Southwest Agri-tech Pty Ltd

Civil Aviation Safety Regulations PART 101

RPAS Operations Manual

Version:	1 – <IssueDate>
Approved by:	Sean Maynard
Next Review Date:	<NextReviewDate>

CONTENTS

Applicability

This operations manual is not just a set of procedures, instructions, and guidance. It is a vital tool for Southwest Agri-tech Pty Ltd's personnel to ensure the safe execution of their duties and aviation operations. It is the backbone of our control and supervision of RPA flight operations. Every member of our team plays a crucial role in this, and it is imperative that all personnel strictly adhere to the relevant instructions and procedures contained in this manual.

Amendment record

VERSION NO.	DATE	EFFECTIVE DATE	PARTS/SECTIONS	DETAILS
1	<IssueDate>	Immediate	All	Initial issue based on 2024 UA template.

Glossary

Acronyms and abbreviations

ACRONYM/ABBREVIATION	DESCRIPTION
AGL	Above ground level
ALARP	As low as reasonably practical
ATSB	Australian Transport Safety Bureau
ATC	Air traffic control
BVLOS	Beyond visual line of sight
CAA	Civil Aviation Act 1988 (the Act)
CASA	Civil Aviation Safety Authority
CASR	Civil Aviation Safety Regulations 1998
CRP	Chief remote pilot
EVLOS	Extended visual line of sight
HLS	Helicopter landing site
IAW	In accordance with
JSA	Job safety assessment
MOS	Manual of Standards
MC	Maintenance controller
NM	Nautical miles
NOTAM	Notice to Air Missions
NVLOS	Night Visual Line of Sight
OC	Operational crew member
RePL	Remote pilot licence
ReOC	Remotely piloted aircraft operator's certificate
RP	Remote pilot (or UAV controller)
RPA	Remotely piloted aircraft (same meaning as UAV)
RPAS	Remotely piloted aircraft system (same meaning as UAS)
SMS	Safety management system
SOC	Standard operating conditions – reference reg 101.238 CASR (1998)
SOP	Standard operating procedures
UOC	Unmanned aerial vehicle operator's certificate

ACRONYM/ABBREVIATION	DESCRIPTION
VLOS	Visual line of sight
VMC	Visual meteorological conditions

Definitions

For the definition of terms used in this manual, refer to the Part 1 Dictionary at the end of Volume 5 of the *Civil Aviation Safety Regulations (1998) (CASR)*, the Part 101 MOS, or the CASA-produced Flight Operations Regulations Consolidated Dictionary (downloadable from CASA's website). Operator-specific terms are defined here:

TERM	DEFINITION
Official authorisation	An authorisation from CASA, Airservices Australia, or any other authority responsible for providing an aviation authorisation, including the controlling authority of a military operating or restricted area.
Defect	Any confirmed abnormal condition of an item, irrespective of whether the condition could eventually fail. In addition to imperfections that may impair the structure, composition, or function of the RPAS, the scope of this definition encompasses any intermittent failure, spurious warning, or fault in the operation of an RPAS that may cause it to deviate from the manufacturer's specifications.
Major defect	A defect, the size of which may affect the safety of the aircraft or cause the aircraft to become a danger to persons or property.
Minor defect	A defect that is not a major defect.
Operational crew member	All personnel (except for the RP) have a duty essential to the control or navigation of an RPA operation.
Personnel	All personnel (including employees, contractors, and volunteers) are responsible for the safety of RPA operations.
Safety occurrence	Any event that affects, or could affect, the safety of an RPA operation.
Visual meteorological conditions	For RPA operations, this refers to horizontal visibility greater than 5000 meters and clear of cloud.

1 Policy and procedures

1.1 Operator information

1.1.1 Organisation details

Table 1: Organisation details

DETAIL	
Name of legal entity	Southwest Agri-tech Pty Ltd
Registered office address	PO BOX 761 Margaret River WA 6285
ARN	1304014
ACN	680 859 385
Operational headquarters address	140 Freshwater Drive Burnside WA 6285
Operational headquarters phone	0415 477 534
Operational headquarters email	sean@swagritech.com.au

1.1.2 Organisational overview

Southwest Agri-tech Pty Ltd holds a remotely piloted aircraft operator's certificate (ReOC) to conduct aerial work activities using remotely piloted aircraft systems (RPAS). The operator uses RPA to conduct aerial work operations specialising in aerial agriculture, photography, videography, mapping, and surveying using the RPA listed in Appendix B.

Remote pilots and ground crew are employed full-time, part-time, or casually, depending on demand and level of activity. Maintenance is performed in-house and subcontracted to various external organisations as needed.

1.1.3 Organisational diagram

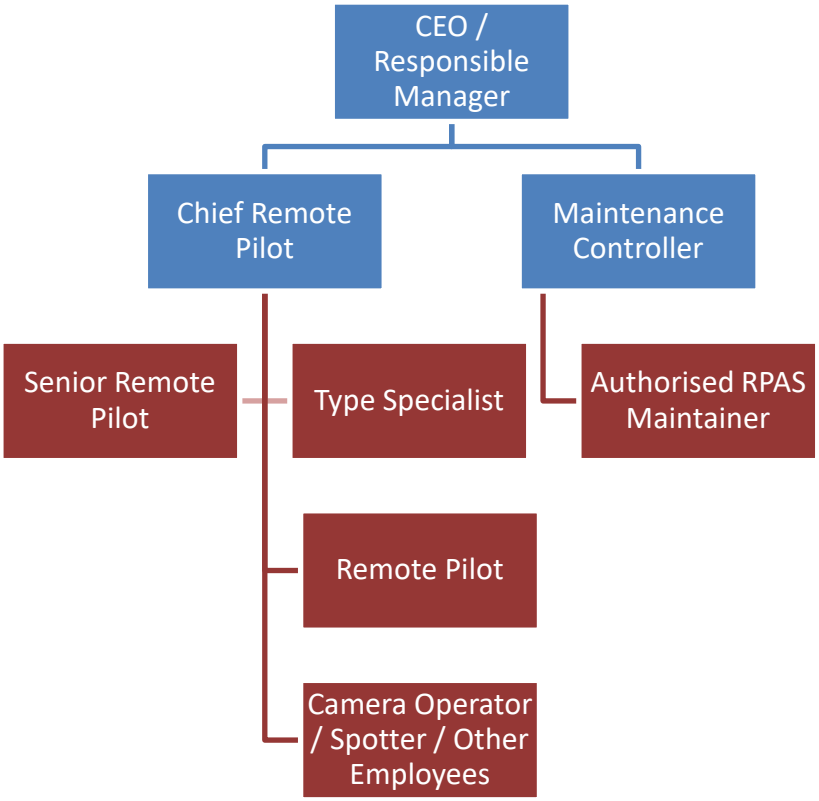


Figure 1: Organisational diagram.

1.2 Personnel

The key personnel positions of CEO, Chief Remote Pilot, and Maintenance Controller must be filled by an individual appointed by the operator. CASA must assess and approve the Chief Remote Pilot, and the CEO and Maintenance Controller must be acceptable to CASA.

Operations may not be conducted when a key position is vacant unless approved by CASA.

1.2.1 List of key personnel

Table 2: Key personnel

NOMINATED POSITION	NAME	ARN	DATE APPROVED
Chief remote pilot	Sean Maynard	1257228	<IssueDate>
Maintenance controller	Sean Maynard	1257228	N/A
CEO/Responsible manager	Sean Maynard	1257228	N/A

1.2.2 Key positions and responsibilities

1.2.2.1 Chief Executive Officer (CEO)/Responsible Manager

The CEO is responsible for the safety and corporate compliance of RPA operations.

The CEO must ensure:

- the safe conduct of RPAS operations IAW the conditions of the ReOC and the civil aviation legislation
- there are sufficient suitably experienced, qualified, and competent personnel.
- there is a suitable management structure.
- the operation is adequately financed and resourced
- safety performance indicators and targets are set up and regularly reviewed
- the approved documented practices and procedures are checked and managed for continuous improvement
- that key personnel satisfactorily fulfill the responsibilities of their positions IAW this manual and the relevant civil aviation legislation
- CASA is notified of any changes to the:
  - operator's name, address, or contact details
  - nominated personnel
  - financial status of the operator, which may affect the safety of RPA operations

1.2.2.2 Chief Remote Pilot (CRP)

The CRP is responsible for safely managing the RPA operations.

The CRP must:

- ensure that RPA operations are conducted IAW the conditions of the ReOC and relevant civil aviation legislation
- ensure that pilots and crew are suitably qualified and have experience and skills to enable them to fulfil the duties of their position satisfactorily
- maintain a record of qualifications held by the RP and OC
- monitor the operational standards and ability of the RP and OC
- review compliance and facilities by:
  - conducting internal audits
  - reviewing audit findings
  - taking any necessary corrective action to rectify deficiencies as soon as possible
- review scheduling and rostering of crew to ensure that fatigue does not adversely affect the safety of operations
- provide the RP and OC with ready access to all documents and manuals necessary to ensure the safety of all flights
- be the main point of contact with CASA for operational matters

- inform the CEO of any matter connected to RPA operations that is relevant to the CEO's duties

1.2.2.3 Maintenance Controller (MC)

The MC is responsible for ensuring that RPAS are correctly maintained.

The MC must:

- control all RPAS maintenance, either scheduled or unscheduled
- keep records of all personnel allowed 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 unserviceability issues
- ensure that each item of equipment essential to the operation of each RPA is serviceable before being released to service
- maintain a thorough technical knowledge of each RPAS being used
- ensure that all maintenance activities are conducted IAW the procedures detailed in Section 3 of this manual
- investigate all significant defects in the RPAS
- monitor the failure rates of RPAS components and impose extra maintenance requirements as necessary to ensure the safety of operations

1.2.3 Other positions and responsibilities

1.2.3.1 Senior Remote Pilot (SRP)

Senior Remote Pilots (SRP) are responsible for operational matters as authorised by the CRP.

SRP are responsible for the following:

- approving standard operations (e.g., excluding those that need an extra CASA, Airservices Australia, or military approval) on behalf of the CRP
- ensuring all RPs are following the correct procedures and checklists for their authorised tasks
- immediately reporting any compliance or safety issues to the CRP
- acting in the role of the CRP when delegated
- abiding by any conditions/restrictions placed on them by the CRP

1.2.3.2 Type Specialist (TS)

A TS is an RP with a superior Remote Pilot Licence (RePL) rating than the CRP for the type the operator intends to operate. The TS will advise the CRP on aspects of flight operations that relate to type specialist requirements.

A TS is responsible for:

- providing advice and guidance to the CRP for specialised type operations
- ensuring specialist operations are planned within type restrictions and countersigning flight authorisations for specified types only

- consulting with MC and providing any technical information for cause analysis, symptomatic problems, etc. related to the specific type
- instructing RPs internally to use the specific RPA type IAW the induction requirements

As this manual requires, all other aspects of flight operations are still governed and overseen by the CRP.

1.2.3.3 Remote Pilot (RP)

RPs are responsible for the following:

- conducting flight IAW these procedures
- the safe operation of the RPA from the commencement of operations until the RPA is shut down after an operation
- acting IAW the procedures contained in this manual
- acting IAW any conditions imposed on their RePL
- following applicable regulatory requirements and supporting documents, such as the AIP

RP includes a holder of a CASA 'RePL' or 'UAV Controllers Certificate.'

1.2.3.4 Camera operators, spotters, and other employees

All camera operators, spotters, and other persons involved in the operation of RPAS controlled under the authority of the ReOC must follow the procedures set out in this manual and any lawful direction given to them by a Remote Pilot.

1.2.4 Changing key personnel

A change of key personnel is significant and requires prior approval from CASA. Wherever possible, the CEO will ensure the vacating personnel change is approved by CASA before the holder of a key position vacates their position.

1.2.5 Delegation of duties

The CRP may delegate responsibilities to an approved SRP. The CRP must provide a briefing of all critical information and conditions of the delegation before putting it in place.

The CRP can revoke the delegation at any time.

The CRP must record any delegated duties with the SRP’s personnel records. Appendix F11 shows the details the CRP must register.

1.3 Operations manual administration

1.3.1 Access and distribution

This manual is kept electronically in the company’s cloud based document storage system. Copies of this manual that are not accessed directly from the system are uncontrolled.

Uncontrolled copies of the manual are not to be used unless the copy is verified to be identical to the current manual edition stored in the system.

All personnel must provide a written acknowledgment (an electronic acknowledgment such as an email is allowed) to the CRP saying that they have accessed, read, and understood this manual before performing any duty essential to the control or navigation of an RPA.

The CRP is to retain the acknowledgements in the company's cloud based document storage system.

1.3.2 Continuous improvement

This manual describes the current practices and procedures. It must be amended to reflect any changes. Staff are encouraged to suggest improvements in practices and procedures. Suggestions should be made to the CRP. All errors in the manual must be reported to the CRP as soon as practical.

The CRP must incorporate planned changes to operational practices and procedures into this manual before the change is implemented (see Section 1.3.3 of this manual).

The CRP must review the operations suite of documents at least annually to ensure the relevance and currency of all procedures. This review is also needed to achieve full compliance with legislative requirements.

1.3.3 Amendment procedure

Before making a significant change[1] to the operation, including significant changes to this manual, the CRP must send a draft copy incorporating proposed changes to CASA for approval. Only after CASA has approved the amendment may the CRP distribute it for operational use.

The CRP can make non-significant changes to this manual without approval from CASA.

The CRP must provide a copy of the updated manual to CASA within 21 days of any change.

Amended versions of this manual must include the date and have an updated version number assigned. The CRP must summarise the changes in the amendment record table.

The CRP must ensure the manual is copied to the records management system once it is approved for operational use.

The CRP must ensure that all personnel are notified of changes. The notification should include background on why the changes were made, the effective date, the reasons for the changes, and any implications for staff.

All personnel must provide a written or electronic acknowledgment of having read and understood the amendment before performing any duty essential to the control or navigation of an RPA after the amendment's effective date.

[1] See Part 101 MOS 10A for definition of 'significant change'.

The CRP is to retain the acknowledgements in the company's cloud based document storage system.

1.4 Record keeping and management.

1.4.1 Responsibility for record keeping.

Records fall into four categories:

- Personnel records
- Flight-related records
- RPA-related records
- Administrative records.

RP's must keep their logbook. The CRP manages all other personnel, flight-related, and administrative records. The MC handles RPA-related records.

1.4.2 Required records and retention.

Table 3: Personnel records.

TYPE OF RECORD	MINIMUM RETENTION PERIOD
Training event	Seven years after the date on which the record was made
Checking event	Seven years after the date on which the record was made
Attainment of RP qualification (including relevant qualifications held before commencement of employment)	Seven years after the date of the RP's last operation of an RPA within this operation
Attainment of qualification of competency about the safety of RPA operations (other than RP duties)	Seven years after the date on which the person ceases to be employed by the operator
RP logbook*	Seven years after the date of the RP's last operation of an RPA within this operation

*** The RP is to keep accumulated flight experience (including experience held before commencement of employment). For minimum requirements, see Section 10.06 of Chapter 10, Division 2 of the Part 101 MOS.**

Table 4: Flight-related records

TYPE OF RECORD	MINIMUM RETENTION PERIOD
Flight Record	Seven years after the date on which the record was made

Written consent to fly at less than 30 meters from a person	Seven years after the date on which the consent was provided

Note: The Flight Record combines the job safety assessment (JSA), authorised RPAS operational release, and RPAS operational log.

Table 5: RPA-related records

TYPE OF RECORD	MINIMUM RETENTION PERIOD
RPAS Technical Log	Seven years after the last time, the operator operated the RPA.
Register of RPA used to include manufacturer, model, maximum gross weight, and serial number.	Seven years after the date on which the record was made

Table 6: Administrative records

TYPE OF RECORD	MINIMUM RETENTION PERIOD
Acknowledgement of access to and understanding of the RPAS operations manual version	Seven years after the acknowledgment is made
Register of persons (other than the CRP) allowed to conduct training and checking (if applicable)	Seven years after the last time, the trainer provided training or checking.
Compliance audit record (see Section 1.6.1 of this manual)	Seven years from the date of the audit
Risk register	For each version of the register, 12 months after an updated version is issued
Safety occurrence register	For each safety occurrence entry in the register, seven years from the date of occurrence

1.4.3 Content of records

As a minimum, all records must have the details required by the Part 101 MOS.

1.4.4 Format of records

Records may be in any format determined to be acceptable by the CRP.

The record templates in Appendix F are examples only. They may be used where the usual means of keeping records cannot keep a record or is not the preferred method for maintaining a type of record or a record for a particular task.

1.4.5 Production of records

All records required by the Part 101 MOS must be available to CASA within seven days of a written request.

1.4.6 Location of permissions, exemptions and approvals

Copies of the ReOC and all permissions and approvals held or used in operations are held in the company's cloud based document storage system.

1.5 Internal training

1.5.1 Persons allowed to conduct training.

Only the CRP and persons nominated in writing by the CRP may provide internal training. Before authorising a person to conduct training, the CRP must ensure that competency tests are in place to guarantee the effectiveness and comprehensiveness of all training delivered.

1.5.2 Initial training

All personnel must thoroughly complete induction training and assessment to understand their roles, task requirements, and responsibilities. The training syllabuses are in Appendix G.

1.5.3 Type and complex operations training

Personnel need extra training and skills assessment before:

- undertaking a new complex operation – that is, an operation outside of the standard operating conditions (SOC) or
- operating a new RPA type.

Appendix G holds the training syllabuses.

1.5.4 Senior remote pilot training

The CRP is to conduct the training and evaluation of the SRP as per Appendix G4.

An SRP evaluation is to be conducted annually to ensure proficiency and competency.

The CRP must record SRP training and evaluation in the RP training records.

The CRP must maintain a list of approved SRPs.

1.6 Internal audit process

1.6.1 Operations manual and regulatory compliance

At 12-month intervals, the CRP will conduct a compliance audit on a representative sample of processes and procedures. At a minimum, the audit must assess the:

- accessibility and awareness of the current operations manual by all personnel
- accuracy and completeness of flight records and aircraft logs
- records of pilot training, skill checks, and qualifications
- completeness and accuracy of RP logbooks.

1.6.2 Monitoring operational standards

At 12-month intervals, the CRP will conduct a checking event with each RP and OC in a representative sample of operations to assess their operational competence and compliance with the operations manual and relevant aviation legislation.

The CRP must report to the CEO confirming that the operational standards are being kept and that corrective action (if needed) is being taken.

1.7 Fitness for duty

1.7.1 Reporting unfit for duty

No personnel may perform a task related to the safety or navigation of an RPA when unfit to undertake that activity. A person is taken to be unfit to perform a duty if their ability to perform the duty safely is impaired or likely to be impaired because they:

- are unwell or tired and/or
- have an illness or injury and/or
- have consumed, used, or absorbed a psychoactive substance (including alcohol) and/or
- have consumed prescription or over-the-counter medication (such as codeine and antihistamine) that can cause adverse side effects such as drowsiness.

Personnel must immediately report any potential or actual unfitness for duty to the CRP. The CRP will remedy the situation.

1.7.2 Alcohol consumption

Remote Pilots and others involved in the operation of RPAS must not perform their duties while under the influence of alcohol. Alcohol must not be consumed within 8 hours of commencing RPAS operations or at any time during an operation.

As a ‘safety-sensitive aviation activity,’ operational person(s) working under the authority of this ReOC may be randomly tested for alcohol and other drugs and must conform with any drug and alcohol testing requirements made by CASA or any contracting organisation.

1.8 Minimum experience requirements

RP must hold a RePL or UAV Controller Certificate, which authorises them to operate the RPA.

1.9 Recency requirements

The RP in command must have sufficient recent experience to be able to competently operate the RPA.

1.10 Safety occurrence reporting

All personnel must report safety occurrences, including near misses, to the CRP as soon as practical.

The CRP must ensure that the following occurrences are reported to the ATSB.[2]

Table 7: Safety occurrence reporting

RPA AND OPERATIONAL CHARACTERISTICS	ROUTINELY REPORTABLE MATTERS (RRM)	IMMEDIATELY REPORTABLE MATTERS (IRM)
RPA over 25kg MTOW operating under a ReOC and all certified RPA operations	• a reportable serious aircraft incident • declaration of an emergency about the aircraft • an external aircraft incident associated with the operation of the RPA or an incident which could affect the safety of the operation	• fatal aircraft-related injury • serious aircraft-related injury • aircraft structural damage or failure that affects its structural integrity or will require a major repair • aircraft is missing or completely inaccessible • loss of separation standard between aircraft • serious third-party property damage (repair or replacement cost of at least $25,000) • collision with an animal, including a bird.
RPA over 250 gm and under 25kg operated under a ReOC	• the aircraft is missing • the aircraft has suffered serious damage • aircraft inaccessible and the existence of reasonable grounds for believing it is seriously damaged • loss of separation standard between aircraft	• fatal aircraft-related injuries • serious aircraft-related injuries • serious third-party property damage (repair or replacement cost of at least $25,000)
RPA under 250gm and all RPA operated under the Excluded Category	• No report needed	• No report needed

[2] ATSB reporting requirements are detailed in the *Transport Safety Investigation Regulations (2021).*

The CRP must report per the following schedule.

ROUTINELY REPORTABLE MATTERS	IMMEDIATELY REPORTABLE MATTERS
• Submit an 'Occurrence Notification' to the ATSB within 72 hours. Occurrence Notification - Aviation | ATSB	• Report as soon as is reasonably practicable by phoning 1800 011 034 • Follow up with an 'Occurrence Notification' to the ATSB within 72 hours. Occurrence Notification - Aviation | ATSB

All personnel must take reasonable steps to preserve any flight planning and operational data, telemetry logs, and RPAS components that may help determine the cause of an occurrence.

2 RPA operations

2.1 Risk assessment

2.1.1 Risk criteria

Operations may only be conducted if they can be done without an unacceptable safety risk to the RPA or any person or other property and when they do not impose a hazard on the safety of air navigation.

2.1.2 Risk register

The CRP must keep a risk register covering all operational profiles conducted under the ReOC. The risk rating criteria and a template risk register are in the company's cloud based document storage system.

All current controls in the risk register must be linked to a procedure in this manual or a legislative requirement. Where an added control is implemented, the control should be considered in the subsequent amendment of the operations manual.

To ensure the accuracy of risk identification and adequacy of controls, the risk register must be reviewed and updated:

- before starting a new operational profile (for example, an operation requiring a different type of official authorisation)
- after any ATSB reportable safety occurrence
- at least annually.

Note: This operation uses the risk assessment and mitigation method in the CASA safety management system (SMS) kit at http://casa.gov.au/sms.

2.2 Planning

2.2.1 Documentation

A Flight Record must be created for each operation. Section 2 of the Flight Record (F1) has a JSA which must be completed for any operation:

- in RPA above 2 kg
- outside the SOC
- where an official authorisation is needed.

For operations using RPA weighing 2 kg or less and operating IAW the SOC, the RP must consider the items listed in Section 2 of the Flight Record (F1) before commencement of operations.

2.2.2 Operations requiring an official authorisation

Where an operation requires official authorisation, the JSA must include details of any added risk control. The CRP must make applications for official authorisation.

Where an official authorisation is provided, the RP must ensure they have read and understood it before commencing operations. The RP must follow any condition detailed in the authorisation unless doing so would harm aviation safety, in which case they must immediately cease the operation and advise the CRP of the issue as soon as practical.

Copies of all current official authorisations are available in the company's cloud based document storage system.

2.2.3 Flight authorisation

All operations require authorisation by the CRP. Before authorising an operation, the CRP must review the planning section of the Flight Record to ensure the operation will follow legislation and meet an acceptable risk profile.

A RPAS Operational Release/Flight Authorisation expires on any changes to:

- the type of RPA
- the crew
- the location
- authorised dates and times.

2.3 Before flight

2.3.1 Validation of operational documentation

Before operations commence, the RP must conduct an on-site validation of the operational planning documentation and local environmental considerations and note the on-site validation in Section 4 of the Flight Record (Appendix F1). Any variable outside the flight authorisation or manufacturer limitations requires an updated flight authorisation before operations commence.

2.3.2 Pre-operational briefing

When an operation involves more than one person, the RPIC must conduct a pre-operational briefing covering details of:

- the operation
- emergency procedures
- hazards
- crew responsibilities

All personnel relevant to the operation must attend the briefing.

2.3.3 Pre-operational serviceability

Before the commencement of the day's first flight, a serviceability inspection must be completed IAW Section 3.1.2 of this manual. A checklist should be used to ensure all inspection items are covered. The person conducting the inspection must record details of the inspection, including any identified defects, in the RPAS Technical Log before the commencement of operations.

The RP must complete a pre-flight inspection before each take-off.

All personnel must enter any defects they find during operations into the RPAS Technical Log as soon as practical and report the matter to the MC.

RPs must ensure that all required maintenance actions detailed in the RPAS Technical Log have been completed before a flight. RPs must not attempt to operate RPAS with unresolved major defects. Operations may proceed with minor defects, provided they are assessed and will not affect the safety of operations.

Note: A minor defect is one that will not affect the safety of the aircraft or cause it to become a danger to persons or property.

2.4 Flight operations

2.4.1 RPAS documentation and instructions

All RPAs must be operated according to the manufacturer's instructions and checklists, or an alternative procedure approved by the CRP.

Where an alternative RPA operating procedure has been approved, the procedure will be detailed in Appendix C. Before approving an alternative procedure, the CRP must conduct a risk assessment to assess the impact of the changed procedure on the safety of flight operations.

2.4.2 Ensuring operations do not pose a hazard

The RP must ensure that the RPA is not operated in a way that creates a hazard to another aircraft, person, or property.

To reduce the potential for conflict with other aircraft, the RP should not operate the RPA within 500 ft vertically or 1500 m horizontally of any airborne crewed aircraft unless approved by the CRP.

The RP must ensure that the prevailing meteorological conditions allow for visual separation from obstacles and other airspace users unless otherwise approved by CASA.

2.4.3 Aeronautical radio usage

Only qualified personnel under Part 61 or Part 64 of CASR may use an aeronautical radio.

An aeronautical radio is needed for all operations using RPA with a gross weight > 2 kg within controlled airspace or outside of the SOC.

Radio broadcasts must be made:

- **in controlled airspace:** only when directed by ATC or CASA or where necessary to resolve a potential conflict with a crewed aircraft.
- **in uncontrolled airspace:** only where necessary to resolve a potential conflict with a crewed aircraft.

Where carriage of an aeronautical radio is not mandatory, the RP should consider the benefits of situational awareness and use an aeronautical radio where appropriate.

2.4.3.1 Format of radio broadcasts

Radio broadcasts should be in the format <who am I talking to>, <location>, <who am I>, < what am I doing or what do I want>, <location>.

For example, TRAFFIC

BAIRNSDALE

UNCREWEDRPA

OPERATING 2NM SOUTH-EAST OF BAIRNSDALE AERODROME, NOT ABOVE 400 FEET A.G.L FOR THE NEXT 20 MINUTES

BAIRNSDALE

AIP GEN 3.4 has more detailed instructions on radio procedures.

2.4.4 Use of transponder

The RP must ensure that a transponder / ADS-B (out) capability fitted to the RPA is not activated unless requested explicitly by air traffic control or required by an official authorisation.

2.4.5 Transportation of dangerous goods

RPAS are subject to the requirements of the dangerous goods legislation.[3] The RP must ensure that RPA do not carry dangerous goods.

Note: When travelling to the site, limitations apply to the carriage of dangerous goods, including batteries, on commercial aircraft. Crew are reminded of their obligations to follow the carrier's dangerous goods policy.

2.4.6 Operations near people

Subject to 2.4.6.1 below, RP must ensure that an RPA is not flown within 30 m laterally of any person. This is measured from the point on the ground directly below the RPA to the position of any person not directly involved in the control or navigation of the RPA.

[3] See Section 23 of the CAA and Part 92 of CASR.

Note: Persons being filmed or photographed – such as actors, athletes, or members of the public – are not considered essential to the control and navigation of the RPA.

2.4.6.1 Operations 30m to 15m of a person

Operations within 30 m but not less than 15 m of a person are allowed if the following criteria are satisfied:

- A risk assessment must be completed, with mitigators implemented for the level and type of risk identified.
- The person must be advised of any identified risks and given details of the implemented mitigation strategies.
- The person must be advised of the requirement to obtain their consent to fly within 30m of them.
- The person consents to the RPA flying within 30 m of them.

Any consent to fly within 30 m of a person must be provided in writing.

Note: A body corporate or any other entity cannot give such consent on behalf of any individual.

2.4.6.2 Use of signage and barriers

When planning tasks, the RP should consider the placement of signage and barriers to restrict entry to the RPA operating area. Signage or barriers should be placed at all points of likely public access and noted on the JSA.

2.4.7 Operations over populous areas

The RP must also ensure an RPA (other than a micro-RPA) that is not certificated is not operated over a populous area at a height less than the height from which, if any of its components fail, it would be able to clear the area.

The RP may fly a certificated RPA over a populous area at a height less than the height from which, if any of its components fail, it can clear the area, with a CASA approval.

2.4.7.1 Populous area definition

An area is a populous area in relation to the operation of an uncrewed aircraft if the area has a sufficient density of population for some aspect of the operation, or some event that might happen during the operation (in particular, a fault in, or failure of, the aircraft) to pose an unreasonable risk to the life, safety or property of somebody who is in the area but is not connected with the operation.

2.4.7.2 Timing of operations

For operations where public activity levels are variable throughout the day or days of the week. RP should consider scheduling tasks ‘out of hours’ to make an area non-populous. Similarly, the temporary removal of specific high-value or sensitive third-party assets from the operating area can change the status of an area from populous to non-populous. Any specific requirements must be noted on the JSA.

2.4.8 Operations near aerodromes

The RP must not fly an RPA:

- over a movement area of a controlled aerodrome; or
- within the no-fly zone of a controlled aerodrome; or[4]
- within the relevant airspace of a non-controlled aerodrome during a relevant event

unless the RPA is flown:

- IAW an official authorisation; or
- indoors IAW Section 2.4.13; or
- tethered IAW Section 2.4.14

Note: See Appendix D1 for the specialised procedures for flying within controlled airspace and D2 for operations within the relevant airspace of non-controlled aerodromes and HLS.

2.4.9 Operations in Special Use Airspace (SUA)

2.4.9.1 Danger areas

RPs must consider the associated risks when planning a task within a Danger area. The CRP must conduct a risk assessment before approving any operation within a Danger area.

2.4.9.2 Military Operating areas

Approval must be obtained before operating RPA within an MOA. The SUA section of ERSA provides contact details for the administrating authority. All approval conditions must be complied with.

When planning a task, RPs must consider the risks involved in operating in the area. The CRP must conduct a risk assessment prior to any operation within a Military Operating area. Operations that have not received the approval of the administrating authority must not be authorised by the CRP.

2.4.9.3 Restricted areas

RPAs must not be operated in Restricted areas unless approval has been obtained from the controlling authority. All conditions of the approval must be complied with.

The CRP must not approve operations in Restricted areas without the approval of the controlling authority. Details and conditions of the operating approval must be recorded on the JSA for the task.

2.4.9.4 Prohibited areas

Flight within prohibited areas is not permitted under any circumstance.

[4] See Chapters 4 and 9 of the Part 101 MOS.

2.4.10 Operations at night

Operations at night are conducted under the generic night approval CASA 01/17 – Approval Operation of RPA at Night. Schedule 2 of the approval instrument has the equipment requirements and minimum environmental conditions that must be met.

A copy of the current version of CASA 01/17 can be found in the company's cloud based document storage system.

The JSA must include details of how the approval conditions will be met and mitigations for any other risks.

Only the CRP and RPs who have completed the night operations training and assessment (IAW Section 1.5 of this manual) can fly RPA at night.

Operator-specific requirements for night operations, which are in addition to the provisions of the CASA instrument, are in Appendix D3.

2.4.11 Operations above 400 ft AGL

Operations above 400 ft AGL (measured from the point directly below the RPA) require official authorisation. Before seeking approval, the CRP must conduct an assessment to show any added risks and controls. Items to be considered include:

- proximity to obstacles (shielding)
- crewed aircraft flight paths
- ability to maintain VLOS.
- aeronautical radio requirements
- NOTAM requirements
- environmental conditions.

2.4.12 Operations outside of VLOS

RPA must not be flown outside of VLOS without CASA approval. If CASA has authorised the operation, procedures can be found in Appendix D.

2.4.13 Indoor (contained) operations

The CRP may approve indoor operations.

Where the operation is within the no-fly zones of a controlled or uncontrolled aerodrome, the CRP must consider the requirements of PART 101 MOS 4.04 and 9.05, respectively, when approving the task.

Indoor operations may occur during relevant events.

Refer to Appendix D for the specialised operating procedures.

2.4.14 Tethered operations

The CRP may approve tethered operations.

Despite the Part 101 MOS 4.04, CASA approval is required for tethered operations in the no-fly zone of a controlled aerodrome.

Tethered operations within the no-fly zones of a non-controlled aerodrome are allowed without extra CASA approval, provided they meet the Part 101 MOS 9.05 requirements.

Tethered operations within the no-fly zone of a non-controlled aerodrome are permitted during relevant events.

For the specialised tethered operation procedures, refer to Appendix D.

2.4.15 Environmental and weather limitations

RP must check the prevailing environmental and weather conditions throughout each operation. Operations must not start if the prevailing conditions are outside the RPA's published operating criteria.

If conditions deteriorate during an operation, the RP must land the RPA as soon as reasonably practical and suspend the operation until the conditions are within the limits of the RPAS.

2.5 Post-flight administration

After operations, the RP must complete the remaining items of the Flight Record and file the record.

As soon as practical following each operation, the RP must record the 'time in service' and any known defects in the RPAS Technical Log.

2.6 Emergency procedures

2.6.1 General

The emergency response for all RPA emergencies is to return the RPA to a safe location on the ground. The preference is to do this without damage to the RPA in the shortest possible time while limiting the potential for injury to people or damage to property on the ground.

The priority of actions is:

1. Maintain control of the RPA
2. Manoeuvre the RPA to a safe location
3. Land the RPA

Depending on the emergency, the RP may use automation or manual flight control to manage the situation.

Any expanded emergency procedures and checklists specific to an RPA are in Appendix C.

Where the RPA has expanded emergency procedures, the RP must ensure an emergency checklist is readily available.

The crew should use initial action principles in all operations:

- **For solo RPAS operations:** Aviate, Navigate, Communicate, Administrate (ANCA)
- **For multi-crew RPAS operations:** Communicate (between crew), Aviate, Navigate, Communicate (externally to ATC / relevant stakeholder), and Administrate (CANCA)

Any RPA that loses control, is missing, or has crashed must be reported to the Chief Remote Pilot immediately.

2.6.2 Loss of orientation

- The RP should attempt to establish the orientation of the RPA. If orientation cannot be established after three attempts, they should initiate a Return-To-Home

2.6.3 Loss of control link

- Monitor the RPA, which should automatically 'Return-To-Home' or 'Land Now' as programmed
- If the programmed lost link action does not start within the expected time, the RP should try to recover the command link by cycling the power or restarting the ground station
- If the link does not recover and the RPA is within VLOS, wait for it to land when the battery is flat

2.6.4 Flight termination

Where the RP cannot regain control of the RPA, they should try to command a motor stop or activate the flight termination system (if fitted). The RP should consider the likely location

and trajectory of the RPA before controlling a motor stop or starting a flight termination system.

The RP must understand that avoiding injury to third parties and their property is paramount and is a higher priority than preventing damage to the RPA.

2.6.5 RPA crash site management

- Shut down the motors if still running
- Establish a safe perimeter
- Where there is no sign of smoke or fire
    - Inspect the battery(s) for swelling or damage
- Where there are signs of smoke or fire
    - Maintain a safe distance and prepare the fire-fighting equipment for use
    - Avoid contact with the smoke or fumes
- Report the incident to the CRP.
- Record the incident on the aircraft technical log.

2.6.6 Lost RPA / Loss of VLOS

- Initiate a 'Return to Home' (RTH)
- If visual contact with the RPA is not re-established within 1 minute:
    - Command an emergency shutdown.
    - Make a radio broadcast informing all nearby aircraft of an 'uncontrolled RPA' along with its last known position, altitude, and bearing.
    - Notify the CRP

NOTE: Before an emergency shutdown is conducted, consideration must be given to the probable location of the RPA and the potential for collision with persons or property.

2.6.7 Battery Fires

- Establish a safe perimeter around the site
- Use the available fire extinguisher (s) / water to contain the spread of the fire

Note: Class D extinguishers should be used on lithium-metal battery fires, and Class B extinguishers should be used on lithium-ion battery fires.
Further venting and fire may occur as more cells within the battery enter thermal runaway. Avoid smoke and fumes and watch the battery fire until it is completely extinguished.

2.6.8 Equipment

2.6.8.1 Communications Radio Failure

- The RP should land the RPA in a safe location before making any attempt to rectify the radio issue
- Make any mandatory radio calls prefixed with 'transmitting blind.'

2.6.8.2 Actual or Suspected Controller Failure

- Turn the controller off to start a 'Return-To-Home.'

2.6.9 Intrusions

2.6.9.1 Intruder RPA or crewed aircraft enters the operating area.

- Manoeuvre the RPA away from the track of the intruder aircraft
- Descend and land the RPA as soon as it is safe to do so

2.6.9.2 Non-company personnel enter the operating area.

- Manoeuvre the RPA away from the person(s)
- Land the RPA as soon as reasonably practicable while attempting to maintain 30m separation

2.6.9.3 Bird hazard

Task an observer (where available) to watch the flight pattern of the bird(s).

- If the bird is actively tracking the RPA
    - Land the RPA as soon as possible
- If the bird is acting aggressively towards the RPA
    - Attempt to rapidly ascent to above the bird's altitude (fixed wing to add a full roll during the climb where possible)
    - Move laterally away from the direction that the bird approached from
    - Conduct a rapid but safe descent to landing. Maintain forward speed during the descent to reduce the likelihood of the onset of vortex ring state.

2.6.9.4 Animal hazard

- Attempt to manoeuvre the RPA away from the animal.
- If the animal chases the RPA, manoeuvre to a fenced-off area (if possible).
- Land the RPA and shut it down as soon as possible in a safe location.

2.6.10 Night operations

2.6.10.1 Failure of landing area lighting at night

- If standby lighting is available
    - Activate the standby lighting
    - Continue the operation or land the RPA (as appropriate)
- If standby lighting is not available

- Check that the Return-To-Home position is clear of obstacles
- Execute a Return-To-Home

2.6.10.2 Failure of orientation lighting at night

- Execute Return-To-Home

2.6.11 Environmental

2.6.11.1 Deteriorating weather conditions

- Manoeuvre the RPA clear of the weather (if possible)
- Land the RPA as soon as possible in a safe location

2.6.12 Crew

2.6.12.1 Incapacitated pilot (single-crew operations)

- Initiate a Return-To-Home.

2.6.12.2 Incapacitated pilot (multi-crew operations)

- If a second company remote pilot is in the vicinity of the ground control station:
  - The second pilot should assume control of the RPA
  - Manoeuvre the RPA to a safe area
  - Land the RPA as soon as possible in a safe location
  - Assess the condition of the incapacitated pilot and initiate emergency response
- If no company remote pilot is in the vicinity of the ground control station:
  - Nearest crew member initiates the "Return to Home" (RTH) procedure
  - Assess the condition of the incapacitated pilot and initiate emergency response

2.6.13 Tethering

2.6.13.1 All tethering emergencies except broken tether and loss of lift

- Gently pull the RPA down by the tether until it can be captured and powered down

2.6.13.2 Broken Tether

- Initiate a slow descent, ensuring that any tether line that stays attached to the RPA does not foul the propellors
- Land the RPA in a safe location

2.6.13.3 Loss of lift

- Check that the area downwind is clear
- Call out, “Look out above.”
- Shut down the motors

3 Maintenance

3.1 Maintenance schedules

3.1.1 Periodic inspection schedule

All RPA are maintained IAW the maintenance schedules and procedures detailed in Appendix C of this manual. The MC must describe any upcoming maintenance item in the RPAS Technical Log.

3.1.1.1 Firmware and software

Updating RPAS and control system software is a periodic maintenance item and must only be conducted as and when directed by the MC.

3.1.2 Daily inspection schedule

A serviceability inspection of the RPA must be completed before starting that day's flight operations. Pre-flight inspection requirements are listed in Appendix C of this manual and the RPAS Technical Log.

The daily inspection is a maintenance item and must be recorded when completed.

3.2 Maintenance authorisation

3.2.1 Maintenance personnel

Table 8 outlines the roles/entities authorised to conduct specified maintenance activities on RPAS.

Table 8: Maintenance activities and personnel

PERSON	MAINTENANCE ITEMS
MC	• All maintenance items
RP holding a valid RePL who has completed operator RPA-type training	• Daily inspection (including pre-and post-flight) • Replacement of propellers • Replacement and charge of batteries • Fitting and removal of payloads and role equipment • Update of firmware/software
Organisations and service providers assessed by the MC as competent to provide RPAS maintenance services	• All maintenance items
Manufacturers of RPAS items and their approved service agents	• All maintenance items

The ground crew who has completed operator RPA-type training	• Daily inspection (including pre-and post-flight) • Replacement of propellers • Replacement and charge of batteries • Fitting and removal of payloads and role equipment • Update of firmware/software

3.3 Recording of defects and maintenance

It is the responsibility of all personnel to report defects to the MC as soon as practical.

Any person conducting maintenance (including daily inspections) must record it in the RPAS Technical Log.

3.4 Post-maintenance test flights

Before the MC returns an RPAS to service following any rectification or modification that has the potential to affect flight safety, it must have a flight test. Any appropriately licenced RP may conduct a flight test.

The MC must decide the composition of a flight test and detail it on the Flight Record.

The CRP must authorise all RPAS test flights.

An extra test flight is not required where an external provider completes the maintenance and provides written certification that a test flight has been completed.

3.5 Component maintenance and records

Where components of the RPA have time-life or calendar life limits or where CASA requires individual component time-in-service records to be kept, the MC must ensure that the records are kept.

A component history card (Part 4 of the RPAS technical log) for each component may be used to satisfy this requirement. If a component history card is used, records of the part's installation and removal from RPA and all component maintenance must be recorded on the record.

Note: CASR 101 MOS 10 (d)(ii) requires individual time-in-service records for engines, motors, rotors, and propellers on RPA with a MTOW of greater than 25kg.

Appendix A. Copy of RPA Operator's Certificate

A copy of the Remote Operator's Certificate may be found in the company's cloud based document storage system.

Appendix B. List of RPAS types operated

Table 9 lists the make and model of each RPA operated. Personnel must not use an RPA that is not listed in the table.

Table 9: RPAS types operated

MAKE	MODEL
DJI	Agras T50
DJI	Mavic 3M (Multispectral)

Note: Adding an RPA model that is not within the scope of the ReOC constitutes a 'significant change' that requires CASA approval. See Part 101 MOS for the definition of 'significant change.'

Appendix C. RPAS type-specific procedures

C1 DJI Agras T50

C1.1 Pre-flight & post-flight check

Manufacturer checklists are to be used. The latest version of the aircraft user manual contains the checklists.

C1.2 Specific emergency procedures

Aircraft-specific emergency procedures are contained in the aircraft user manual.

C1.3 Maintenance schedule

The manufacturer's maintenance schedule and recommendations are to be used.

Refer to the latest versions of the aircraft user guide on the manufacturer’s website – https://dji.com.

C1.4 RPAS maintenance & operational manual(s)

The current versions of the aircraft user and maintenance manuals are available on the company’s cloud based document storage system.

C1.5 Battery management

Refer to the aircraft user manual.

C2 DJI Mavic 3M (Multispectral)

C2.1 Pre-flight & post-flight check

Manufacturer checklists are to be used. The latest version of the aircraft user manual contains the checklists.

C2.2 Specific emergency procedures

Aircraft-specific emergency procedures are contained in the aircraft user manual.

C2.3 Maintenance schedule

The manufacturer's maintenance schedule and recommendations are to be used.

Refer to the latest versions of the aircraft user guide on the manufacturer's website – https://dji.com.

C2.4 RPAS maintenance & operational manual(s)

The current versions of the aircraft user and maintenance manuals are available on the company's cloud based document storage system.

C2.5 Battery management

Refer to the aircraft user manual.

Appendix D. Specialised procedures

D1 Operations in controlled airspace

Operations in controlled airspace are allowed without requiring specific CASA approval where the operation is conducted clear of the approach and departure paths, outside of 3NM from the aerodrome measurement points, and below 400 feet AGL.

Operations within 3NM of the aerodrome measurement points, within the approach and departure path, or above 400 feet AGL need specific approval.

D1.1 Obtaining approvals

D1.1.1 Civil airspace controlled by Airservices Australia

For simple projects where task performance is not critical, an automated airspace approval should be used in preference, where they are available.

The standard application process is preferred for major projects where significant funds and logistics are required (e.g., travel, accommodation, etc.) or where job performance is critical. This reduces the risk of CASA cancelling an automated airspace pre-approval at short notice.

RP can obtain automated approvals for controlled aerodromes before starting the task.

Where automated approvals are unavailable, the CRP must make a written application to the CASA using Form 101-09.

D1.1.2 Military Controlled Airspace

The CRP can obtain a Letter of Agreement to fly in military-controlled airspace directly from the military air traffic control service. ERSA is the source of contact details.

Operations above 400 ft AGL in military-controlled airspace also require an Instrument of Approval from CASA.

D1.2 General operating requirements in controlled airspace

The Chief Remote Pilot must conduct a risk assessment that details the task hazards and the risk mitigation strategies before approving operations in controlled airspace.

All flights within controlled airspace should be geofenced laterally and vertically.

The CRP must ensure that at least one person is certified to use a VHF air band radio and is always onsite.

RP must keep a radio listening watch on the local VHF frequency at least 15 minutes before and throughout the operation. RP must NOT make radio broadcasts unless explicitly requested by air traffic control or in the case of an emergency that might affect crewed traffic.

The CRP must ensure the RPA has an active fail-safe mode triggered if a data-link loss occurs. Before flight, the RP must check the configuration of the fail-safe to confirm it will cause the RPA to:

- adjust altitude to the minimum safe level to provide obstacle clearance and minimum potential for collision with other aircraft and
- move to a predefined safe landing or flight termination area and
- land or otherwise end the flight.

The RP must immediately notify ATC if the RPA exits the operating area (escape event), regardless of whether it was under the pilot's control at the time of the escape.

Unless otherwise requested by ATC, the RP must ensure a transponder or ADSB (out) capability fitted to an RPA is turned OFF within controlled airspace.

D1.3 Extra requirements when working under a written authorisation

Unless the approval instrument says otherwise, the remote pilot must:

- ensure there is reliable VHF coverage that would allow the remote pilot to communicate with ATC if required.
- follow any direction given by ATC
- not conduct operations unless a NOTAM advising of the RPA operations is active. The CRP must ensure that a NOTAM request is sent.
- follow the conditions on the authorisation if the conditions conflict with a requirement in this manual

D2 Operations within the relevant airspace of a non-controlled aerodrome or HLS

For operations using RPA over 2 kg, the RP must listen to the relevant air traffic service frequency or frequencies or the relevant CTAF (as applicable). The RP should start listening to the radio 15 minutes before the first launch and continue listening for the duration of the RPA's operation.

The CRP strongly encourages the use of radio for all operations.

The remote pilot in command must ensure that the RPA is not flown within 500 feet vertically and 1500 meters horizontally of any airborne crewed aircraft unless approved explicitly by the CRP.

An observer is optional but encouraged for all operations within the relevant airspace of a non-controlled aerodrome or HLS. The CRP should consider using an observer when planning operations within relevant airspace.

Observers should be trained IAW in this manual.

When used, observers should be available from 15 minutes before the RPA is launched to the time that the RPA lands.

An observer must:

- be in a location that enables them to help with traffic avoidance; and
- have continuous two-way communication with the remote pilot of the RPA

The remote pilot in command must ensure that the RPA is equipped and operated with an active fail-safe mode that will:

- Adjust altitude to the minimum safe level (not above 400 feet AGL) to provide obstacle clearance and minimise the potential for collision with other aircraft.
- transit to a predefined safe landing or flight termination area; and
- land or otherwise end the flight

  if the RPA data link or control of the RPA is lost.

D2.1 Operations during a relevant event

Operations using micro-RPA with a gross weight of less than 250g are permitted in relevant airspace during relevant events provided the flight:

- remains clear of the movement area and the approach and departure paths; and
- does not create an obstruction to an aircraft that is taking off or landing.

In all other circumstances, the RP must stop the operation and land the RPA as soon as they become aware of an airborne crewed aircraft operating in the area (‘a relevant event’). The operation may recommence when the crewed aircraft has left the area or ceased operating.

D3 Night operations

In addition to the requirements of CASA Instrument 01/17, RP should ensure that:

- The take-off and landing areas are lit to near daylight conditions to allow Autoland's capability of the RPA to function normally. Ground lighting must be available for each nominated and alternate landing area. A backup ground lighting system should be available where the JSA includes a single take-off/landing site.
- the selected take-off and landing sites should be visually off-line from the operating area associated with the task. This reduces the effects on night vision associated with looking at brightly lit areas.

NOTE: RP are reminded that CASA 01/17 does not allow RPA to be operated outdoor at night if it is raining or there are thunderstorms observed or reported within 5 km of the proposed operation.

D4 Tethered Operations

D4.1 General requirements for tethered operations

- Non-automated tethering systems must have at least two crew members. One crew member shall control the aerial platform, and the other shall hold the tether line.
- A single crew may use an automated tethering system.
- Crew must have received training and be approved by the CRP to conduct tethered operations.
- The MC is responsible for assessing the suitability of systems for tethered operations and must note any approvals on the maintenance log for the approved system.
- Only MC-approved systems may be used for tethered operations.
- The tether line working load strength must be at least five times the MTOW of the aerial platform.
- The attachment point to the aerial platform must be able to sustain a load of at least five times the MTOW of the aerial platform.
- The maximum length of the tether shall be 150 feet (45 meters).
- For manually operated tethers, the line must be weighted periodically along its length to prevent line sailing and entanglement with the aerial platform during descent.
- The ground anchor point must sustain a vertical load of seven and a half times the MTOW of the RPA without moving.
- Where available, propellor guards should be fitted during tethered operations.
- All crew must wear hard hats, eye protection, and normal PPE during operations.
- The quadrant immediately downwind of the ground tether point should be kept clear of people throughout the operation to a distance equal to the length of the tether.

D4.2 Tethered operations within the no-fly zone of a controlled aerodrome

Reserved

D4.3 Standard language for use when tethering

Crew must use the following standard language during multi-crew tethered operations.

D4.3.1.1 Remote pilot commands

Challenge	Response
Taking off, release the tether.	Copy taking off
Release tether	Releasing tether
Retract tether	Retracting tether
Hold tether	Holding tether

Landing, retract tether.	Copy landing
Slow release / retract	Slowing release / retract
Speed up release / retract	Speeding up release / retract
Report current tether length.	The current tether length is (?)

D4.3.1.2 Tether operator commands

Challenge	Response
Stop climbing	Stopped
Stop descending	Stopped
Proceed on task	Copy (ascending/descending/moving)
Approaching maximum length	Copy approaching the maximum length.
Tether at maximum length	Copy tether at maximum length.
Report indicated height	Indicated height is (?)

D4.3.1.3 Emergency commands

Challenge	Response
STOP STOP STOP	Copy stops
LAND IMMEDIATELY	Copy Landing now
CLEAR THE AREA NOW – (REPEAT)	(move away from beneath the RPA)

D5 Indoor Operations

- Where the operation is within the no-fly zone of a controlled or uncontrolled aerodrome, the CRP must consider the Part 101 MOS 4.04 and 9.05 requirements when approving the task.
- Either the CRP or RP must obtain written permission from the owner of the premises before any operation.
- The building or structure must completely enclose the operation so the RPA cannot escape.
- The RP must ensure that if the RPA collides with any part of the containment area, no material from the RPA or containment area can cause injury to a person or property outside the region.
- The lost link and low battery fail-safe functions must be set to hover rather than return to home.
- The hover height must be set below the lowest ceiling height within the operating area.

- Lighting in the operating area must be adequate to allow the regular operation of any collision avoidance and ground proximity sensors fitted to the RPA
- Remote pilot/s flying the RPA must be proficient in GPS disabled / ATI mode operations. The RP must use a 'GPS off' mode, if available.
- The OC shall place signage at each potential entrance to the operating area within the building, warning of drone operations in progress and the need to stay out and keep the entrance closed.
- The RP is to conduct as many test flights as necessary to work out the airflow within the operating area and any likely adverse effects on the RPA behaviours. Non-company personnel may not be in the active area whilst the RP conducts test flights.
- The RP must ensure that the RPA has propeller guards fitted if non-company personnel are within the operational area.
- All non-company personnel inside the operational area must complete a Non-Company Personnel Consent.
- All Non-Company Personnel are to receive a pre-flight briefing before commencement of the operation.
- The RP must complete a JSA, and any non-standard items must be subject to a risk assessment.
- The Flight Record must include details of the containment area and any added controls needed to keep the RPA within the area.

D6 Agricultural Operations

Agricultural operations must be authorised by the Chief Remote Pilot.

RP may only conduct agricultural operations if all the conditions of the relevant permissions can be met. This includes conditions imposed by CASA and/or rereolevant State authorities.

D7 EVLOS Operations

Reserved

D8 Operations over or near people

Reserved

Appendix E. Risk rating criteria and risk register template

Table 10: Consequence values

Value	Consequence	Meaning
A	Catastrophic	• Catastrophic incident • Fatality • Equipment destroyed • More than $100,000 impact • Threatens the ongoing existence of the organisation
B	Hazardous	• Major incident • Serious injury • Major equipment damage • $50,000 – $100,000 impact • Major impact on the organisation's ability to provide services • A significant reduction in safety margins, or creating physical distress or a workload such that the operators cannot be relied upon to perform their tasks accurately or completely
C	Moderate	• Serious incident • Injury to persons • $10,000 – $50,000 impact • A significant reduction in safety margins, a reduction in the ability of the ReOC holder to cope with adverse operating conditions because of an increase in workload or because of conditions impairing their efficiency
D	Minor	• Nuisance • Minor injury • $2,000 – $10,000 impact • Operating limitations required • Use of emergency procedures to manage
E	Negligible	• Less than $2,000 impact • Few consequences, managed through normal procedures

Table 11: Likelihood values

Value	Likelihood	Meaning
5	Frequent	Likely to occur many times (has occurred frequently)
4	Occasional	Likely to occur sometimes (has occurred infrequently)
3	Remote	Unlikely to occur, but possible (has occurred rarely)
2	Improbable	Very unlikely to occur (not known to have occurred)
1	Extremely Improbable	It is almost inconceivable that this event will occur

Table 9: Risk rating matrix

	Consequence				
	A	B	C	D	E
Likelihood	**Catastrophic**	**Hazardous**	**Moderate**	**Minor**	**Negligible**
5 Frequent	5A	5B	5C	5D	5E
4 Occasional	4A	4B	4C	4D	4E
3 Remote	3A	3B	3C	3D	3E
2 Improbable	2A	2B	2C	2D	2E
1 Extremely improbable	1A	1B	1C	1D	1E

Risk level	Acceptance level	Actions
High	CEO	The activity must be suspended. Risk is considered unacceptable and requires a new concept of operation.
Medium	Chief remote pilot	Risk should be mitigated to ALARP. Activity can continue only after acceptance from the chief remote pilot or senior manager.
Low	Chief remote pilot	Risk is acceptable, and activity may continue, providing consideration has been given to the activity.

E1 Risk register

Next Review Due Date:

Ref No.	Date added	Hazard	Risk description	Existing controls	Initial Risk			Additional controls	Residual risk			Risk owner
					Likelihood	Consequence	Risk rating		Likelihood	Consequence	Risk rating	
EXAMPLE 01	*1/1/2025*	*An unauthorised person moves into the operating area*	*Collision with and injury to the person*	*Operations not permitted within 30m of people not associated with the operation.* *The use of signage and barriers and barriers to be considered during completion of the JSA.*	*3*	*C*	*3C*	*Spotter to be used during operations.* *All access gates to be closed around the site.* *Barriers installed at open access points.* *Warning signage to be installed at access gates and barriers*	*1*	*C*	*1C*	*RP*

Appendix F. Forms and templates

F1 Flight Record

Section 1: Operations overview and preliminary assessment

Operation identifier:		
Name of preliminary assessor:		
Task overview:		
Location:		
Proposed date(s) and time(s):		
Proposed RPAS type/model(s):		
Preliminary assessment:		
	YES	**NO**
30 m from people can be maintained	☐	☐
Clear of populous areas	☐	☐
Below 400 ft AGL	☐	☐
Outside of an active restricted area	☐	☐
Outside of the no-fly zone of a towered airport	☐	☐
Outside of the no-fly area during a relevant event	☐	☐
Operating in day VMC	☐	☐
Operating VLOS	☐	☐
The organisation's SOP mitigates all hazards	☐	☐
Not near active emergency operations	☐	☐
RPA weight 2 kg or less	☐	☐
If you answered **YES** to ALL the above, complete the section below and send it to the CRP for authorisation: Launch location: _____ Recovery location: _____ Maximum height planned: _____ ft AGL If you answered **NO** to ANY of the above, complete JSA (Section 2 of Flight Record).		

Section 2: Job safety assessment

Section 2 does not need to be completed where an operation falls within the SOC, using RPA that is not heavier than 2 kg, and where no official authorisation is required.

Map of operating area showing launch and landing locations and any relevant hazard

Airspace class(es) and height(s)		Maximum operating height	ft AGL
SUA		Maximum operating altitude	ft AMSL
Nearby aerodromes (include location, distance, type)			
Aeronautical radio frequencies			

VLOS	☐	EVLOS	☐	BVLOS	☐	DAY	☐	NIGHT	☐

Airspace hazards and mitigations

Ground hazards and mitigations (people, obstacles, interference, etc.)

Does SOP adequately mitigate all hazards?	☐ YES	☐ NO
If NO, detail unmitigated hazards		

Preliminary assessment / JSA correct	☐ YES	☐ NO
If NO, record changes here		

Other operating restrictions/limitations

Identification of official authorisation obtained (if applicable)

Section 3 Approval

Flight authorisation	Approved	☐ YES	☐ NO
Date(s) approved for operations			
RPA types/models approved for operations			
CRP ARN:	Sign:	Date:	
RP ARN:	Sign:	Date:	

Section 4: Flight log

Part A

RP to complete before starting operations.

RP	Second RP	Observer/crew
Weather (confirm that conditions meet manufacturer limitations)		
Onsite validation of planning documentation completed	RP initials:	

Detail any omissions and errors in the planning document here

Part B

RP to complete after operations.

Was the operation conducted IAW Sections 1 to 3 of this Flight Record?	☐ YES	☐ NO
If NO, record changes here		

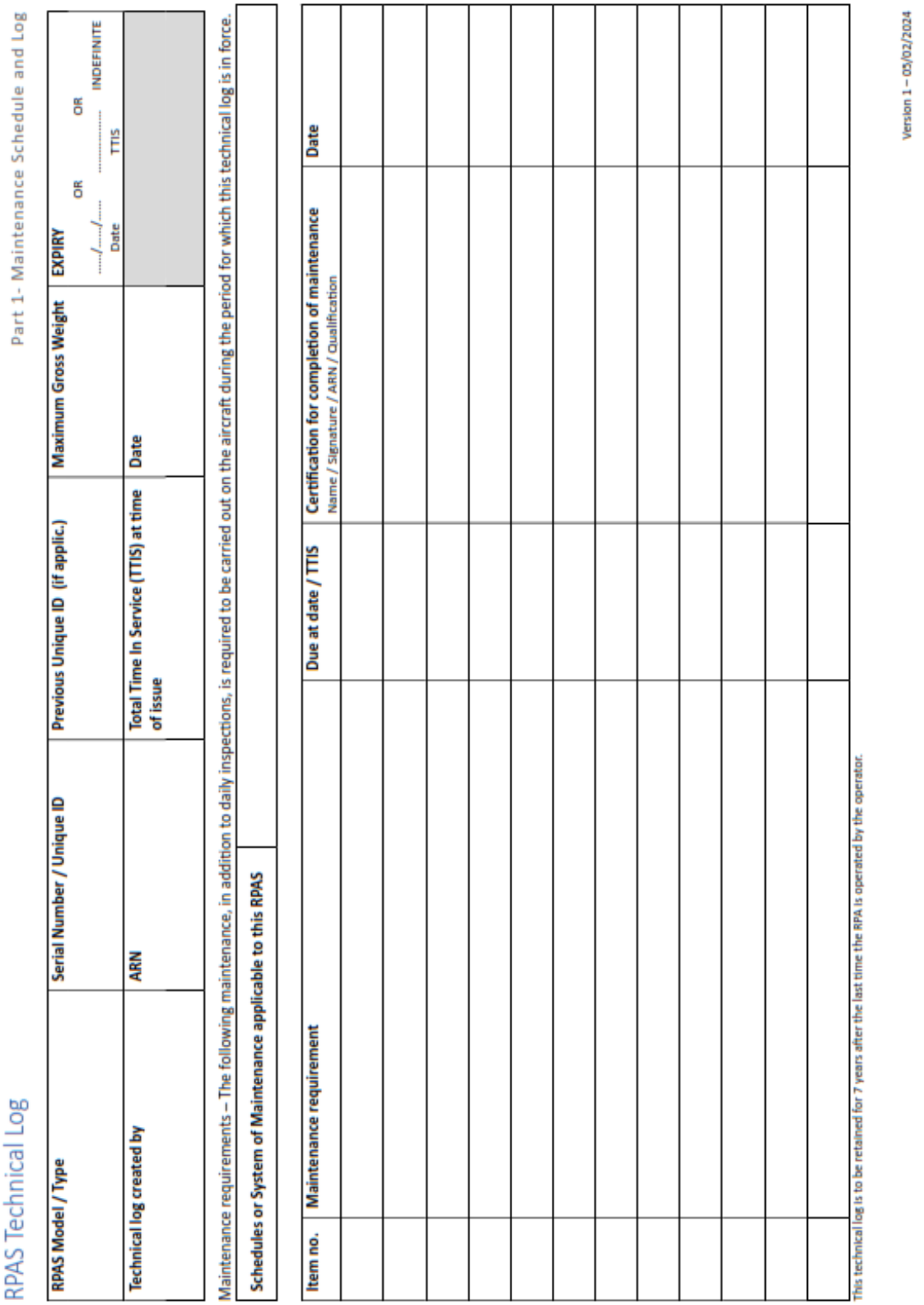
General comments

Part C

Was the RPAS serviceable at the end of the operation?	☐ YES	☐ NO
If NO, record the defects on Part 2 of the RPAS Technical log		

F2 RPAS Technical Log

F2.1 Part 1 – Maintenance schedule and log



RPAS Technical Log

Part 1- Maintenance Schedule and Log

RPAS Model / Type	**Serial Number / Unique ID**	**Previous Unique ID (if applic.)**	**Maximum Gross Weight**	**EXPIRY** ...../...../..... Date OR ..... TTIS OR INDEFINITE
Technical log created by	**ARN**	**Total Time In Service (TTIS) at time of issue**	**Date**	

Maintenance requirements – The following maintenance, in addition to daily inspections, is required to be carried out on the aircraft during the period for which this technical log is in force.

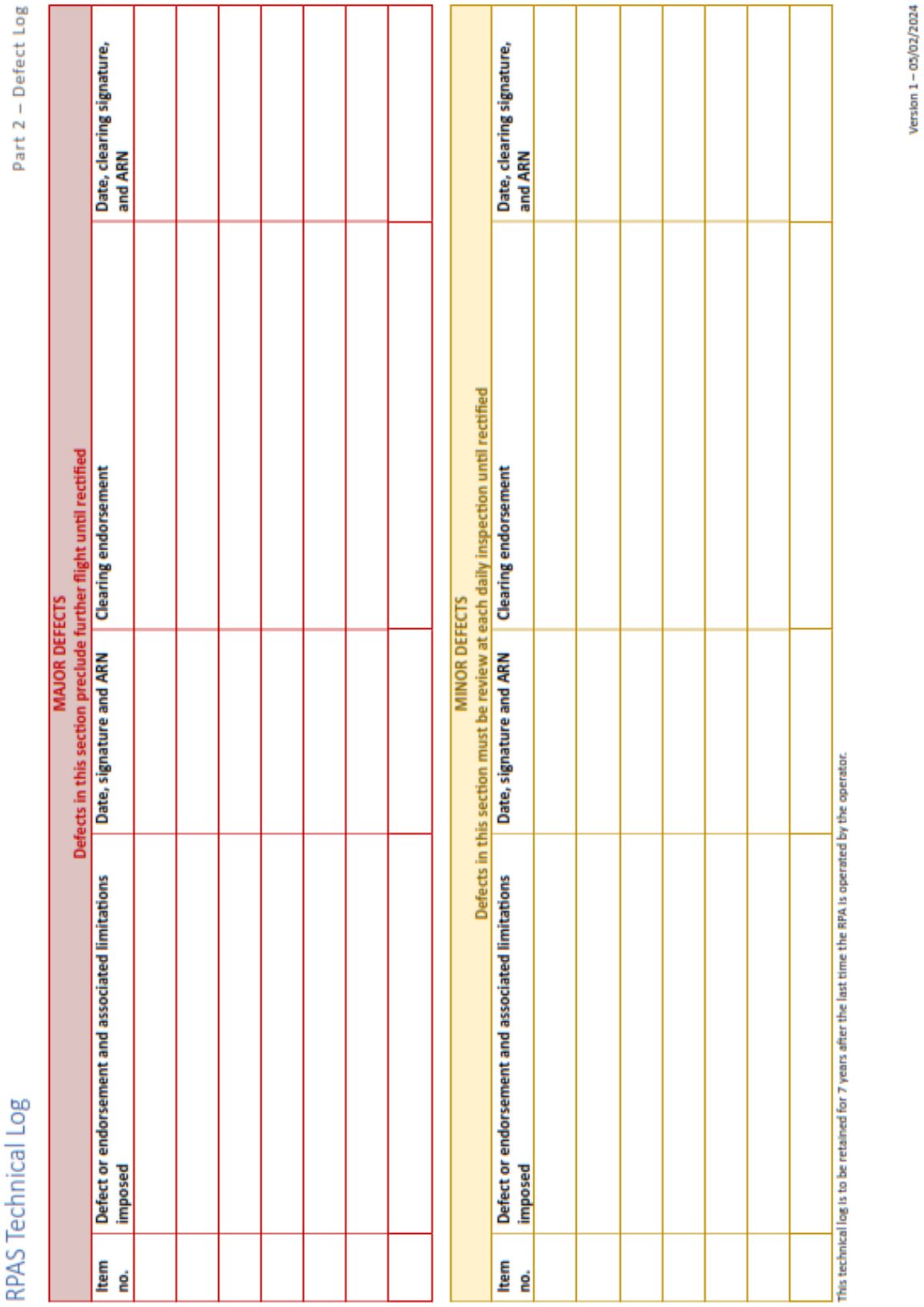
Schedules or System of Maintenance applicable to this RPAS	

Item no.	Maintenance requirement	Due at date / TTIS	Certification for completion of maintenance Name / Signature / ARN / Qualification	Date

This technical log is to be retained for 7 years after the last time the RPA is operated by the operator.

Version 1 – 05/02/2024

F2.2 Part 2 - Defect log



RPAS Technical Log

Part 2 – Defect Log

MAJOR DEFECTS
Defects in this section preclude further flight until rectified

Item no.	Defect or endorsement and associated limitations imposed	Date, signature and ARN	Clearing endorsement	Date, clearing signature, and ARN

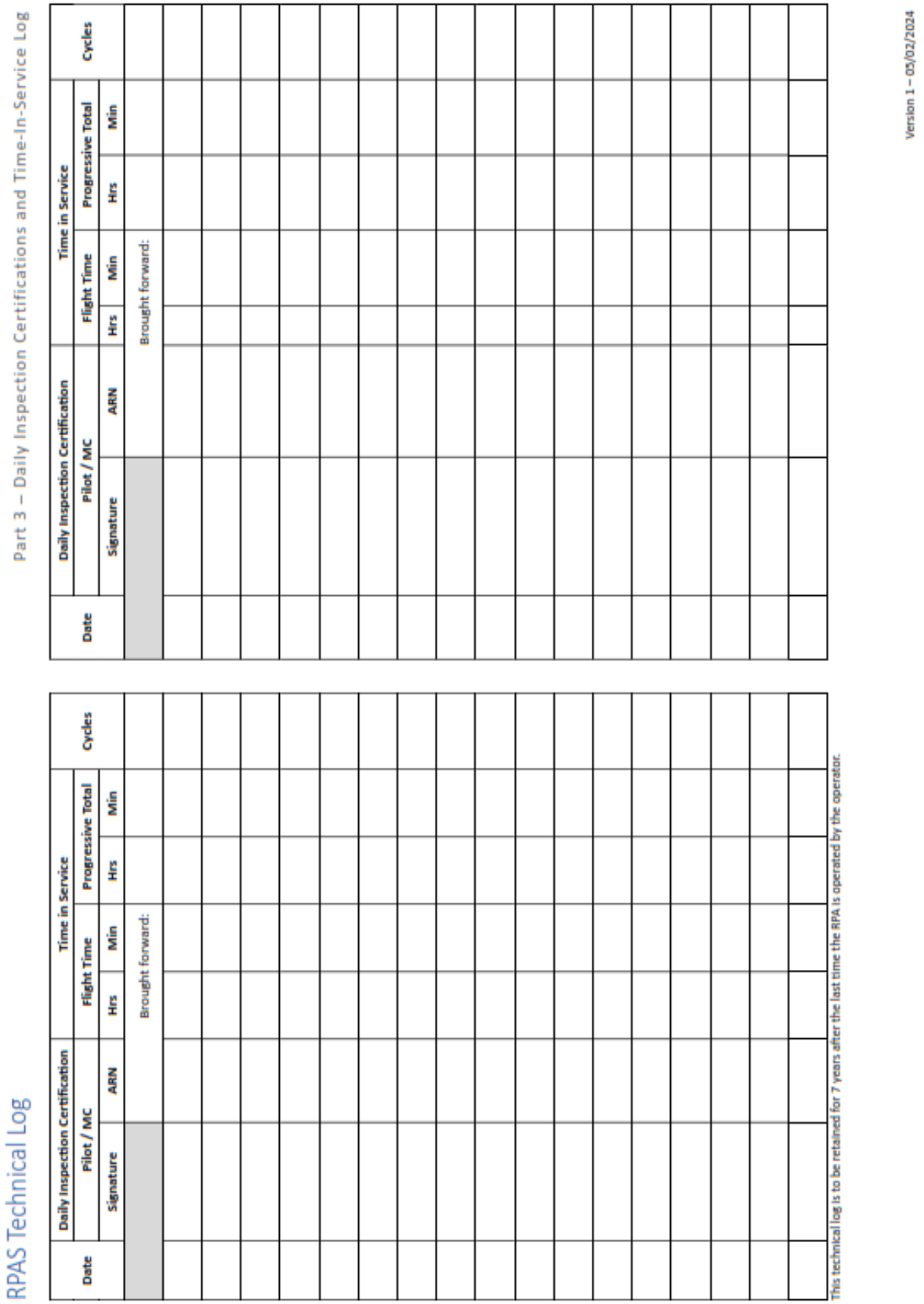
MINOR DEFECTS
Defects in this section must be review at each daily inspection until rectified

Item no.	Defect or endorsement and associated limitations imposed	Date, signature and ARN	Clearing endorsement	Date, clearing signature, and ARN

This technical log is to be retained for 7 years after the last time the RPA is operated by the operator.

Version 1 – 05/02/2024

F2.3 Part 3 – Daily inspection and time in service log



RPAS Technical Log

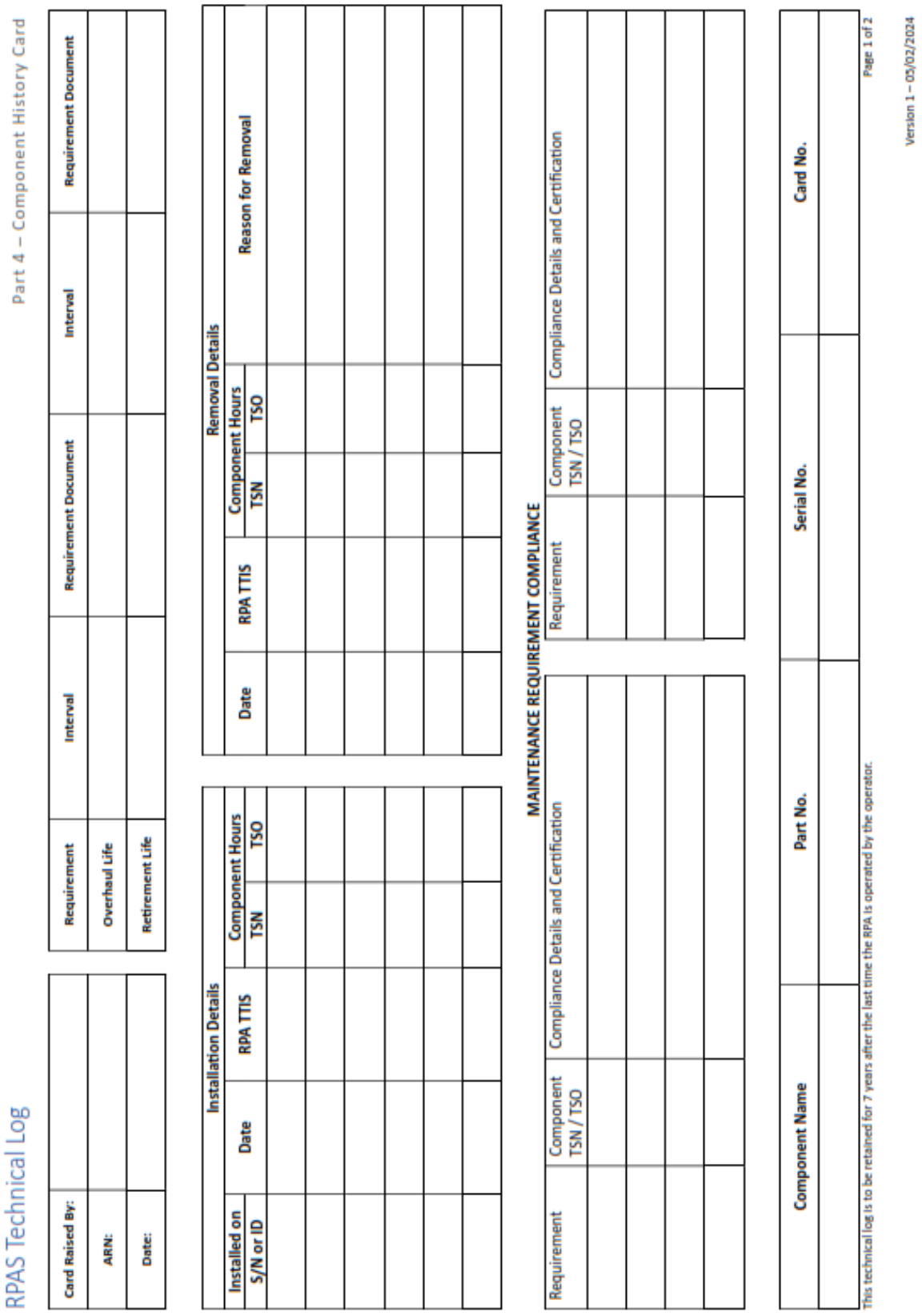
Part 3 – Daily Inspection Certifications and Time-In-Service Log

Date	Daily Inspection Certification			Time in Service				Cycles
	Pilot / MC			Flight Time		Progressive Total		
	Signature	ARN		Hrs	Min	Hrs	Min	
			Brought forward:					

This technical log is to be retained for 7 years after the last time the RPA is operated by the operator.

Version 1 – 05/02/2024

F2.4 Part 4 – Component history card



RPAS Technical Log

Part 4 – Component History Card

Card Raised By:		Requirement	Interval	Requirement Document	Interval	Requirement Document
ARN:		Overhaul Life				
Date:		Retirement Life				

Installation Details					Removal Details				
Installed on S/N or ID	Date	RPA TTIS	Component Hours TSN	Component Hours TSO	Date	RPA TTIS	Component Hours TSN	Component Hours TSO	Reason for Removal

MAINTENANCE REQUIREMENT COMPLIANCE

Requirement	Component TSN / TSO	Compliance Details and Certification

Requirement	Component TSN / TSO	Compliance Details and Certification

Component Name	Part No.	Serial No.	Card No.

This technical log is to be retained for 7 years after the last time the RPA is operated by the operator.

Page 1 of 2

Version 1 – 05/02/2024

RPAS Technical Log

Part 4 – Component History Card

COMPONENT MAINTENANCE LOG

Details of modifications embodied, repairs, and overhauls carried out. Include cross reference to certification in RPA records

Page 2 of 2

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F3 Initial remote pilot employee record

CONTACT DETAILS					
Pilot Name:		ARN			
Address:					
Phone:		B	AH	M	
Email					

NEXT OF KIN			
Name:		Relationship:	
Address:			
Phone:	B	AH	M

CREDENTIALS AND EXPERIENCE			
Hours:	Multirotor:	Fixed Wing:	Powered Lift:
	Helicopter:	Airship:	Total:
Types Flown:			

TRAINING AND ASSESSMENT

INDUCTION TRAINING		
Subject	**Date**	**Certified by**
WHS Induction:		
Policy & Procedures		
Initial flight check		

RECURRENT TRAINING		
Subject	**Date**	**Certified by**

OPERATOR APPROVALS		
Approval	**Date**	**Certified by**
Night		
EVLOS		
Senior Remote Pilot		

F4 Induction training record

Pilot Name:		ARN	
Trainer Name:		Date of training:	

SUBJECT/DISCUSSION POINT	COMPLETE YES / NO
• Knowledge of Operations Manual	
• Knowledge of normal operations	
• Planning requirements (NAIPS, flight plans, NOTAMS, etc.)	
• Briefing requirements IAW the pre-operations briefing form	
• Forms required for general operations (Part F of Operations Manual)	
• Roles and responsibilities of assigned crew positions	
• Emergency procedures (Section 2.6 of Operations Manual)	
• Conduct job safety assessment and risk management procedures	
• Maintenance procedures and internal authorisations	
• WHS issues	
• Crew coordination and support crew duties	
• Introduction to the Document Management System	
• Obtaining automated airspace approvals (where applicable)	
• Introduction to the Compliance Management System (where applicable)	
Comments	

TRAINING ACKNOWLEDGEMENT			
Completed	☐ YES ☐ NO		
Trainer signature		Date	
Pilot Signature		Date	

F5 Continuation training record

Pilot Name:		ARN:	
Trainer Name:		Date of training:	

SUBJECT/DISCUSSION POINT	COMPLETE YES / NO
Knowledge of Operations Manual	
Knowledge of normal operations	

• Planning requirements (NAIPS, flight plans, NOTAMS, etc.)	
• Briefing requirements IAW pre-operations briefing form	
• Forms required for general operations (Part F of Operations Manual)	
• Roles and Responsibilities of assigned crew positions	
• Emergency procedures (Section 2.6 of the Operations Manual)	
• Conduct of a job safety assessment and risk management procedures	
• Maintenance procedures and internal authorisations	
• WHS issues	
• Crew coordination and support crew duties	
Comments:	

TRAINING ACKNOWLEDGEMENT			
Completed:	☐ YES ☐ NO		
Trainer signature:		Date:	
Pilot Signature:		Date:	

F6 Observation flight record

Trainee pilot name:		ARN	
Trainer name:		Date of training:	

Training goals:	

Operation identifier:			
Location:		Date / Time:	
RPAS type/model:			

	YES	NO
30m from people can be maintained	☐	☐
Clear of populous area	☐	☐
Below 400 ft AGL	☐	☐
Outside of the restricted area	☐	☐
Outside of the no-fly zone of a towered airport	☐	☐
Outside of the no-fly area during a relevant event	☐	☐
Operating in day VMC	☐	☐
Operating VLOS	☐	☐
All hazards mitigated by SOP	☐	☐
Not near active emergency operations	☐	☐
RPA weight 2kg or less	☐	☐

Comments:	

Trainee pilot signature:		Trainer signature:	

F7 Safety occurrence reporting form

Management understands that reporting safety occurrences can sometimes be difficult, particularly for new and junior staff. Management strongly encourages all personnel to voluntarily report all matters they believe pose a risk to our operations.

Anyone can make a report confidentially and anonymously. However, there are situations where people must make reports under legislation, e.g., the PIC of an aircraft involved in an accident or serious incident.

Management treats all reports as confidential to the greatest extent possible. If you would like to receive feedback on the outcome of your report, then please provide contact details. Anonymous reports will have the reporter's details removed before dissemination.

Check this box if you wish to make an anonymous report	☐ **ANONYMOUS**

REPORTER'S DETAILS			
Reporter's first name:		Reporter's last name:	
Phone (including area code):			
Email:			
Reporter's position/role:	☐ PIC ☐ RP (not in command) ☐ Observer ☐ Other ground crew ☐ No defined role in the task		

OCCURRENCE DETAILS			
Occurrence Date		Occurrence Time	
State / Territory of Occurrence	☐ NSW ☐ VIC ☐ SA ☐ WA ☐ NT ☐ QLD ☐ TAS ☐ ACT		
Location of event			
Was there damage to the RPAS?		☐ YES	☐ NO
Was there any injury to a person?		☐ YES	☐ NO
Occurrence class	☐ Incident	☐ Serious incident	☐ Accident
Describe the event			
Are any supporting media files, photos, or videos available?		☐ YES	☐ NO
Have the telemetry logs been kept?		☐ YES	☐ NO

RPAS DETAILS			
RPAS registration:			
RPAS make:		RPAS model:	
Operation / Job #:			

EVENT DETAILS			
Purpose of the operation:			
Departure location:		Destination location	
Related runway (if applicable):			
Type of operation:			
The phase of flight:	☐ Standing ☐ Taxiing ☐ Take-off ☐ Initial Climb ☐ Climb ☐ Cruise ☐ Approach ☐ Descent ☐ Landing ☐ Manoeuvring ☐ Circuits ☐ Holding ☐ Other ☐ Unknown		
Operation type:	☐ VLOS ☐ EVLOS ☐ BVLOS		
Altitude type:	☐ AGL ☐ AMSL ☐ Surface	Altitude	
Event type:	☐ Bird strike ☐ Other animal strike ☐ Technical failure ☐ Near collision with another plane ☐ Weather / turbulence ☐ Other		

Report ID:		Date received	
Assigned to:			
Action:			
Date finalised:		Finalised by:	
Management review date:		Management review by:	

F8 Safety occurrence register

OCCURRENCE ID	DATE RECEIVED	ANON.	ASSIGNED TO	DATE FINALISED
		☐ YES ☐ NO		
		☐ YES ☐ NO		
		☐ YES ☐ NO		
		☐ YES ☐ NO		
		☐ YES ☐ NO		
		☐ YES ☐ NO		
		☐ YES ☐ NO		
		☐ YES ☐ NO		
		☐ YES ☐ NO		
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		☐ YES ☐ NO		
		☐ YES ☐ NO		
		☐ YES ☐ NO		
		☐ YES ☐ NO		
		☐ YES ☐ NO		
		☐ YES ☐ NO		
		☐ YES ☐ NO		

F9 RPA register

See the RPA registration certificate in the company's cloud based document storage system.

F10 Consent to operate within 30m of non-company personnel

CONSENT FOR OPERATION NEAR NON-COMPANY PERSONNEL

Regulation Relating to this Operation (*CASR 1998*)

"101.245 Operation near people

(1) Subject to sub-regulations (2) and (3), a person must not operate an RPA within 30 meters of a person (the ***second person***) who is not directly associated with the operation of the RPA.

Penalty: 10 penalty units.

(1A) An offence against sub-regulation (1) is an offence of strict liability.

Note: For ***strict liability***, see section 6.1 of the Criminal Code.

(2) Sub-regulation (1) does not apply if the second person is standing behind the RPA while the RPA is taking off.

(3) Sub-regulation (1) does not apply if:

(a) the RPA is a very small, small, or medium RPA; and

(b) the second person has consented to the RPA operating within 30 m of him or her; and

(c) the RPA operates no closer than 15 m of him or her.

(4) Sub-regulation (1) does not apply if:

(a) the RPA is an airship, and

(b) the airship approaches no closer to the second person than 10 m horizontally and 30 ft vertically.

(5) Sub-regulation (1) does not apply if the person holds an approval under regulation 101.029 for the purposes of this sub-regulation."

I agree that I understand the above regulations surrounding the operation of an RPA within 30m of a person. The RPA operator has explained the risks associated with the operation to me.

I hereby consent to an RPA being operated within 30m but no closer than 15m of me.

Full Name	Signature	Date

F11 SRP delegation record

Start date of delegation				
End date of delegation				
Restrictions on delegation				
Any other specific requirements				
SRP Name		Sign/Date		
CRP Name		Sign/Date		
Handover/takeover brief				
Applications in progress and status				
Current/Upcoming tasks				
Internal training to be conducted				
RPAS serviceability				
Ancillary equipment serviceability				
Remote pilots/crew status				
Other items				

Appendix G. Training syllabus and checking matrix

G1 Policy and procedure training syllabus

Applicability:

- All RPs and operational crew members.

G1.1 Ground/theory

- Knowledge of operations manual
- Knowledge of normal operations:
  - Planning requirements (NAIPS, flight plans, NOTAMS, etc.)
  - Forms required for general operations (Section 2 in the operations manual)
  - Briefing requirements IAW pre-operations briefing form
  - Roles and responsibilities of assigned crew positions
  - Emergency procedures (Section 2 in the operations manual)
  - Conduct of a job safety assessment and risk management
  - Maintenance procedures and internal authorisations
  - Safety and risk management strategies and WHS issues
- Crew coordination and support crew duties.

G2 RPAS type training syllabus

Applicability:

- RPs operating RPA type (all items)
- Operational crewmembers handling RPA type (items relevant to the role).

G2.1 Ground/theory

- Description of RPAS and components
- Handling of RPAS and transportation
- Handling and charging of LiPo batteries
- Assembly/disassembly of the system, including the camera
- Detailed explanations on the use of the transmitter and operating frequencies and limitations
- Flight controls, sound, and light signals
- Manual and reversionary modes
- Pre-flight inspection
- Problem-solving, fault analysis
- Pre- and post-flight procedures
- Crew management and responsibilities
- Crew coordination (including the use of standard phraseology)
- Use of operating software
- Use of ancillary equipment.

G2.2 Flight exercises

- Range check
- Take-off and landing
- Practical flight exercises (normal automatic control)
- Practical flight exercises (backup manual control)
- Automatic safety features
- Camera operation
- Emergency procedures (may talk through relevant EPs that cannot be simulated safely during flight)
- Specialised RPAS training: night VLOS (N-VLOS), EVLOS, BVLOS as applicable
- Safety.

G3 Night visual line of sight training syllabus

Applicability:

- RPs operating at night.

G3.1 Unit description

This unit describes the skills and knowledge required to operate an RPA at night-time.

G3.2 Elements and performance criteria

G3.2.1 Pre-flight preparation

The RP confirms that:

(1) The RPA meets the equipment requirements for an N-VLOS flight.
(2) A risk assessment has been completed that incorporates the night visual conditions.

G3.2.2 Night operations

(1) Perform all normal manoeuvres under N-VLOS conditions using manual control or an AFMS.
(2) Orient and navigate the RPA efficiently and safely at a distance.
(3) Maintain an effective lookout for other aircraft and take appropriate action to maintain separation and prevent conflict.

G3.2.3 Night landing

(1) Land the RPA safely and without damage within N-VLOS tolerances.

G3.2.4 Range of variables

(1) Various payloads and RPA configurations.
(2) Operations both in dark conditions and under artificial illumination.
(3) Various weather conditions.

G3.2.5 Underpinning knowledge

(1) RPA equipment requirements.
(2) Human performance considerations.
(3) Night operation considerations.
(4) Knowledge of rules and considerations under artificial illumination.
(5) N-VLOS operational requirements for operations at a controlled or non-controlled aerodrome (if required).

G3.3 Practical assessment (N-VLOS-P)

G3.3.1 Flight test requirements

A person operating under an N-VLOS approval must demonstrate their knowledge of N-VLOS flight requirements as set out in subclause G3.3.2 and competency in the units of competency mentioned in subclause G3.2.3 by performing manoeuvres with an aircraft in the desired category.

G3.3.2 Knowledge requirements

The applicant must demonstrate their knowledge of the privileges and limitations of the rating and must also demonstrate knowledge of:

(1) The definition of 'night' for aviation purposes.
(2) RPA requirements for flight at night (compared to day VMC).
(3) Applicable rules and considerations for flight at night under bright lights.
(4) Considerations for conducting an N-VLOS flight at a controlled or non-controlled aerodrome (if applicable).
(5) The visual illusions and human performance limitations that may eventuate with an N-VLOS flight.
(6) Weather minima for NVLOS operations.

G3.3.3 Practical flight standards

(1) Ensure the aircraft is fit to fly and is equipped for night flights.

Competently conduct all normal manoeuvres at night manually or with an automated mode as applicable.

Under manual or automated control, orient and navigate the aircraft efficiently and safely at a distance from the control station.

Maintain an effective lookout for other aircraft and take appropriate action to maintain separation and prevent conflict.

G3.4 Theory (N-VLOS-T)

G3.4.1 Flight at night theory test

(1) Enumerate the additional considerations needed to operate an RPA during an N-VLOS flight (compared to a flight during the day):

- under bright lights and
- in an otherwise dark area.

Define 'night' for aviation purposes.

Describe the aircraft equipment requirements for an N-VLOS.

Describe the considerations for conducting an N-VLOS flight at a non-controlled aerodrome.

Describe the additional considerations for coping with equipment failures at night.

G3.4.2 Human performance

Explain the relevant human performance and physiological limitations for the conduct of RPAS operations at night:

(1) Describe the adaption of the eye to darkness and explain how long the eye takes to adapt to night conditions.
(2) Describe why lights have a red filter during night operations.

G3.4.3 Risk assessment – night operations

Describe and list any special precautions a RP might take for a night operation.

G4 Senior Remote Pilot (SRP) training syllabus

G4.1 Unit description

This unit describes the skills and knowledge required for an RP to be appointed as an SRP.

G4.2 Experience requirements

Before appointment as an SRP, the Remote Pilot must:

- have at least 20 hours operating RPA above 250 grams of which at least 5 hours shall be on the aircraft type to be used by pilots under the control of the SRP
- hold an Aeronautical Radio Operators Certificate or higher aviation radio qualification
- where the SRP's role involves night operations, have completed at least five (5) night flights
- where the SRP's role involves BVLOS operations, have completed at least five (5) BVLOS flights
- where the SRP's role involves operations within 3nm of controlled aerodromes, the SRP must have completed at least five (5) flights operated within 3 NM of a controlled aerodrome.

G4.3 Training

SRP training includes the following areas:

- Operations Manual content
- CASA legislation
- Basic aeronautical knowledge
- Aeronautical information products (maps/charts, ERSA, AIP)
- Interpretation of weather reports
- RPAS limitations
- Record keeping
- Approval of tasks
- Communication with CASA
- Risk management.

G4.4 Assessment

The assessment of an SRP assessment is to consist of the following items:

G4.4.1 Scenario activity

A standard RPAS operation which may or may not require permission from CASA. The scenario should be presented as a complex operation in which multiple risks must be identified and mitigated.

G4.4.2 Oral Exam

The CRP is to conduct an oral exam consisting of a minimum of 15 questions which cover the following key areas:

- roles and responsibilities of SRP
- Part 101 Vol 3 of the Civil Aviation Safety Regulations (CASR 1998)
- Part 101 Manuals of Standards
- aeronautical publications
- interpreting VTC, including symbols, area frequencies, aerodromes, airspace class and vertical limits, and PRD areas
- decode terminal area forecast and NOTAM
- VMC conditions
- ERSA
- company RPAS procedure
- knowledge of risk identification
- risk management process
- RePL categories
- emergency procedures.

Appendix H. Permissions, Exemptions, and Approvals

Permissions, exemptions and approvals are stored in the company's cloud based document storage system.