



WILDDRONE

Operational Checklists

Location: Ol-Pejeta Conservancy

Date: September 2024

Version: 2.1

Ops Plan

Pre-Ops

Pre-Flight

In-Flight

Post Flight

Post-Ops

Contingency

Emergency

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| Ops Plan |
| Pre-Ops |
| Pre-Flight |
| In-Flight |
| Post Flight |
| Post-Ops |
| Contingency |
| Emergency |

Operation planning checklist

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|-------------------------|---|
| Operational Environment | <div><input type="checkbox"/> Check area<div><input type="checkbox"/> No-fly zones & NOTAMs</div><input type="checkbox"/> Topography (Ground obstacles, Airspace visibility)</div> <div><input type="checkbox"/> Notify third parties<div><input type="checkbox"/> ATC (planned locations, heights and times)</div><input type="checkbox"/> Ol Pejeta comms room</div> |
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☐ Weather checks ([UAVForecast](#))

☐ **Temperature:** -10° to 40° C

☐ **Wind** (Mini 4P < 10.7 m/s, Mavic 3E < 12 m/s)

Tip: plan the mission so that the wind pushes the drone towards the pilot.

☐ **Rain:** up to a light drizzle (check for dark clouds)☐ **Visibility:** more than 5km

Pre-Operation checklist

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|-------------|---|
| 3rd Parties | <div><input type="checkbox"/> Inform ATC of planned locations, heights and times</div> <div><input type="checkbox"/> Inform Radio Room of planned locations and times</div> |
| Packing | <div><input type="checkbox"/> Go through the packing checklist</div> |

Pre-Flight checklist

| First Flight | |
|-------------------------|--|
| Operational Environment | <div><input type="checkbox"/> Check area<div><input type="checkbox"/> No-fly zones & NOTAMs</div><input type="checkbox"/> Topography (Ground obstacles, Airspace visibility)</div> <div><input type="checkbox"/> Weather checks (UAVForecast)<div><input type="checkbox"/> Temperature: -10° to 40° C</div><input type="checkbox"/> Wind (Mini 4P < 10.7 m/s, Mavic 3E < 12 m/s)<div><i>Tip: plan the mission so that the wind pushes the drone towards the pilot.</i></div><input type="checkbox"/> Rain: up to a light drizzle (check for dark clouds)</div> <div><input type="checkbox"/> Visibility: more than 5km</div> <div><input type="checkbox"/> Kp-index: max 5</div> |

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| Ops Plan |
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In-Flight checklist

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| | <input type="checkbox"/> Check flight performance <i>Tip: In windy conditions, check your drone's max speed against the wind to gauge its power reserve.</i> |
| | <input type="checkbox"/> Upload waypoint mission <i>Tip: To abort mission, flip the flight mode switch.</i> |
| | <input type="checkbox"/> Start recording |
| | <input type="checkbox"/> Continuously monitor : <ul style="list-style-type: none"> <input type="checkbox"/> Weather <input type="checkbox"/> Drone (Battery, RSSI, GPS, altitude, speed, distance, ...) <input type="checkbox"/> Transmitter (Battery) <input type="checkbox"/> Air traffic on frequency 124.3 MHz, and FlightRadar24 |
| | <input type="checkbox"/> Before landing <ul style="list-style-type: none"> <input type="checkbox"/> Advise everyone in the operational volume |

Post Flight checklist

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| | <input type="checkbox"/> After landing : <ul style="list-style-type: none"> <input type="checkbox"/> Stop on-board recording <input type="checkbox"/> Stop GoPro recording |
| | <input type="checkbox"/> Remove the batteries |
| | <input type="checkbox"/> Visual inspection of the drone and equipment |

Post Operation checklist

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| | <input type="checkbox"/> inform the ATC & OI Pejeta comms room . |
| | <input type="checkbox"/> Empty SD cards |
| | <input type="checkbox"/> Recharge / Storage charge the batteries |
| | <input type="checkbox"/> Document the flight (Drone Logbook , KFL flight logs) |
| | <input type="checkbox"/> Record and report any incidents/accidents |

Contingency procedures

NB: For every contingency, RPIC calls out: "CONTINGENCY, [contingency name]"

C01 - Low battery/high drain

- Sufficient battery to RTH?
 - **YES:** RTH
 - **NO:** Slow landing
- Drone close to home?
 - **YES:** Manual landing
 - **NO:** RTH

C02 - High-wind carries UAS

- Exited the flight geometry?
 - **YES:** Follow Emergency **E03**
- Able to RTH?
 - **YES:** RTH
 - **NO:** Slow landing

C03 - Aircraft approaching

- Lower drone to a safe altitude (below 30m AGL)

C04 - Wildlife approaching

- RTH
- Get in the car
- Control drone, move away

C05 - UAV warnings or errors

- Able to RTH?
 - **YES:** RTH
 - **NO:** Slow landing

C06 - C2 link warnings or errors

- Orient antenna towards UAS
- RTH
- Consider driving towards UAS

C07 - Poor Weather (Rain, Wind, Visibility)

- RTH

C08 - Crew feeling unwell

- RTH

C09 - 3rd party approaching

- Assistant communicates, and avoids distracting the RPIC.

C10 - Flight geography breached

- UAV under control?
 - **YES:** RTH
 - **NO:** Follow Emergency **E04**

Emergency procedures

NB: For every emergency, RPIC calls out: “EMERGENCY, [emergency name]”

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| E01 - Aircraft dangerously close <ul style="list-style-type: none">• AP shouts “Kill Kill Kill”• Activate kill switch | E02 - Threatening Wildlife <ul style="list-style-type: none">• Get in the car ASAP!• Manually RTH |
| E03 - Operational Vol. Breached <ul style="list-style-type: none">• Activate kill switch• Communicate with ATC (+254-XXX XXX XXX):<ul style="list-style-type: none">◦ Location, bearing, time◦ Remaining flight time, drone size / type, speed | E04 - Loss of control/ fly-away <ul style="list-style-type: none">• Try switching flight modes• Try to regain control, or activate kill switch• Communicate with ATC (+254-XXX XXX XXX):<ul style="list-style-type: none">◦ Location, bearing, time◦ Remaining flight time, drone size / type, speed |
| E05 - Bush fire <ul style="list-style-type: none">• Call radio room: +254-XXX XXX XXX | E06 - Crew unfit for flight <ul style="list-style-type: none">• RTH• Provide first aid• Call radio room: +254-XXX XXX XXX |