



Australian Government

AVIY3070A Recover remote pilot aircraft (RPA)

Release: 1

AVIY3070A Recover remote pilot aircraft (RPA)

Modification History

Not applicable.

Unit Descriptor

This unit involves the skills and knowledge required to recover a remote pilot aircraft (RPA), including controlling the rate of descent, maintaining directional control, minimising bouncing, and stopping the RPA within the available landing area. It also includes completion of after-landing checks and the performance of a mishandled landing/ go-around when required. Licensing, legislative, regulatory or certification requirements are applicable to this unit.

Application of the Unit

Work must be carried out in compliance with the relevant licence and aircraft rating requirements of the Civil Aviation Safety Authority (CASA) and/or ADF; airspace control requirements and Day Visual Flight Rules (Day VFR); and aircraft control principles, regulations, safety codes, protocols and procedures relevant to landing a RPA. Operations are conducted as part of commercial or military aircraft activities across a variety of operational contexts within the Australian aviation industry. Use for ADF Aviation is to be in accordance with relevant Defence Orders and Instructions and applicable CASA compliance. Work is performed under limited supervision.

Licensing/Regulatory Information

Remote Pilot Licence (RPL) Basic – Level 1

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

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|-----------------------------|--|
| 1 Land RPA | 1.1 RPA is landed at a controlled rate of descent within a specified area, and with directional control maintained |
| | 1.2 RPA is landed within the available area |
| | 1.3 After-landing checks are performed in accordance with approved checklist |
| | 1.4 Weather conditions are monitored |
| 2 Manage mishandled landing | 2.1 Decision to perform go-around is made when safe landing cannot be achieved |
| | 2.2 Power is applied and RPA is manoeuvred clear of the ground and after take-off procedures are conducted |
| | 2.3 Allowance for wind velocity is made during go-around |

Required Skills and Knowledge

This describes the essential knowledge and skills and their level required for this unit.

Required knowledge:

- Relevant sections of Civil Aviation Safety Regulations and Civil Aviation Orders
- In Defence context, relevant Defence Orders and Instructions
- Relevant OH&S and environmental procedures and regulations
- Principles of aerodynamics
- Landing procedures
- All required checklist items
- The causes of loss of directional control during landing
- The aerodynamic forces involved during the flare
- The effect of wind on landing performance
- How to calculate a cross wind component
- Windsock and other indicators that are used to determine wind velocity

Required skills:

- Exercise sound judgment sufficient to perform landing procedures
- Recognise and respond to conditions leading to a go-around
- Carry out correct procedures in the event of a go-around
- Use of instruments to monitor RPA performance
- Maintain compliance with regulatory requirements
- Communicate effectively with others when landing a RPA including use of radio
- Read and interpret instructions, regulations, procedures and other information relevant to landing a RPA
- Interpret and follow operational instructions and prioritise work
- Operate electronic communication equipment to required protocol
- Work collaboratively with others when landing a RPA
- Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others
- Promptly report and/or rectify any identified problems that may occur when landing a RPA in accordance with regulatory requirements and workplace procedures
- Implement contingency plans for unexpected events that may arise when landing a RPA
- Apply precautions and required action to minimise, control or eliminate hazards that may exist when landing a RPA
- Monitor and anticipate operational problems and hazards and take appropriate action
- Monitor work activities in terms of planned schedule
- Modify activities dependent on differing workplace contingencies, situations and environments
- Work systematically with required attention to detail without injury to self or others, or

damage to goods or equipment

- Adapt to differences in equipment and operating environment in accordance with standard operating procedures
- Select and use required personal protective equipment conforming to industry and OH&S standards
- Implement OH&S procedures and relevant regulations
- Identify and correctly use equipment required when landing a RPA

Evidence Guide

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required knowledge and skills, the range statement and the assessment guidelines for this Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

- The evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria of this unit and include demonstration of applying:
 - the underpinning knowledge and skills
 - relevant legislation and workplace procedures
 - other relevant aspects of the range statement

Context of and specific resources for assessment

- Performance is demonstrated consistently over a period of time and in a suitable range of contexts
- Resources for assessment include:
 - a range of relevant exercises, case studies and/or other simulated practical and knowledge assessment, and/or
 - access to an appropriate range of relevant operational situations in the workplace
- In both real and simulated environments, access is required to:
 - relevant and appropriate materials and equipment, and
 - applicable documentation including workplace procedures, regulations, codes of practice and operation manuals

Method of assessment

- Assessment of this unit must be undertaken by a registered training organisation
- As a minimum, assessment of knowledge must be conducted through appropriate written/oral tests
- Practical assessment must occur:
 - through activities in an appropriately simulated environment at the registered training organisation, and/or
 - in an appropriate range of situations in the workplace

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance.

Tasks must be undertaken in:	• in accordance with Day Visual Flight Rules
Performance may be demonstrated in:	• single engine RPA • multi engine RPA
Performance may be demonstrated on an RPA with:	• fully functioning dual controls • with the use of a suitable simulator
Aircraft may include:	• Remotely Piloted Aircraft/Unmanned aircraft
Crew may include:	• Remote Pilot • Observer
Instruments may be:	• instrumentation associated with the particular system
Limitations may be imposed by:	• local noise abatement requirements and curfews
Classes of airspace must be:	• Class G airspace, as designated by the Civil Aviation Safety Authority
Landings include:	• normal • crosswind
Dependent on the type of organisation concerned and the local terminology used, workplace procedures may include:	• company procedures • enterprise procedures • organisational procedures • established procedures • standard operating procedures
Information/documents may include:	• relevant sections of Civil Aviation Safety Regulations and Civil Aviation Orders pertaining to the landing of a RPA • in Defence context, relevant Defence Orders and Instructions • Fight Manual • Manual of Standards • operations manuals • approved checklists • workplace procedures and instructions and job specification • induction and training materials • conditions of service, legislation and industrial agreements including workplace agreements and awards
Applicable regulations and legislation may include:	• relevant Civil Aviation Safety Regulations and Civil Aviation Orders • in Defence context, relevant Defence Orders and

Performance includes tolerances specified in either of:

Instructions

- relevant state/territory OH&S legislation
- relevant state/territory environmental protection legislation
- relevant Australian Standards
- relevant licence and aircraft rating requirements of the Civil Aviation Safety Authority (CASA) such as:
 - Manual of Standards
- relevant Defence documentation such as:
 - Defence Orders and Instructions

Unit Sector(s)

Not applicable.

Competency field

Y - Aircraft Operation and Traffic Management