

Pre-Flight Checklist

THE LIST THAT KEEPS THE DATA FROM BEING WORTHLESS

RANGEPOINTGEO

Drone Mapping Checklist Series — Part 1 of 7

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	<input type="checkbox"/>
2	Terrain reconnaissance done — relief, vegetation, water, obstacles, access points reviewed on Google Earth	<input type="checkbox"/>
3	Property/access permission confirmed in writing — operating without permission isn't covered by drone insurance	<input type="checkbox"/>
4	Logistics planned — drive time, site hours, battery count, crew, equipment list confirmed	<input type="checkbox"/>
5	Mission plan built — altitude, overlap, flight lines matched to project specs	<input type="checkbox"/>

AIRSPACE & REGULATORY VERIFICATION

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

WEATHER ASSESSMENT

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

#	ITEM	✓
15	Visibility confirmed at 3 statute miles or greater (Part 107 requirement)	<input type="checkbox"/>

EQUIPMENT VERIFICATION

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

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
