THE DRONE PILOT BRIEF · FIELD CHECKLIST

Cold weather flight & LiPo checklist

Preflight checks for sub-freezing missions. LiPo = lithium polymer, the battery type most drones use.

Verified as of 22 Oct 2026 against the live article

NOT AN FAA DOCUMENT

Job / site: _____ Date: _____ Remote pilot in command: _____

BEFORE THE MISSION

- [ ] Keep all flight batteries in a climate-controlled vehicle or an insulated thermal case with active heating pads until the moment of installation.
- [ ] Never install a battery that is cold to the touch.
- [ ] Plan for a 30% reduction in total safe flight duration.
- [ ] Plan the return-to-home path so it does not face strong headwinds.

POWER-UP AND LAUNCH

- [ ] On telemetry, verify battery cell temperature has reached at least **15°C (59°F)** before arming the motors.
- [ ] Set the ground control station to show individual cell voltages, not a combined percentage.
- [ ] Hover check: **60 seconds at 10 feet**. Watch voltage stability under a steady load.

IN FLIGHT

- [ ] A healthy cell should stay **above 3.6V under load**.
- [ ] Any cell dropping toward **3.5V**: abort and return to the launch point.
- [ ] Watch for condensation or lens fogging after big temperature shifts.

> Why: below 10°C (50°F) LiPo chemistry slows, internal resistance rises and voltage can drop fast. Battery percentage readings become inaccurate in the cold; watch cell voltage.

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