UNSW RPAS Operation Logbook

RPAS operation enquiries:

Enquiries related to UNSW purpose RPAS operations should be made by contacting drones@unsw.edu.au or phone Dr Ted Rohr 02 9385 4235.

RPAS Activity Logs and Documents in Moodle:

Pilots are required to log their flight details and maintenance details on the website. ReOC, Ops Manual and Ops Library can be download or viewed from the website. It requires zID and zPass to access. https://moodle.telt.unsw.edu.au/.

Dr Yincai Zhou
Chief Remote Pilot
Professional Officer in Surveying and Geospatial Engineering
School of Civil and Environmental Engineering, UNSW

RPAS operations under UNSW ReOC by RePL holders:

Job Safety Assessment (Appendix 5 in UNSW RPAS Operational Library) and flight authorisation form (Appendix 1) are required for each operation. Email your JSA and flight authorisation form to the Chief Remote Pilot Dr Yincai Zhou (y.zhou@unsw.edu.au) for review and authorisation prior your operation. Flight log is required for each flight.

Excluded RPAS operations:

Operations are under CASA's Standard Operation Conditions (SOC). Flight log is required for each flight.

RPAS details:

RPAS Model:	
Custodian (name, email and phone):	
In service date:	
Max take-off weight:	
Max wind resistance:	
Max flight time:	
Max transmission distance:	
Battery (mAh/Watt):	

RPAS Maintenance Log

Authorised RPAS Maintenance Pilot:

Date	Description of defect or maintenance required	Name / signature	Rectification	Name / signature

Battery Maintenance Log

Date	Battery #	Description of defects	Rectification	Name / signature

UNSW RPAS Safe Operation General Checklists

Note: This is a guide to develop your own checklists for your specific RPAS model.

Pre-field:

- Location – check *Can I Fly There*
- Job Safety Assessment completed (Appendix 5 in RPAS Operational Procedures)
- Flight Authorisation by Chief Remote Pilot
- Area approval or permission from CASA
- WHS (Risk Management Form UNSW-UNSW-RMF-7146 in *safesys.unsw.edu.au*)
- WHS form read and signed by crew members
- SWP (Safe Work Procedure ENG-CVEN-SWP-4938 in *safesys.unsw.edu.au*)
- RPAS batteries charged
- RC batteries charged
- Camera/Lidar batteries charged
- Mobile devices fully charged
- Latest firmware (RPAS & RC)
- Latest software (mobile devices)
- Onsite Internet access ready
- RPAS Equipment Pack List
- Transportation organised
- PPE (boots, clothing, hat & sunglasses)
- Health (Sunscreen, water & food)
- First Aid kit
- Manual handling tools
- Fit to operate RPAs (be able to manage stress and fatigue)
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Pre-Flight:

- Zero Alcohol for Pilots and observers
- Induction to visitors
- Talk to people surrounds for risk awareness
- Obtain public's consent if within 15 m
- No hazards in proximity
- RPAS battery is full
- RC battery is full
- Mobile device battery is full
- Air frame no damage
- Motors no damage
- Propellers no damage
- Cables securely connected
- Flight mode (on RC) correct
- Geofence set up
- Alternative and Emergency landing sites planned
- SD card in camera or RPAS.
- Connect the batteries.
- Batteries inserted securely.
- Propellers securely mounted.
- No loose parts.
- No missing or loose screws.
- Turn on the transmitter.
- Turn on RPAS.
- Calibrate RPAS IMU if needed
- Calibrate RPAS compass if needed
- GPS position is locked.
- Home point recorded
- Enough space to launch and fly.
- Back away from RPAS to a safe distance.
- Facing to RPAS.
- No warnings or errors
- No confidence no launch
- Launch into wind (fixed wing)
- Launch safely

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In-flight:

- Keep VLOS all times
- Don’t fly out of range.
- Be vigilant
- Check all battery level frequently
- Respond warning messages promptly
- Wind speed under limit
- Air traffic observing
- Beware of eagles
- No hazards in proximity
- Ready to take control manually in emergency
- Redirect RPAS to safe location in emergency
- Return home in emergency
- Power off propellers mid-air in emergency

Landing:

- Check wind direction
- Linear or circular landing
- Land into wind (fixed wing)
- Landing path/area clear
- Abort landing ready
- Disarm motors after landed
- Power off RPAS
- Power off RC
- Check damaged on RPAs
- Download images

RPAS Equipment Pack List

- Aircraft + propellers + gimbal + camera + SD cards
- RC (DJI) and radio modem (eBee)
- Batteries + charger + Lipo bags
- Cables (e.g. RPAS to PC, radio modem to PC, iPad)
- Propeller rubber bands (eBee), guards & screws (DJI)
- Mobile devices and chargers
- RPAS manuals & Safe Operation Checklist
- ReOC & RePL (for licensed pilots; paper or electronic copy)
- ERSA & VTC (for licensed pilots; paper or electronic copy)
- Aviation radio receiver/transmitter if needed
- Internet access in field
- Safety signs – *RPAS in Operation*

Date	Pilot Name/ARN	Location	Flight #	Battery #	Pre-flight checked?	Time of take-off (hh:mm)	Post-flight checked?	Time in service (minutes)	Total time in service	Notes (weather/damage/danger etc)
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