



Drone Flight Operations Checklist - Farm Management

Pre-Flight Checks

Ensuring drone and equipment are ready for operation.

Drone Battery Level (%)

Propeller Condition (1-5 Scale, 1=Excellent, 5=Damaged)

GPS Status

- ☐ Connected
- ☐ Disconnected
- ☐ Weak Signal

Compass Calibration Required?

- ☐ Yes
- ☐ No

Time of Pre-Flight Check

Any unusual noises during motor start?

Write something...

Camera Lens Condition

- ☐ Clean
- ☐ Smudged
- ☐ Dirty
- ☐ Scratched

Weather Assessment

Evaluating weather conditions for safe and effective flight.

Wind Speed (mph)

Enter a number...

Temperature (°F)

Enter a number...

Visibility (miles)

Enter a number...

Cloud Cover

- ☐ Clear
- ☐ Few Clouds
- ☐ Scattered Clouds
- ☐ Broken Clouds
- ☐ Overcast

Precipitation

- ☐ None
- ☐ Light Rain
- ☐ Moderate Rain
- ☐ Heavy Rain
- ☐ Snow
- ☐ Hail

Date of Assessment

Enter date...

Time of Assessment

Additional Weather Notes

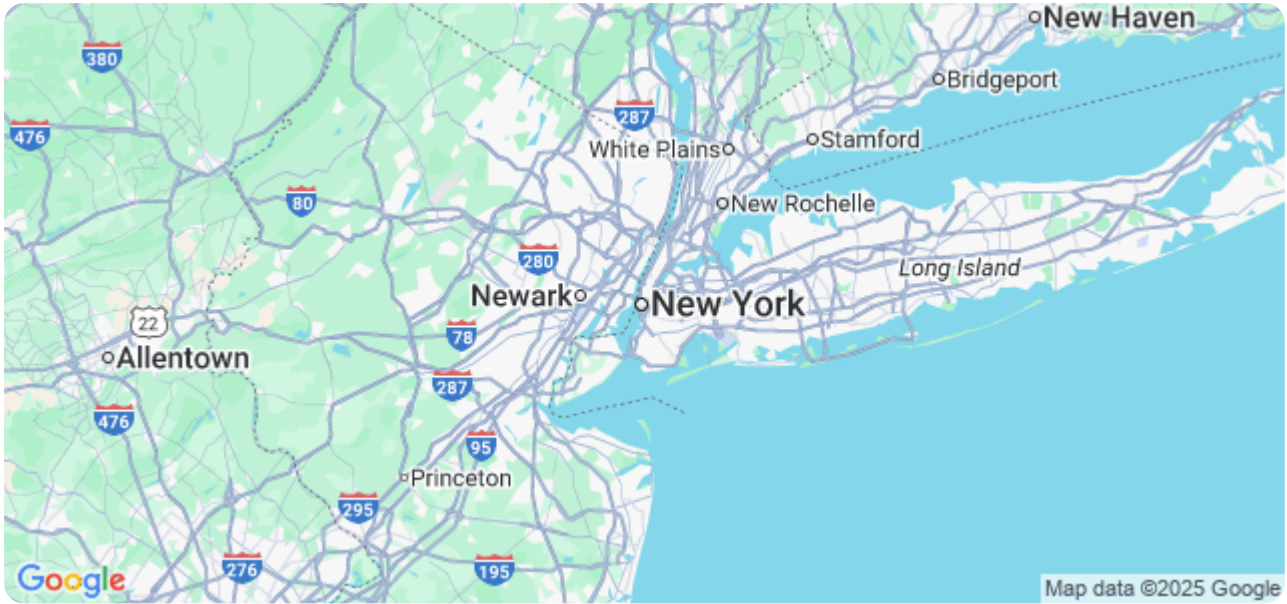
Write something...

Flight Planning & Area Survey

Defining flight path and identifying potential hazards.

Flight Area Coordinates (GPS)

 [Set My Current Location](#)



Flight Altitude (Feet/Meters)

Enter a number...

Overlap Percentage (Front/Side)

Enter a number...

Flight Purpose

- ☐ Crop Health Assessment
- ☐ Field Mapping
- ☐ Livestock Monitoring
- ☐ Irrigation Assessment

Potential Hazards Identified (e.g., power lines, buildings)

Write something...

Planned Flight Date

Enter date...

Planned Flight Start Time

Ground Personnel Present

- ☐ Observer
- ☐ Spotter
- ☐ None

Regulatory Compliance & Permissions

Verifying adherence to airspace regulations and obtaining necessary approvals.

FAA Part 107 Certificate Status

- ☐ Active
- ☐ Inactive
- ☐ Pending

Certificate Expiration Date

Enter date...

Airspace Authorization (LAANC)

- ☐ Approved
- ☐ Pending
- ☐ Not Required

Flight Altitude (ft)

Enter a number...

Airspace Restrictions & Notices

Write something...

Local Regulations Compliance

- ☐ Compliant
- ☐ Review Required

FAA Authorization Documents (if applicable)

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Drone & Payload Inspection

Thoroughly inspecting drone components and attached equipment.

Battery Voltage (V)

Enter a number...

Propeller Condition (1-10)

Enter a number...

Camera Lens Condition

- ☐ Clean
- ☐ Slightly Dirty
- ☐ Dirty
- ☐ Damaged

GPS Signal Strength

- ☐ Excellent
- ☐ Good
- ☐ Fair
- ☐ Poor

Checklist for Obstructions

- ☐ Propellers
- ☐ Landing Gear
- ☐ Sensors
- ☐ Camera

Photo of Drone Condition

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Notes on Drone Condition

Write something...

Battery & Power Management

Checking battery levels and ensuring adequate power for the flight.

Battery 1 Voltage (V)

Enter a number...

Battery 2 Voltage (V)

Enter a number...

Battery 1 Capacity (%)

Enter a number...

Battery 2 Capacity (%)

Enter a number...

Battery 1 Condition

- ☐ Excellent
- ☐ Good
- ☐ Fair
- ☐ Poor

Battery 2 Condition

- ☐ Excellent
- ☐ Good
- ☐ Fair
- ☐ Poor

Last Battery Charge Date

Enter date...

Estimated Flight Time Remaining (mins)

Geofence & Safety Settings

Confirming geofence parameters and safety feature configurations.

Maximum Flight Altitude (Feet)

Enter a number...

Return-to-Home Altitude (Feet)

- ☐ 20
- ☐ 30
- ☐ 40
- ☐ 50
- ☐ Custom

Active Safety Features

- ☐ Obstacle Avoidance
- ☐ Return-to-Home
- ☐ Low Battery Warning
- ☐ Smart Landing

Geofence Radius (Feet)

- ☐ 50
- ☐ 100
- ☐ 200
- ☐ 500
- ☐ Custom

Custom Geofence Coordinates (Latitude/Longitude)

Write something...

Flight Execution

Performing the flight operation as planned and monitoring performance.

Flight Start Time

Altitude (feet/meters)

Enter a number...

Flight Speed (mph/kmh)

Enter a number...

Flight Mode

- ☐ Manual
- ☐ Autonomous
- ☐ Follow Me

Real-time observations during flight (e.g., unusual behavior)

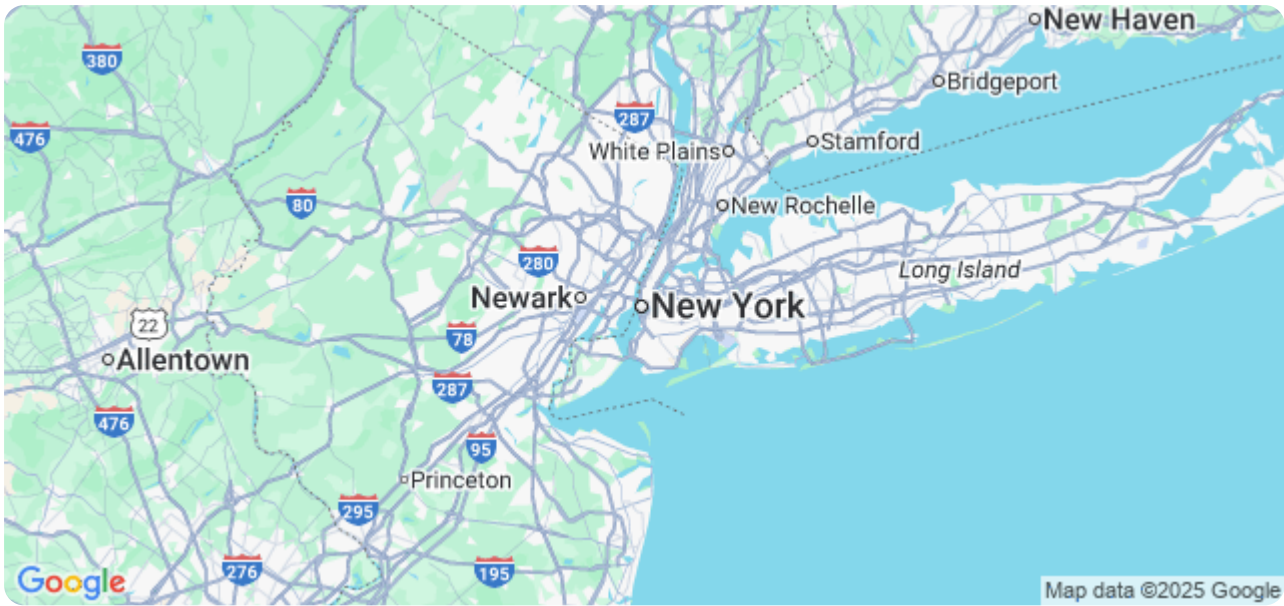
Write something...

Battery Percentage Remaining (Estimated)

Enter a number...

Current Drone Location (GPS Coordinates)

 [Set My Current Location](#)



Post-Flight Procedures


Completing tasks after the flight, including data download and equipment storage.

Flight End Time

Total Flight Time (minutes)

Enter a number...

Flight Log File (Optional)

 [Upload File](#)

Overall Flight Performance

- ☐ Excellent
- ☐ Good
- ☐ Fair
- ☐ Poor

Notes/Observations (e.g., unusual behavior, issues)

Write something...

Date of Next Maintenance/Inspection

Enter date...

Data Management & Analysis

Organizing and reviewing collected data for farm management decisions.

Data Analysis Completion Date

Enter date...

Estimated Crop Yield (based on drone data)

Enter a number...

Summary of Key Insights from Data Analysis

Write something...

Data Analysis Priority (for follow-up actions)

- ☐ High
- ☐ Medium
- ☐ Low

Exported Data Files (e.g., NDVI maps, point clouds)

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Confidence Level of Data Analysis (0-100)

Enter a number...