

Version	Approved by		Approval date	Effective date	Next full review		
2.0	Pro Vice-Chancellor Research		2 August 2022	2 August 2022	August 2025		
Procedure Statement							
Purpose		This procedure sets out the responsibilities and authorities governing the use and maintenance of remotely piloted aircraft systems at UNSW.					
Scope		The content of the procedure applies to all staff and students at UNSW and affiliated centres and institutes using remotely piloted aircraft systems for university purposes in Australia and overseas.					
Are Local Documents on this subject permitted?		Yes, however Local Documents must be consistent with this University-wide Document		🗆 No			
Procedure Processes and Actions							

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1. Preamble

Remotely Piloted Aircraft Systems (RPAS; in short drones) are used for diverse purposes such as surveying, remote sensing, aerial photographing, aerial filming, infrastructure inspection, environmental assessment, crop health monitoring, emergency response and disaster relief. Their outdoor operation in the Australian airspace is regulated by the Australian Civil Aviation Safety Authority (CASA) according to Commonwealth legislation, and UNSW has a framework in place to enable compliance with CASA and other requirements.

2. Regulatory Environment

Piloting a drone for UNSW purposes may be considered a commercial activity by CASA. Accordingly, UNSW holds a Remotely Piloted Aircraft Operator's Certificate (ReOC) and has a CASA-approved Chief Remote Pilot and Maintenance Controller to oversee all drone operations on behalf of the Deputy Vice-Chancellor Research & Enterprise and Pro Vice-Chancellor (Research) and the institution as outlined in this procedure and supporting documents. Policy and administrative support is provided by Research Ethics & Compliance Support (RECS) as detailed on the UNSW drone operation and management website. All UNSW drone operations, including job approvals, competency induction and job safety and risk assessments are submitted and managed via the online drone management software, AVCRM.

3. Excluded Category

Operating a drone weighing less than 2kg is excluded from CASA's explicit authorisation when flown within Standard Operating Conditions (SOC) as defined by CASA. Under these circumstances, drone operators do not need to become CASA-certified remote pilots. However, operators are required to obtain an Aviation Reference Number (ARN) and complete CASA's accreditation course. Additionally, operators are required to register their drones with CASA and UNSW Insurance via RECS prior to drone operation.

In addition, where drones less than 2kg are registered with CASA under the UNSW ReOC for dualuse under excluded and included category operations, drone operators who are not RePL holders need to be adequately trained by a licensed pilot, and must maintain the drones in strict adherence with the UNSW RPA Operations Manual. This recognises the risk that inadequate or non-compliant operations of drones registered under UNSW ReOC with CASA may compromise the university's ReOC.

Operation using micro RPAs (250g or less) must comply with the 'excluded category' requirements outlined in this section. This includes the requirement to obtain an ARN, complete CASA's accreditation course, register the drone with CASA and UNSW Insurance and submit flight operations and logs via AVCRM. Micro RPAs are permitted to be flown within 5.5km (3NM) of the movement area of a controlled aerodrome, permitted they are not operated over the movement area or over or in the departure or approach path and not creating a collision hazard to other aircraft taking off or landing. Operators intending to fly on UNSW Kensington or Canberra campus' are required to contact RECS (drones@unsw.edu.au) for advice on CASA requirements prior to such operation (please see section 10).

4. Included Category

For drones above 2kg, and drones under 2kg flown outside SOC as defined by CASA, operators are required to become licensed remote pilots. This includes:

- obtaining an ARN and a Remote Pilot Licence (RePL) from CASA
- submitting the ARN, RePL and relevant qualifications with UNSW RECS by email to drones@unsw.edu.au, as well as providing drone details for registration with CASA and insurance purposes
- completing the competency assessment and obtaining flight authorisation for flight conduction from the UNSW Chief Remote Pilot
- following all requirements of the UNSW RPA Operations Manual and associated documents

5. Accountabilities of CEO/Managing Director

The CEO/Director, which is the UNSW Deputy Vice-Chancellor Research & Enterprise and Pro Vice-Chancellor (Research) as delegated by the Vice-Chancellor, are accountable for safety and corporate compliance. They will provide the necessary resources so that all operations and maintenance can be conducted to meet company obligations, goals and objectives including finance and human resources. The CEO is accountable to ensure the currency of the ReOC and will ensure that any operation conducted on behalf of the company is conducted under the control and authority of the Chief Remote Pilot and/or Maintenance Controller as identified on the ReOC. The CEO/Director is required to advise CASA of any of the following:

- changes to the company's name or registered address
- nomination of a new Maintenance Controller or Chief Remote Pilot
- changes to the financial status of the operator (bankruptcy, liquidation, etc.)
- respond to safety related surveys or questionnaires

6. Responsibilities of the Chief Remote Pilot

UNSW's Chief Remote Pilot (CRP) is responsible for all operational matters and RP training affecting the safety of operations. The role and responsibilities of the CRP are to:

- Ensure that operations are conducted in compliance with the Civil Aviation Act 1988, the Regulations, and the Part 101 Manual of Standards (MOS)
- monitor and maintain operational standards and supervise RP(s) who work under the authority of the ReOC of UNSW
- maintain complete and up-to-date operational documents in accordance with Part 101 MOS.

- develop applications for approvals and permissions where required to facilitate operations
- develop checklists and procedures relating to flight operations
- be the point of contact for CASA
- notify CASA prior to any change to this manual or its schedule
- assess and authorise the appointment of Senior Remote Pilots
- ensure an annual review of all operational documents is completed
- ensure all records are kept IAW the Part 101 MOS
- adhere to any requirements set out in the Part 101 MOS

7. Responsibilities of the Maintenance Controller

UNSW's Maintenance Controller is responsible for ensuring the maintenance of RPAS is in accordance with the manufacturer specifications. The role and responsibilities of UNSW's Maintenance Controller are to:

- control all RPAS maintenance, either scheduled or unscheduled
- keep records of personnel permitted to perform maintenance on RPA including details of their training and qualifications
- develop, enforce and monitor RPAS maintenance standards
- maintain a record of RPAS defects and any unserviceability
- ensure that each item of equipment essential to the operation of UNSW's RPA is serviceable
- ensure that specialist equipment items, including payload equipment are serviceable
- maintain thorough technical knowledge of RPAS operating under the authority of the ReOC of UNSW
- ensure maintenance activities are conducted in accordance with the procedures detailed in the relevant RPAS section
- investigate all significant defects in the RPAS

8. Responsibilities of the Remote Pilot in Command

For the purposes of this procedure, at UNSW, a Remote Pilot includes a holder of a CASA 'RePL' or 'UAV Controllers Certificate'. UNSW's Remote Pilot in Command of an RPA are responsible for:

- conducting flight in accordance with these procedures
- the safe operation of the RPA
- acting in accordance with these procedures
- acting in accordance with any conditions imposed on their RePL
- complying with applicable regulatory requirements and supporting documents, such as the Airservices Australia Aeronautical Information Package.

9. Responsibilities of Payload Operators, Observers and Others

At UNSW, all Payload Operators, observers and other persons involved in the operation of RPAS controlled under the authority of the ReOC of UNSW have committed to complying with the procedures set out in the UNSW ReOC Manual and any lawful direction given to them by an Unmanned Aerial Vehicle controller or Remote Pilot in Command.

10. Controlled Airspace

Drone operation within 3NM (5.5KM) of a controlled aerodrome boundary, a restricted area, a prohibited area or a populous area, can only be conducted with written approval by CASA. In some circumstances, drone operations within these areas may be permitted if a micro-RPA (250g or less) is used. The UNSW Kensington and UNSW Canberra campus are situated within 3NM of international airports (Sydney Airport and Canberra Airport, respectively) and their respective flight paths. Operators intending to fly on UNSW Kensington or UNSW Canberra campus are required to contact RECS (drones@unsw.edu.au) for advice on CASA requirements prior to operation.

11. Complaints and Grievances

UNSW has established a complaints and grievances mechanism for UNSW personnel, students and persons external to the university. This process allows the voicing of concerns regarding the use of drones in research and the management processes for drones.

Complaints and allegations of non-compliance about the conduct of research using drones by UNSW staff, students and visitors involving RPAs are to be reported to the Director of Research Ethics and Compliance Support (RECS) (drones@unsw.edu.au). Where deemed appropriate, natters may be referred to the UNSW Conduct & Integrity Office. Allegations involving possible breaches of the *Australian Code for the Responsible Conduct of Research* are referred to the Research Integrity Unit (research.integrity@unsw.edu.au) to be reviewed in accordance with the UNSW Research Code of *Conduct*.

Grievances about drone management processes involving RPAs by UNSW staff and students should be addressed to the Director of RECS (<u>drones@unsw.edu.au</u>) to be assessed against institutional and legislative frameworks.

12. Additional Operating Guidelines

Operating guidelines in support of this procedure are approved by the Deputy Vice-Chancellor Research &/or Enterprise and Pro Vice-Chancellor (Research) and displayed in their most current form on the UNSW drone <u>website</u>.

Accountabilities						
Responsible Officer	Director, Research Ethics & Compliance Support					
Contact Officer	Manager, Research Ethics & Compliance Email: <u>drones@unsw.edu.au</u> Phone: 9065 8520					
Supporting Information						
Legislative Compliance	This procedure supports the University's compliance with the following legislation: <u>Civil Aviation Act 1988</u> (Cth) <u>Civil Aviation Safety Regulations 1998</u> Part 101 (Unmanned Aircraft and Rockets) Manual of Standards 2019 (as amended)					
Parent Document (Policy)	UNSW Research Code of Conduct					
Supporting Documents	UNSW RPA Operations Manual <u>HS932 Permit to fly drones - Contractors</u>					
Related Documents	CASA: Drones					
Superseded Documents	Remotely Piloted Aircraft Procedure v1.0					
File Number	2019/07527					
Definitions and Acronyn	ns					
ARN	Aviation Reference Number					
ATSB	Australian Transport Safety Bureau					
CASA	Civil Aviation Safety Authority					

CRP		Chief Remote Pilot							
MOS		Manual of Standards							
ReOC		RPA Operator's Certificate							
RePL		Remote Pilot Licence							
RPA		Remote Piloted Aircraft							
RPAS		Remotely Piloted Aircraft Systems							
SOC		Standard Operating Conditions							
Revision History									
Version Approved by			Approval date	Effective date	Sections modified				
1.0	Deputy Vice-Chancellor Research		12 April 2022	12 April 2022	New procedure				
2.0	Pro Vice-Chancellor Research		2 August 2022	2 August 2022	Full Review				