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| **IMPLEMENTATION**  **Draft 1 – 7 January 2020** | | | |
|  | **Aim**  To prescribe the responsibilities and actions required for the management of drones to ensure the University meets the requirements of the [HSW Policy](https://www.adelaide.edu.au/policies/153) ~~principles~~, and the relevant sections of the [Work Health and Safety (WHS) Act 2012 (SA) and WHS Regulations 2012 (SA)](http://www.legislation.sa.gov.au/LZ/C/A/WORK%20HEALTH%20AND%20SAFETY%20ACT%202012.aspx), [Civil Aviation Act](https://www.legislation.gov.au/Series/C2004A03656) 1988 (Cwth), ~~and~~ [Civil Aviation Safety Regulation Part 101](https://www.casa.gov.au/standard-page/casr-part-101-unmanned-aircraft-and-rocket-operations) (CASR 101) 1998 (Cwth) and [Part 101 (Unmanned Aircraft and Rockets) Manual of Standards 2019](https://www.legislation.gov.au/Details/F2019L00593/Download). | | |
|  | **1** | **Objectives** | |
|  |  | **1.1** | To ensure compliance with the [Civil Aviation Act](https://www.legislation.gov.au/Series/C2004A03656) 1988 (Cwth) and [Civil Aviation Safety Regulation Part 101](https://www.casa.gov.au/standard-page/casr-part-101-unmanned-aircraft-and-rocket-operations) (CASR 101) 1998 and with the University’s Remotely Piloted Aircraft Operator’s Certificate (ReOC) issued by the Civil Aviation Safety Authority (CASA). |
|  |  | **1.2** | To ensure that the risks from drones are identified, assessed and appropriate control measures are in place to prevent an injury to drone operators and the general public. |
|  |  | **1.3** | To ensure that University drone operations are only conducted with the approval of the University’s Chief Remote Pilot and according to conditions of operation set. |
|  |  | **1.4** | To ensure that all drone related incidents/injuries have been reported:   * in the University’s [incident reporting system](https://www.adelaide.edu.au/hr/hsw/unisafe); and * ~~investigated and control measures reviewed before the activity is conducted again;~~ * ~~corrective action(s) implemented where required to prevent a recurrence; and~~ * ~~reported~~ to the University’s [**Chief Remote Pilot**](http://www.adelaide.edu.au/environment/uraf/people/) and then to the Civil Aviation Safety Authority (CASA) as appropriate. |
|  | **2** | **Scope and application** | |
|  |  | **2.1** | **Inclusions**  This process applies to all persons who undertake University of Adelaide related activities and/or are employed or engaged by the University or affiliated with the University in any capacity as a worker as defined under the WHS Act 2012 (SA). This includes but is not limited to employees, title holders, volunteers, Higher Degree Research students, visitors or third parties engaged by the University under a contract of service or contract for service (e.g. contractors, sub-contractors and employees of a labour hire company placed in the University). |
|  |  | **2.1** | **Application**  This process relates to the HSW and Civil Aviation aspects of drone operations.  Reference must be made to the applicable UniversityRemotely Piloted Aircraft Systems (RPAS) Operations, Maintenance Control or Flying Manual for Civil Aviation Safety Authority compliance requirements.  Only activities approved by the University’s Chief Remote Pilot can be conducted.  (Note: Chief Remote Pilot now replaces the term Chief Controller in all CASA legislation.)  Continued |

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| HSW Handbook | **Drone Safety Management** | Effective Date: | **~~16 December 2016~~** | Version ~~1.0~~  2.0 |
| Authorised by | Chief Operating Officer (University Operations) | Review Date: | **~~16 December 2019~~** | Page 1 of 2 |
| Warning | This process is uncontrolled when printed. The current version of this document is available on the HSW Website. | | | |

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|  | **2** | **Scope and application (Continued)** | | | |
|  |  | **2.1** | **Application (Continued)**  Regulations allowing some operations using RPAs under 2kg without certification **DO NOT APPLY** at the University. All RPA activities must be approved by the Chief Remote Pilot in accordance with this process.  The University has been issued an RPA Operator’s Certificate which sets out the scope of operations permitted.  There are some basic rules issued by CASA for all types of Remotely Piloted Aircraft (RPA), including drones and model aircraft.  RPAs can only be operated:   * in visual line of sight (without binoculars or telescope) * below 400 feet above ground level * in visual meteorological conditions * during the day.   Generally RPAs cannot be operated:   * over populous areas, or * within 3 nautical miles (approx. 5 km) of an aerodrome (i.e. city Campus) * in controlled airspace or prohibited areas (i.e. Roseworthy Campus) * within 30 metres of a person not directly associated with the RPAs operating team. * in the approach or departure area for an aerodrome or helipad   Permission for some activities may be given where it can be demonstrated that public safety can be properly managed. Check with the [**Chief Remote Pilot**](http://www.adelaide.edu.au/environment/uraf/people/) for details. | | |
|  | **3** | **Process: Drone Operations** | | | |
|  |  | **Person Responsible** | |  | **Actions** |
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|  |  | **3.1** | **Deputy Vice-Chancellor and President (Research)**  [DVC(R)] |  | * Ensure the following positions are appointed: * Remotely Piloted Aircraft Systems (RPAS) Chief Remote Pilot. * RPAS Maintenance Controller(s). * Appoint a RPAS Compliance Officer(s) if needed. * Ensure the University[RPAS Operations, Maintenance Control and Flying Manuals](https://www.adelaide.edu.au/environment/uraf/intranet) are followed and maintained. * Ensure CASA are advised and approve any changes to the appointment of the Chief Remote Pilot. |
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|  |  | **3.2** | **Remotely Piloted Aircraft Systems (RPAS** [**Chief Remote Pilot**](http://www.adelaide.edu.au/environment/uraf/people/)**)** |  | * Be the approved contact person for CASA within the University. * Maintain the University[RPAS Operations, Maintenance Control and Flying Manuals](https://www.adelaide.edu.au/environment/uraf/intranet). * Ensure the Chief Remote Pilot responsibilities in the University RPAS Operations Manual are followed. * Oversee all University RPAS Operations. * Ensure RPAS Maintenance Controller(s) and RPAS Remote Pilot(s) follow the applicable requirements of the RPAS Operations, Maintenance Control and Flying Manuals. * Ensure the UniversityRPAS Operations, Maintenance Control and Flying Manuals are made available to University workers via the University website. * Provide advice, as required, to Heads of School/Branch and Supervisors on University Drone related CASA requirements.   Continued |

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|  | **3** | **Process: Drone Operations (Continued)** | | | |
|  |  | **Person Responsible** | |  | **Actions** |
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|  |  | **3.2** | **Remotely Piloted Aircraft Systems (RPAS** [**Chief Remote Pilot**](http://www.adelaide.edu.au/environment/uraf/people/)**)**  (Continued) |  | * Refuse permission to any operation that does not meet CASA requirements or the best practices, risk and/or insurance requirements of the University. * Maintain records of the qualifications of all RPA pilots, drones and operations. |
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|  |  | **3.3** | **RPAS** [**Maintenance Controller(s)**](https://www.adelaide.edu.au/environment/uraf/people)  **[Appointed by the (DVC(R)]** |  | * Ensure Maintenance Controller(s) responsibilities in the RPAS Operations and Maintenance Control Manuals are followed. * Assist the ~~Heads of School/Branch and~~ Supervisors/Person in control the activity, to implement the applicable HSW Chapters. These may include, but are not limited to:   + [Hazard Management](https://www.adelaide.edu.au/hr/hsw/hsw-policy-handbook/hazard-management-handbook-chapter)   + [Plant/Equipment Safety Management](https://www.adelaide.edu.au/hr/hsw/hsw-policy-handbook/plant-equipment-safety-management-handbook-chapter)   + [Chemical Safety Management](https://www.adelaide.edu.au/hr/hsw/hsw-policy-handbook/chemical-safety-management-handbook-chapter)   + [Incident Reporting and Investigation](https://www.adelaide.edu.au/hr/hsw/hsw-policy-handbook/incident-reporting-investigation-handbook-chapter) |
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|  |  | **3.4** | **RPAS** [**Compliance Officer(s)**](https://www.adelaide.edu.au/environment/uraf/people)  **[If appointed by the (DVC(R)]** |  | If appointed   * assist the Chief Remote Pilot and act as delegate for the Chief Remote Pilot from time to time within the limits set. |
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|  |  | **~~3.6~~** | **~~Head of School/~~**  **~~Branch~~** |  | * ~~Ensure the University~~~~RPAS Operations, Maintenance Control and Flying Manuals are followed for all School/Branch drone activities.~~ |
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|  |  | **3.5** | **Supervisor/Person in control of the activity** |  | * Ensure the UniversityRPAS Operations, Maintenance Control and Flying Manuals are followed for all School/Branch drone activities. * Contact the University Remotely Piloted Aircraft Systems (RPAS) [Chief Remote Pilot](http://www.adelaide.edu.au/environment/uraf/people/) and [Compliance Officer](http://www.adelaide.edu.au/environment/uraf/people/), prior to commencing drone operations, to discuss proposed drone operations. * Ensure that the requirements of this chapter and relevant HSW Chapters are followed for all drone operations.   These may include, but are not limited to:   * + [Hazard Management](https://www.adelaide.edu.au/hr/hsw/hsw-policy-handbook/hazard-management-handbook-chapter)   + [Plant/Equipment Safety Management](https://www.adelaide.edu.au/hr/hsw/hsw-policy-handbook/plant-equipment-safety-management-handbook-chapter)   + [Chemical Safety Management](https://www.adelaide.edu.au/hr/hsw/hsw-policy-handbook/chemical-safety-management-handbook-chapter)   + [Incident Reporting and Investigation](https://www.adelaide.edu.au/hr/hsw/hsw-policy-handbook/incident-reporting-investigation-handbook-chapter) * [Noise and Sound Safety Management](https://www.adelaide.edu.au/hr/hsw/hsw-policy-handbook/noise-sound-safety-management-handbook-chapter). |
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|  |  | **3.6** | **RPAS Remote Pilot(s)** |  | * Ensure the Remote Pilot(s) responsibilities in the RPAS Operations and Flying Manuals are followed. * Ensure as an RPA Pilot you are licensed and trained to meet CASA requirements.  (Note: Appropriate licensing is a condition under the University’s Insurance program.) * Follow any lawful instruction given by the RPA Chief Remote Pilot or their delegate.   Continued |

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|  | **3** | **Process: Drone Operations (Continued)** | | | |
|  |  | **Person Responsible** | |  | **Actions** |
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|  |  | **3.6** | **RPAS Remote Pilot(s)**  **(Continued)** |  | * Follow the applicable HSW Chapters for drone flying operations and implement the control measures on the Risk Assessment(s). * Ensure when operating a drone from within a vehicle or boat that you do not operate the vehicle or boat. * Follow the University’s Privacy Policy in relation to photographic or video data. * Report any incidents in accordance with the [Report a safety issue or incident ~~and Investigation~~](https://www.adelaide.edu.au/hr/hsw/hsw-policy-handbook/incident-reporting-investigation-handbook-chapter) HSW Handbook chapter. |
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|  |  | **3.7** | **Other workers involved in drone operations** |  | * Ensure you do not operate the drone unless you are an authorised RPAS Remote Pilot.   + Implement the control measures on the Risk Assessment (where required) in accordance with the [Hazard Management](https://www.adelaide.edu.au/hr/hsw/hsw-policy-handbook/hazard-management-handbook-chapter) HSW Handbook chapter. Consider requirements for:   + [Plant/Equipment Safety Management](https://www.adelaide.edu.au/hr/hsw/hsw-policy-handbook/plant-equipment-safety-management-handbook-chapter)   + [Chemical Safety Management](https://www.adelaide.edu.au/hr/hsw/hsw-policy-handbook/chemical-safety-management-handbook-chapter) * Maintain a safe distance from drone flight paths so as to not endanger yourself or others. |
|  | **4** | **Definitions**  **Drone**  A drone may include any Remotely Piloted Aircraft (RPA), Unmanned Aerial Vehicle (UAV), Unmanned Aerial System (UAS), Remotely Piloted Aircraft Systems (RPAS) or First Person View (FPV) aircraft, regardless of size, ability to carry a payload or type of powertrain. | | | |
|  | **5** | **Performance Measures**  Human Resources will use performance measures to assist in identifying areas of success and/or where corrective action is required to meet the objectives and targets of this process.  The level of compliance with the chapter and effectiveness will be determined during the internal audit process. | | | |
|  | **6** | **Useful information and resources** | | | |
|  |  | **6.1** | **University related documents**  [HSW Policy](http://www.adelaide.edu.au/policies/153/)  [HSW Handbook: Hazard Management](https://www.adelaide.edu.au/hr/hsw/hsw-policy-handbook/hazard-management-handbook-chapter)  [HSW Handbook: Plant/Equipment Safety Management](https://www.adelaide.edu.au/hr/hsw/hsw-policy-handbook/plant-equipment-safety-management-handbook-chapter)  [HSW Handbook: Chemical Safety Management](https://www.adelaide.edu.au/hr/hsw/hsw-policy-handbook/chemical-safety-management-handbook-chapter)  [HSW Handbook: Incident Reporting and Investigation](https://www.adelaide.edu.au/hr/hsw/hsw-policy-handbook/incident-reporting-investigation-handbook-chapter)  [HSW Handbook: Noise and Sound Safety Management](https://www.adelaide.edu.au/hr/hsw/hsw-policy-handbook/noise-sound-safety-management-handbook-chapter)  [Privacy Policy](http://www.adelaide.edu.au/policies/62/)  [RPAS Operations Manual](https://www.adelaide.edu.au/environment/uraf/intranet/)  [RPAS Maintenance Control Manual](https://www.adelaide.edu.au/environment/uraf/intranet/)  [RPAS Flight Manual](https://www.adelaide.edu.au/environment/uraf/intranet/)  [Legal and Risk Branch – Drones and Civil Aviation Safety Regulations (Powerpoint)](https://www.adelaide.edu.au/legalandrisk/docs/resources/Drones_101.pdf)  [Legal and Risk Branch – Drones Insurance](http://www.adelaide.edu.au/legalandrisk/insurance/drones/) | | |
|  |  | **6.2** | **Related Legislation**  [Work Health and Safety Act 2012 (SA)](http://www.legislation.sa.gov.au/LZ/C/A/WORK%20HEALTH%20AND%20SAFETY%20ACT%202012.aspx)  [Work Health and Safety Regulations 2012 (SA)](http://www.legislation.sa.gov.au/LZ/C/R/Work%20Health%20and%20Safety%20Regulations%202012.aspx)  [Civil Aviation Act](https://www.legislation.gov.au/Series/C2004A03656)  [Civil Aviation Safety Regulation Part 101](https://www.casa.gov.au/standard-page/casr-part-101-unmanned-aircraft-and-rocket-operations) (CASR 101). | | |

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|  | **6** | **Useful information and resources (Continued)** | |
|  |  | **6.3** | **Useful Web-links**  [**SafeWork SA**](http://www.safework.sa.gov.au/)  [**SafeWork Australia**](http://www.safeworkaustralia.gov.au/)  [Unmanned Research Aircraft Facility (URAF)](https://www.adelaide.edu.au/environment/uraf/) |