



MACQUARIE
University

Operating RPAs with Macquarie

Picture and Permit: Dr Vanessa Pirotta

Important RPA Contacts at Macquarie:

- **Michael Baber**

Chief Pilot

Michael.baber@mq.edu.au

- **Sonya Hendricks**

Risk and Assurance delegate to FSE

Sonya.Hendricks@mq.edu.au

- **Nick Harris**

Deputy Chief Pilot

Nick.harris@mq.edu.au



Aim: To assist pilots in conducting research and teaching at Macquarie, safely and compliantly.

We are here to help.



Photo and Permit: Dr Vanessa Pirotta

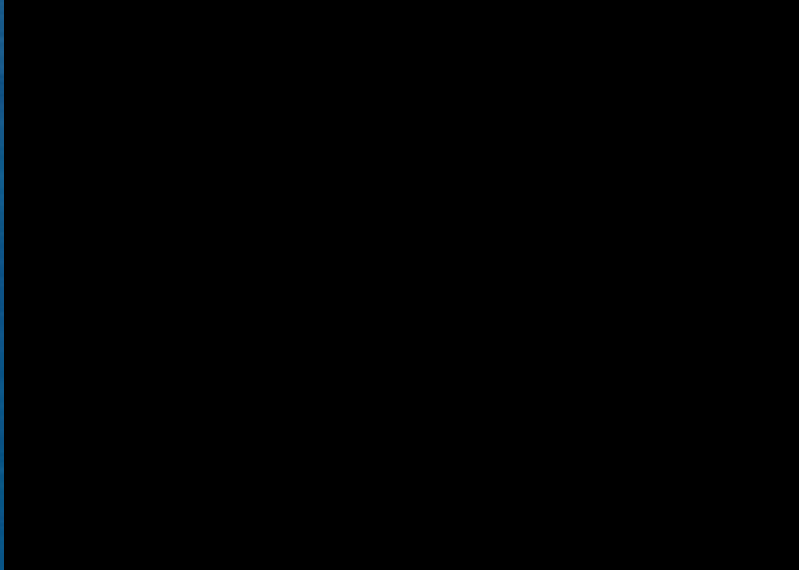


Photo: Rob Perryman



Photo: Rob Perryman. Research: Joni Spencer

Commercial RPA

Sub 2kg Excluded
Category

ReOC

WHAT YOU NEED TO DO TO GET FLYING

1. Go to the CASA website and notify us **five business days before** flying.

» To notify CASA, you will need an aviation reference number (ARN). If you do not already have an ARN, you will need to apply for one.

2. Operate within the **standard operating conditions**:



You must only fly during the day and keep your drone **within visual line-of-sight**.

This means being able to see the aircraft with your own eyes (rather than through a device) at all times.



You must **not fly over or above people**. This could include beaches, parks, events, or sport ovals where there is a game in progress.



You must not fly your RPA **higher than 120 metres (400ft) AGL**.



You must keep your RPA at least **30 metres away from other people**.

You must not fly your RPA **over or near an area affecting public safety or where emergency operations are underway** (without prior approval).

This could include situations such as a car crash, police operations, a fire and associated firefighting efforts, and search and rescue.



You must only fly **one RPA at a time**.



You must keep your RPA **at least 5.5km away from controlled aerodromes**.

Flying **within 5.5km of a non-controlled aerodrome or helicopter landing site (HLS) is possible**, but only if no manned aircraft are operating to or from the aerodrome.

If you become aware of manned aircraft operating to or from the aerodrome/HLS, you must manoeuvre away from the aircraft and land as soon as safely possible.



Remember, you must not **operate your RPA in a way that creates a hazard** to another aircraft, person or property.



Respect personal privacy
Don't record or photograph people without their consent—this may breach state laws.

Remote Operator Certificate (ReOC)

- Flights outside CASA's SOPs or,
- Drones above 2kg or,
- Special areas
 - National Parks
 - Some Marine Parks





✓
When & projects

✓
Activities

✓
Itinerary

✓
Participants

✓
Check ins

6
Activity plans

7
Hazards

8
Assets

9
Attachments

10
Confirm



Remotely Piloted Aircraft (RPA) plans

Will you be flying within  Australia? *

Yes

No

While flying in Australia...

Will you be flying under CASA's standard operating conditions? *

Yes

No

- ✓ Flying during the day and keeping the RPA within visual line-of-sight.
- ✓ Pilots controlling no more than **one** RPA at a time.
- ✓ Flying no higher than **120 metres**.
- ✓ Flying at least **30 metres** away from other people and not flying above people.
- ✓ Away from areas affecting active public safety or emergency operations.
- ✓ *RPA's above 100g:*
Flying **more than 5.5km** from any controlled aerodrome and more than 5.5km from any uncontrolled aerodrome or helicopter landing site with active manned aircraft.
- ✓ Operating the RPA in a way that does not create a hazard to another aircraft, person or property.
- ✓ Flying with respect to personal privacy, state privacy laws and consent for any recordings.

For more details refer to [CASA](#) 

Will you be flying in restricted airspace?

See [Can I Fly There?](#) 

Yes

No

Will you be flying in areas with special laws or regulations?

E.g. National Parks

Yes

No

Are you planning flights in populated areas?

E.g. beaches, sporting events

Yes

No

Will you be flying internationally? *

Yes

No

- ✓ Flying no higher than 120 metres.
- ✓ Flying at least 30 metres away from other people and not flying above people.
- ✓ Away from areas affecting active public safety or emergency operations.
- ✓ RPA's above 100g:
Flying more than 5.5km from any controlled aerodrome and more than 5.5km from any uncontrolled aerodrome or helicopter landing site with active manned aircraft.
- ✓ Operating the RPA in a way that does not create a hazard to another aircraft, person or property.
- ✓ Flying with respect to personal privacy, state privacy laws and consent for any recordings.

For more details refer to [CASA](#) 

Will you be flying internationally? *

Yes

No

While flying in internationally...

What measures will be made to comply with local RPA laws? *

Special considerations/comments

E.g. National Parks

Yes


No

Are you planning flights in populated areas?

E.g. beaches, sporting events


Yes

No

 Bahrain

 Bangladesh

 Barbados

 Belarus

 Belgium

 Belize

 Benin

 Bermuda

Select Countries 

Safe Work Instruction 1



Requirements for use of Remotely Piloted Aircraft (RPAs) including Drones (sub 2 kgs) without an RePL.

Standard Operating Conditions for use of Remote Piloted Aircraft including drones:

Only fly one RPA at a time.	Keep visual line of sight always (with your own eyes - no binoculars) Only fly during the daylight hours.	Fly no higher than 120 metres (400ft) above the ground (AGL).	Never fly above people (e.g. at beaches, festivals, ovals, busy roads footpaths etc.).	Keep your drone at least 30 metres away from people.	Never fly over or near emergency operations (car crash, fire, police operations etc.).
Drones over 100g must keep at least 5.5 km away from controlled aerodromes.	Do not create a hazard for other aircraft, people or property.	Respect personal privacy. Never record or photograph without consent.	Only fly near an uncontrolled aerodrome if there are no aircraft operating.	Use CASA's "OpenSky" app to check for no-fly zones. Always check State laws.	Obtain permission of landowner / obey relevant regulations (e.g. Council or park regulations, animal welfare distance)

Insurance:

- Macquarie University Insurance will only apply if you are an enrolled student or staff member and are using a drone for Macquarie University authorized business or student activities.
- You must obtain prior approval from your Supervisor and either the Chief Pilot or Deputy Pilot.

UNDERGRADUATE STUDENTS, MASTERS, HDR, RESEARCH STAFF ("EXCLUDED" sub-2kg RPA use):

If you are a **student** or **Researcher** using a drone to fulfil the requirements of coursework or research tasks, and your aircraft falls into the **sub-2Kg** category, then the use of a drone is deemed to be **Commercial** but it will fall under the **EXCLUDED** category for which you **MUST** have an **ARN Aviation Reference Number (ARN)** and **Notify CASA** (via MQ Field Friendly) 5 days before you intend to fly.

You must comply with:

- The CASA standard operating conditions outlined above.
- All local council and/or national park laws. Always research the area you plan to fly in.

UNDERGRADUATE STUDENTS, MASTERS, HDR, RESEARCH STAFF (above 2Kg - Commercial use):

If you are a **student** or **Researcher** using a drone to fulfil the requirements of coursework or research tasks, and your aircraft falls into the **above 2Kg** category, then the use of a drone is deemed to be **Commercial**, and the CASA commercial use rules apply.

To operate drone in the Above 2Kg commercial category you must:

- You must have an ARN **Aviation Reference Number (ARN)**, as well as a **RePL**.
- Go to Field Friendly and complete the **RPAs Notification form** at least **5 business days** before flying.
- Upload all documentation and obtain approval for the drone work through Field Friendly.
- You must operate within the CASA standard operating conditions outlined above

Special Considerations

ALWAYS complete:

- The RPA Induction training requirements prior to flying.
- Field Friendly fieldwork application including a flight plan.
- A Safety Risk Assessment on the day prior to flying.
- The Flight **Authorisation** Form and debrief form.
- Report any incidents in ROAR and if required, to CASA.

Additional information:

- [CASA website](#) – Flying drones/remotely piloted aircraft in Australia
- [OpenSky – Drone Safety app](#)
- [Flying Drones under 2 kg](#)
- Flying drones or model aircraft recreationally
- [Battery Safety](#)
- [Drones in Parks policy](#) – NSW
- [Get your remote pilot license](#)

Other related procedures and supporting documents

- Macquarie University RPA Operations Manual
- Macquarie University RPA Appendix 4 Operational Procedures
- Field Friendly
- Aviation Reference Number Application (ARN)
- RPAs Notification Form (APR)
- Participant forms

CONSULTATION:

Name/Position	Date

Approved by:

Date of implementation:

Review date [5 years]:

USERS OF RPA/DRONE ACKNOWLEDGEMENT

Users of RPA/Drones who will be undertaking the work or activity involving the use drones have:

- Completed the MQ RPA induction.
- Read and understood the work instruction.

User of RPA/Drones	Signature	Date

Notes:

Questions?

- **Michael Baber**

Chief Pilot

Michael.baber@mq.edu.au

- **Sonya Hendricks**

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