

Pre and Post Flight Inspection

Micro-UAS Remote Pilot Course

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Learning Objectives



Objective

- Understand what preflight check must be performed.
- Understand what postflight check must be performed.

Agenda

1 Flight planning and pre-flight checks

2 In-flight verification and monitoring

3 Post-flight inspection and actions

Why is this important for me!

Able to operate MUAS safely.

Planning and Pre-Flight Checks

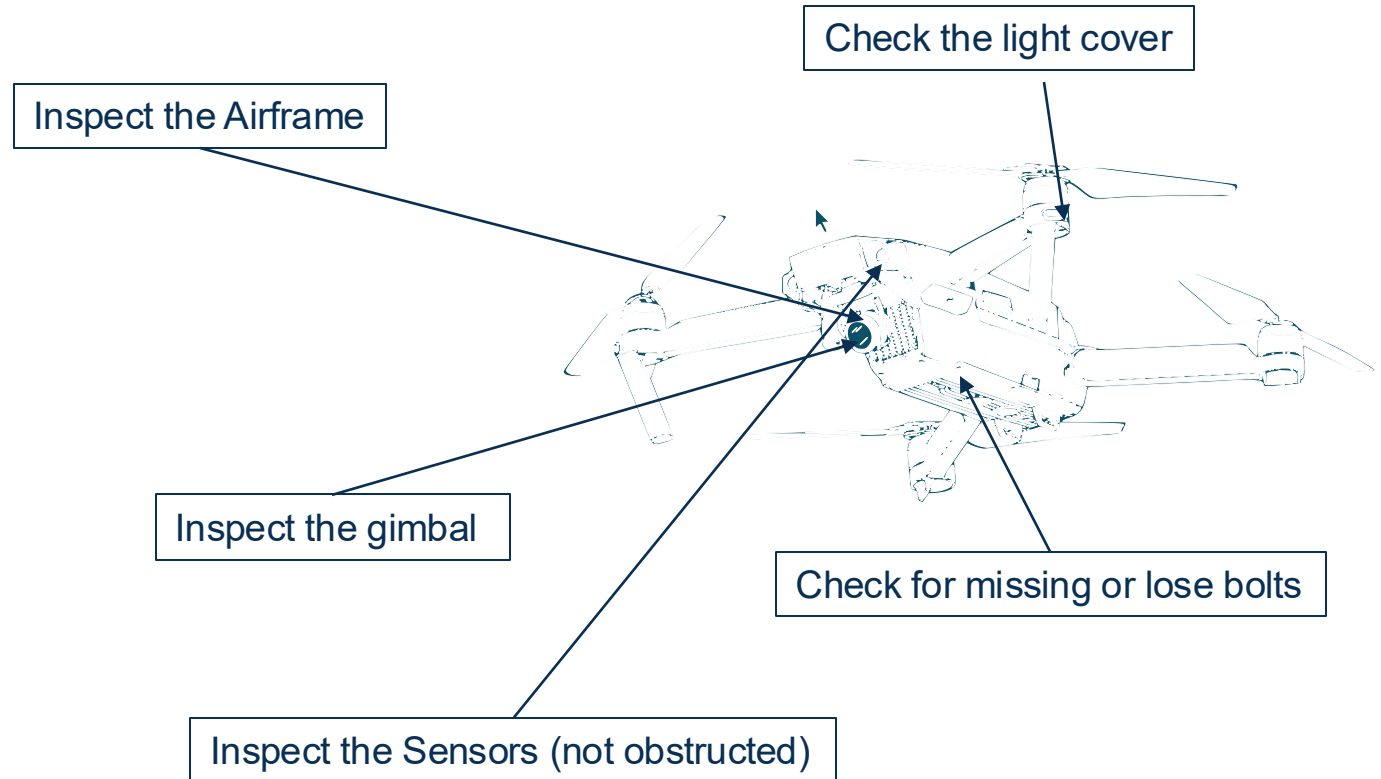
- Weather Check
- Regulatory Compliance - No Fly Zones
 - [Geofencing – Unlocking Required, Authorization?]
- Permission and Documentation

Planning and Pre-flight Checks

- Flight Planning (HP, RTH, Max alti and distance)
 - Interference Check
 - Obstacle Clearance
 - Safety Check and safety measures
 - Take-Off Pad
- Temperature Check
- System Calibration & Setup (Compass and IMU)
- Firmware Updates

Pre-flight Checks

- Drone Inspection
 - Sensor Cleaning
 - Gimbal Cover
 - Camera and Accessories
 - Battery Installation [Aircraft]
 - Propeller and Engine Check
 - Battery Charge [Controller]
 - Body structural integrity



Pre-flight Checks

- Remote Controller & Device Check
 - Controller Check
 - Battery
 - Stick Responsiveness
- Power on controller and then Power On Drone
- App Connection
- Error Messages
- GPS Mode

Final Checks Before Takeoff

- Propellers, battery and obstacles
- GPS and Sensors
- Motor at idle

In-flight Checks

- Low altitude test
- Monitor Telemetry
- Antenna Orientation
- Line of Sight

Post-Flight Inspection

- Safe Landing
- Power Down Drone
- Battery Removal
- Power Down Controller
- Visual Inspection
- Gimbal Inspection

Post-Flight Inspection

- Inspect drone
- Sensor Cleaning
- Drying
- Gimbal Protector
- Final Sensor Check

Questions?

Which of the following apps is used to verify airspace authorization?

- a) Google Maps
- b) B4UFLY
- c) Instagram
- d) WhatsApp

True or False: Micro UAS pilots should avoid flying in wind speeds exceeding the manufacturer's recommended limit.

a) True

b) False

What is the minimum recommended battery level for the drone and remote before takeoff?

- a) 10%
- b) 30%
- c) 50%
- d) 70%

True or False: Compass calibration is mandatory before every flight.

a) True

b) False

What should the remote controller's battery level be before flight?

- a) Partially charged
- b) Fully charged
- c) Doesn't matter
- d) Only 25%

The Return-to-Home (RTH) altitude must be set to:

- a) Below nearby obstacles
- b) Equal to the takeoff altitude
- c) Above nearby obstacles
- d) Fixed at 100 meters

Before takeoff, pilots should test the motors at idle to check for:

- a) Camera focus
- b) Unusual vibrations/sounds
- c) GPS signal strength
- d) Battery temperature

What is the first action after landing post-flight?

- a) Recharge batteries immediately
- b) Inspect the drone for damage
- c) Delete flight logs
- d) Turn off the controller

Thank You

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