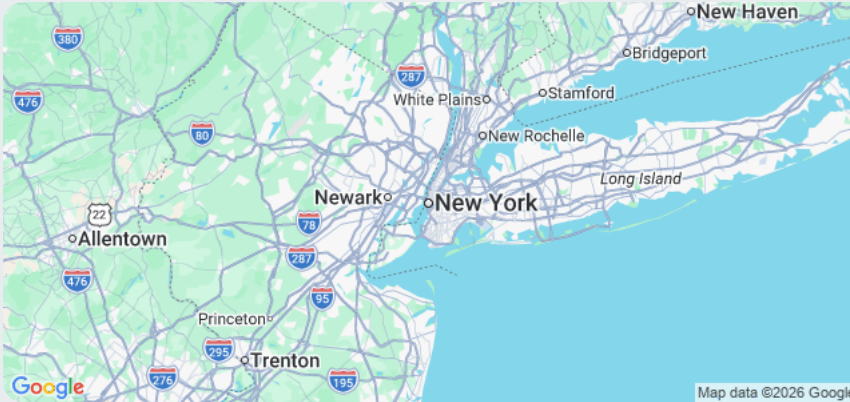
Enter date...

Flight Operation Time

Enter time...

Field/Plot Location

 [Set My Current Location](#)



Current Wind Speed Category

- ☐ Low (Calm/Light Breeze)
- ☐ Moderate (Manageable for Flight)
- ☐ High (Risk of Flight Instability)
- ☐ Dangerous (Ground Operations Only)

Weather Conditions Present

- ☐ Clear Skies
- ☐ Overcast
- ☐ High Humidity
- ☐ Light Rain/Drizzle
- ☐ Fog/Mist

Airspace Obstructions & Noticeable Hazards

Write something...

Pilot-in-Command Authorization

Signal Strength and Command Link Test

Testing the connection between the Remote Controller (RC) and the drone to ensure robust telemetry and command responsiveness.

Remote Controller Connection Status

- ☐ Connected and Stable
- ☐ Intermittent Connection
- ☐ Failed to Connect

Telemetry Signal Strength (RSSI) %

Verified Signal Channels

- ☐ 2.4 GHz Control Link
- ☐ 5.8 GHz Video Feed
- ☐ GPS/GNSS Signal
- ☐ Return-to-Home (RTH) Link

Signal Interference Observations

Write something...

Pilot/Operator Verification

Post-Flight Battery Discharge and Storage Protocol

Logging of flight duration, battery temperature during use, and instructions for discharging batteries to safe storage levels (Storage Voltage).

Date of Post-Flight Inspection

Enter date...

Time of Battery Storage

Enter time...

Post-Flight Battery Temperature (°C)

Enter a number...

Remaining Battery Percentage (%)

Enter a number...

Battery Storage Action Taken

- ☐ Discharged to Storage Voltage
- ☐ Placed in Fireproof LiPo Bag
- ☐ Recharged for Immediate Use

Post-Flight Observations or Anomalies

Write something...

Technician/Pilot Authorization

Maintenance Log and Cycle Count Tracking

Recording the number of charge/discharge cycles and documenting any repairs or replacements made to the battery or drone components.

Maintenance Date

Enter date...

Current Battery Cycle Count

Enter a number...

Maintenance Type

- ☐ Routine Inspection
- ☐ Battery Replacement
- ☐ Firmware Update
- ☐ Repair/Part Replacement

Maintenance Details & Observations

Write something...

Maintenance Receipt or Service Report

 Upload File

Technician/Operator Signature

< Previous

> Next

🏁 Finish

🔧 Generate Sample Report