



How do I plan a drone flight that holds up as a record?

Two sides. Print it, tape it inside the case lid. Verified 6 September 2026.

H HEIGHT AND REACH

- ☐ Ceiling is 400 ft above the ground under the aircraft, not above the launch pad. 107.51(b)
- ☐ Tall structure on site: inside a 400 ft radius of it, up to 400 ft above its immediate uppermost limit. 107.51(b)
- ☐ Groundspeed may not exceed 87 knots, 100 mph. 107.51(a)
- ☐ Aircraft visible with unaided vision, corrective lenses only, throughout the entire flight. Screen, zoom, goggles and binoculars fall outside the rule. 107.31
- ☐ Reach limited by terrain or tree line: move the launch point, split into blocks, or add a visual observer. 107.31

T THE NUMBERS THAT REPEAT

- ☐ Front overlap 75 to 80 percent. Side overlap 65 to 70 percent. Field practice
- ☐ Raise both over vegetation, water, fresh concrete, gravel and bare fill. Field practice
- ☐ Plan overlap against the highest ground in the block. Field practice
- ☐ Single grid, camera straight down, over open ground. Field practice
- ☐ Double grid at 90 degrees, camera back about 20 degrees, wherever anything vertical carries information. Field practice
- ☐ Double grid costs roughly double the time, batteries and images. Carry it in the plan from the start. Field practice
- ☐ Orbit at two or three heights for a single tall object. Record radius, heights and stops. Field practice
- ☐ Electronic shutter: slower line, stop-and-capture mode where available, more overlap, more targets. Field practice

G GROUND CONTROL TARGETS

- ☐ Five minimum: four spread near the corners, one near the middle. More as the area grows. Field practice
- ☐ Spread across the high and the low ground. Never all in a line. Field practice
- ☐ Open sky above each one. Clear of excavation, stockpiles and traffic. Field practice
- ☐ Plan extras so some can be held back as checks. Field practice
- ☐ Set them where the work will not reach. Same targets next month is the whole point. Field practice
- ☐ Photograph each from above and at eye level. Fixed ID for the life of the series. Field practice



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continued

- ☐ Values come from the project's licensed professional of record. Confirm the coordinate system the project's other drawings use. Field practice

W WEATHER AND LIGHT GATES

- ☐ 3 statute miles flight visibility, as observed from the location of the control station. 107.51(c)
- ☐ 500 ft below cloud and 2,000 ft horizontally from cloud. 107.51(d)
- ☐ Personal wind cutoff, set below the manufacturer's limit, written on the mission sheet before the day. Field practice
- ☐ Trade wind builds through the morning, convection after noon. Fly early. Field practice
- ☐ Same time window as the last flight of the series. Bright overcast flattens hard shadow across the whole site. Field practice

P PREFLIGHT: EVERY FLIGHT, NO WAIVER

- ☐ Local weather conditions. 107.49(a)(1)
- ☐ Local airspace and any flight restrictions, for the whole area, not only the launch point, on the day it is flown. 107.49(a)(2)
- ☐ Location of persons and property on the surface. 107.49(a)(3)
- ☐ Other ground hazards: wires, antennas, moving equipment, open excavation. 107.49(a)(4)
- ☐ Inform everyone directly participating: operating conditions, emergency procedures, contingency procedures, roles and responsibilities, potential hazards. 107.49(b)
- ☐ All control links working properly. Enough available power for the intended operational time. Anything attached secure and not affecting flight characteristics or controllability. 107.49(c), (d) and (e)
- ☐ Flying over people: confirm the aircraft meets the subpart D category that applies. 107.49(f)
- ☐ 107.49 is absent from the waiver list. 107.205

B BEFORE YOU PACK UP

- ☐ Flight number, date, start and end time. Field practice
- ☐ Altitude, line spacing, heading, overlap, camera angle, speed. Field practice
- ☐ Target IDs used and their condition. Field practice
- ☐ Launch point, photographed. Field practice



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continued

- ☐ Every deviation from the saved mission, and the reason for it. Field practice
- ☐ The completed preflight assessment, photographed with date and site visible, filed with the images. Field practice: 107.49 requires the assessment, the page is ours

A AT THE DESK

- ☐ Part of what the site map must show: earth-disturbing areas with phasing, approximate slopes and drainage before and after major grading, stockpiles, water crossings, vehicle exits, support activity areas, critical habitat in the action area, pre-construction cover, discharge points, pollutant-generating activities, stormwater controls. Eleven headings in all: read 7.2.4 before drafting. CGP 7.2.4
- ☐ A change the SWPPP no longer reflects: the SWPPP and the site map must be modified within seven days. CGP 7.4.1

Planning aid, not legal advice and not an authorization. The regulations and the permits cited here are the authority; this card points at them. Read against the sources on 6 September 2026. Confirm anything that decides a flight against the source itself before you fly.

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