# Drones: Deakin University Standard for Flying drones/Unmanned Aerial Vehicles (UAV) / Remotely Piloted Aircraft (RPA).

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Owner: Health, Wellbeing and Safety (HR)

## **Introduction**

Deakin University supports the use of Drones in teaching, research, and operations across all fields and disciplines. This Standard outlines the requirements for operation of Drones for all Deakin staff and students. The Standard covers all flight operations, both indoors and outdoors, including those wholly undertaken by Deakin staff and students as teaching, research or service activities, as well as those undertaken by third party organisations as a demonstration, teaching, research or commercial undertaking on behalf of Deakin University.

The Civil Aviation Safety Authority (CASA) governs the use of Drones for recreation and commercial use. As defined by these regulations, any operation which is not undertaken “purely for pleasure” is a commercial operation. Therefore, ***any Drone operation undertaken at or on behalf of Deakin University is a commercial operation, and must follow commercial CASA requirements***. Please be aware that any imagery, data, or information collected with a Drone recreationally cannot be used in any format at Deakin University, as such actions retrospectively deem the recreational flying to be classed as a commercial operation.

CASA regulations inform and override this standard. All staff, students and contractors involved in, or responsible for the operation of drones as part of Deakin business, are required to consult and understand this Standard.

The regulations describe main classes of Drone used for commercial purposes and each class has its own specific requirements. The classes are:

* A. Micro Drone(< 100g) (excluded)
* B. [Very Small Drone (from 100g to less than 2 kg) (excluded)](https://www.casa.gov.au/standard-page/commercial-unmanned-flight-remotely-piloted-aircraft-under-2kg)
* C. [Small Drone ( from 2kg to less than 25 kg) on Deakin property (excluded)](https://www.casa.gov.au/aircraft/standard-page/excluded-remotely-piloted-aircraft-flying-over-your-own-land)
* D. [Small Drone ( less than 25 kg)](https://www.casa.gov.au/aircraft/standard-page/commercial-unmanned-flight-gaining-your-remotely-piloted-aircraft-pilot)
* E. Medium Drone 25 kg and less than or equal to 150 kg
* F. Large greater than 150 kg

Three of these classes are listed as “excluded” (A, B, C), which means they are excluded from requiring a Remote Pilot Licence (RePL), and Remote Operator’s Certificate (ReOC) to undertake commercial operations. While excluded from the RePL and ReOC requirements, they still have registration requirements and strict laws governing their use. To find out more about each class, and their requirements please follow the links above.

If you have any queries about the Standard or the linked forms after reviewing them, please contact [Health Wellbeing and Safety.](http://www.deakin.edu.au/about-deakin/faculties-and-divisions/administrative-divisions/human-resources-division)

## **Requirements for the use of Drones at Deakin.**

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| --- | --- | --- | --- | --- | --- |
| **Requirements** | **A****<100g\*** | **B****100g<2kg\*** | **C****2kg<25kg\*** | **D****<25Kg** | **E/F****Other** |
| Classification determined by the total weight of the aircraft including any attached sensors or other peripherals | **✓** | **✓** | **✓** | **✓** | **✓** |
| Completion of [Drone Form](http://www.deakin.edu.au/__data/assets/word_doc/0007/1392496/Deakin-ReOC_Flight_RA_Authorisation_Form.docx) | **✓** | **✓** | **✓** | **✓** | **✓** |
| Approval of use through the Drone form by Nominated Officer | **✓** | **✓** | **✓** | **✓** | **✓** |
| Compliance with [standard operating conditions](#StandardOperatingConditions) unless there is a risk assessment approved by the University’s Chief Remote Pilot [link required] | **✓** | **✓** | **✓** | **✓** | **✓** |
| All accidents and injuries involving Drones are to be reported by the pilot at: <http://www.deakin.edu.au/accident>  | **✓** | **✓** | **✓** | **✓** | **✓** |
| All activities must comply with the [Deakin’s Privacy Policy](https://policy.deakin.edu.au/document/view-current.php?id=139) | **✓** | **✓** | **✓** | **✓** | **✓** |
| **Where the operation of the Drone is by University staff or students** |
| Registration with CASA: Aviation Reference Number required: <https://www.casa.gov.au/standard-page/arn-applications>  |  | **✓** | **✓** | **✓** | **✓** |
| Consult CASA Advisory Circular 101-10 at: <https://www.casa.gov.au/files/ac10110pdf> |  | **✓** | **✓** | **✓** | **✓** |
| The operator is competent and experienced | **✓** | **✓** | **✓** | **✓** | **✓** |
| Working under a Remote Operators Certificate held by Deakin |  |  |  | **✓** | **✓** |
| Operator holds a Remote Pilot’s Licence |  |  |  | **✓** | **✓** |
| Covered automatically by Deakin insurance otherwise [Insurance Office](https://wiki.deakin.edu.au/display/staff/Insurance) to be notified | **✓** | **✓** | **✓** |  |  |
| If cost of the Drone exceeds $10,000, [Insurance Office](https://wiki.deakin.edu.au/display/staff/Insurance) to be notified | **✓** | **✓** | **✓** | **✓** | **✓** |
| **The operation of the Drone is by an CASA approved operator: Deakin representative must ensure:** |
| Registration with CASA  |  | **✓** | **✓** | **✓** | **✓** |
| Working under a Remote Operators Certificate |  |  |  | **✓** | **✓** |
| Operator holds a Remote Pilot’s Licence |  |  |  | **✓** | **✓** |
| Proof of Public Liability Insurance of $10 million or more | **✓** | **✓** | **✓** | **✓** | **✓** |

 (\*) Solely over Deakin property

## **Standard Operating Conditions**

**Standard Operating Conditions** apply unless special arrangements are made:

* You must only fly during the day and keep your Drone within visual line-of sight: close enough to see, maintain orientation and achieve accurate flight and tracking. This means being able to see the aircraft with your own eyes (rather than through a device at all times).
* You must not fly your drone after sunset.
* You must not fly your Drone higher than 120 metres (400ft) above ground level (AGL), referenced to a point on the ground immediately below the drone at any time during the flight.
* You must not fly your drone over or near an area affecting public safety or where emergency operations are underway (without prior approval). This could include situations such as a traffic accident, police operations, a fire and associated firefighting efforts, and search and rescue.
* You must keep your drone at least 30 metres away from other people. That is any person who is not charged with duties essential to the safe operation of a Drone.
* You must not fly your drone over or above people. This could include beaches, parks, events, or sports ovals where there is a game in progress.
* You must keep your drone away from prohibited/restricted areas.
* 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.
* You must keep your drone at least 5.5km away from [controlled aerodromes](http://www.airservicesaustralia.com/services/unmanned-aerial-systems-in-controlled-airspace/) - one with an operating control tower.
* You can only fly one drone at a time.
* The operator must not breach [Deakin’s Privacy Policy](https://policy.deakin.edu.au/document/view-current.php?id=139)

Failure to follow [StandardOperatingConditions](#StandardOperatingConditions)can result in significant fines and possible imprisonment.

## **Remote Operator’s Certificate**

Deakin Holds a Remote Operator’s Certificate (ReOC), managed by the Deakin University Marine Mapping Group, meaning that those at Deakin University who hold an Remote Pilot Licence can operate under the University’s Certificate.

## **Remote Pilots Licence**

If you want to fly a Drone (remotely piloted aircraft) commercially in Australia, outside the excluded categories ( A- Micro Drone, B-Very Small Drone, or C-Small Drone on Deakin property), then you need to be licensed and/or certified by the Civil Aviation Safety Authority (CASA). The certification is called a Remote Pilot Licence (RePL), and allows individuals to fly for organisations which hold a Remote Operator’s Certificate (ReOC). If you do not have a RePL, there are two ways you can gain one:

1. If you have no prior aviation knowledge, you will need to complete a course with a Drone training provider.
2. If you have passed an aeronautical knowledge exam for a flight crew licence, you can complete operation (practical type) training with an Drone training provider to get type rated.

Lists for both types of providers can be found at the following:

<https://www.casa.gov.au/aircraft/standard-page/uas-certificate-holders>

Once you hold a RePL, you can be signed-in under the Deakin University ReOC. The ReOC is managed by Deakin’s Chief Remote Pilot . Please contact the Chief Remote Pilot to discuss your planned operations (airframes and locations) and the process for signing-in under the Deakin ReOC. This includes understanding Deakin’s ReOC procedures and a practical flight exam.

Once you have read and understood the ReOC documents, the Chief Remote Pilot will organize a time to meet and discuss your knowledge of the documents, and conduct a practical flight exam. You will be required to sign the ReOC manual, and list any aircraft you wish to use under the ReOC. You will need to provide proof of ID (driver’s license, passport, etc.), and your RePL certificate.

## **Some Useful Documents**

* Access to the Advisory Circular (AC) 101-10 can be found at:
<https://www.casa.gov.au/files/ac10110pdf>
* CASA Advisory Circular (AC) 101-01, and Civil Aviation Safety Regulations 1998 Part 101:
<https://www.casa.gov.au/standard-page/casr-part-101-unmanned-aircraft-and-rocket-operations>
* Aeronautical Information Package: <https://www.airservicesaustralia.com/aip/aip.asp>
* Visual Terminal Charts (VTC):
 <https://www.airservicesaustralia.com/aip/aip.asp?pg=60&vdate=25-May-2017&sect=VTC&ver=1>
* Visual Navigation Charts (VNC):
<https://www.airservicesaustralia.com/aip/aip.asp?pg=60&vdate=25-May-2017&sect=VNC&ver=1>
* **National Aeronautical Information Processing System (NAIPS):** <https://www.airservicesaustralia.com/naips/Account/Logon>
* To obtain an Aviation Reference Number (ARN), please visit:
<https://www.casa.gov.au/standard-page/arn-applications>
* Operating Drones under 2 kg: <https://www.casa.gov.au/standard-page/commercial-unmanned-flight-remotely-piloted-aircraft-under-2kg>