

Pre-Flight Checklist

The manufacturer's checklist keeps the aircraft from crashing. This checklist keeps the data from being worthless. Print it. Laminate it. Run through it every flight, no exceptions. Total time: ~10 minutes. Cost of skipping it: a half-day refly and a hard conversation with the client.

SITE ASSESSMENT

#	ITEM	✓
1	Project specs reviewed — deliverable type, accuracy class, GSD, CRS confirmed before leaving the office	☐
2	Terrain reconnaissance done — relief, vegetation, water, obstacles, access points reviewed on Google Earth	☐
3	Property/access permission confirmed in writing — operating without permission isn't covered by drone insurance	☐
4	Logistics planned — drive time, site hours, battery count, crew, equipment list confirmed	☐
5	Mission plan built — altitude, overlap, flight lines matched to project specs	☐

AIRSPACE & REGULATORY VERIFICATION

#	ITEM	✓
6	Sectional chart reviewed — airspace class and altitude boundaries identified (don't rely on geofencing alone)	☐
7	LAANC authorization submitted and approved if in controlled airspace — further coordination needs 72+ hours	☐
8	NOTAMs and TFRs checked the morning of flight — TFRs change with little notice	☐
9	Remote ID broadcasting and verified via receiver app	☐
10	ADS-B monitoring solution set up and tested — built-in receiver, ground station, or web-based tracking	☐

WEATHER ASSESSMENT

#	ITEM	✓
11	Wind speed within mapping limits — Enterprise: 15–20 mph max; Consumer: 10–15 mph (manufacturer max ≠ mapping max)	☐
12	Cloud ceiling adequate for flight altitude with margin	☐
13	No precipitation in operating window — moisture on the lens destroys data quality	☐
14	Temperature assessed — battery performance adjusted if <40°F (10–20% loss) or >95°F	☐

#	ITEM	✓
15	Visibility confirmed at 3 statute miles or greater (Part 107 requirement)	☐

EQUIPMENT VERIFICATION

#	ITEM	✓
16	All batteries charged and inspected — flight, controller, tablet, base station; check cycle count and swelling	☐
17	SD card formatted (full format), capacity verified, spare available — quick format leaves fragmentation	☐
18	Firmware versions checked — no unexpected updates or settings resets (DJI auto-updates can reset gimbal/RTK config)	☐
19	Gimbal calibrated on flat surface, pitch angle matches mission plan — 2–3° deviation breaks overlap geometry	☐
20	Propellers inspected for damage — cracks, chips, warping, mounting (run finger along leading edge)	☐
21	RTK/GNSS — Fixed solution, CRS verified, PDOP < 2.0, correction link active	☐
22	Obstacle avoidance configured for mission type, changes documented — aggressive avoidance ruins consistent altitude	☐
23	Camera settings configured — shutter speed, ISO ceiling, white balance fixed (not auto)	☐

23 items · 4 sections · ~10 minutes · Start before driving to the site, finish before takeoff

MISSION INFO

Project: _____
 Site: _____
 Date: _____ Flight #: _____
 Platform: _____
 Operator: _____

AIRSPACE & CONDITIONS

Airspace class: _____
 LAANC ID / approval: _____
 Wind (mph) / dir: _____
 Temp (°F): _____
 Visibility (SM): _____

PRE-FLIGHT NOTES / ANOMALIES
