



Australian Government

AVIY3068A Launch remote pilot aircraft (RPA)

Release: 1

AVIY3068A Launch remote pilot aircraft (RPA)

Modification History

Not applicable.

Unit Descriptor

This unit involves the skills and knowledge required to perform a remote pilot aircraft (RPA) launch, including completing pre-launch checks, launch procedures, after launch checks and a rejected launch. 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 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 RPA launch.

Operations are conducted as part of commercial and 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 Carry out pre-launch procedures | 1.1 Pre-launch briefing is completed |
| | 1.2 Approved pre-launch checklists are completed in accordance with Flight Manual and company operations manual |
| | 1.3 Completed fail-safe checks |
| | 1.4 RPA is lined up into wind |
| | 1.5 Air Traffic Control clearances are obtained where applicable |
| 2 Take off RPA | 2.1 Launch power is applied, RPA is maintained aligned in the launch direction |
| | 2.2 RPA is configured for nominated climb profile |
| | 2.3 Lookout is maintained |
| | 2.4 Radiotelephone listening watch is maintained, if applicable |
| | 2.5 After launch checks are performed in accordance with approved checklist |
| 3 Launch emergency | 3.1 Abnormal operations are identified |
| | 3.2 Power settings are adjusted as applicable |
| | 3.3 Control is maintained to bring the RPA to a safe stop |
| | 3.4 Associated procedures and/or checklists are initiated and completed |

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 ADF context, relevant Defence Orders and Instructions
- Relevant OH&S and environmental procedures and regulations
- Principles of aerodynamics
- Purpose and functions of RPA systems
- Functions and effects of all RPA controls
- All pre-launch and after launch checks
- RPA launch performance
- Air traffic requirements, if required
- Factors affecting directional control of the RPA
- Problems that may occur when launching an RPA and appropriate actions that should be taken in each case
- Manufacturers specifications relating to the operation of a RPA
- Obstacle clearance techniques

Required skills:

- Apply launch procedures in accordance with flight manual
- Interpret wind direction
- Comply with air traffic instructions and regulatory requirements, as required
- Manage launch emergencies
- All pre-launch and after launch checks
- Identify obstructions or other hazards that might hinder a safe launch
- Communicate effectively with others when taking off an RPA
- Read and interpret instructions, regulations, procedures and other information relevant to taking off an RPA
- Interpret and follow operational instructions and prioritise work
- Operate electronic communication equipment to required protocol
- Work collaboratively with others when launching 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 launching an RPA in accordance with regulatory requirements and workplace procedures
- Implement contingency plans for unexpected events that may arise when taking off a RPA
- Apply precautions and required action to minimise, control or eliminate hazards that may exist when taking off a RPA

- Check and monitor fail-safe functions
- 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 launching an 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 a RPA with:	• fully functioning controls • with the use of a suitable simulator
Aircraft may include:	• Remotely Piloted Aircraft (RPA)/Unmanned aircraft
Crew may include:	• Remote Pilot • Observer
Instruments may be:	• instrumentation associated with the particular system
Limitations may be imposed by:	• prevailing visibility
Class of airspace is:	• Class G airspace, as designated by the Civil Aviation Safety Authority
Launch must include:	• normal • crosswind
Pre-launch briefings may include:	• departure procedures • actions in the event of non-normal or emergency situations
Rejected launch requirement may include:	• RPA malfunction
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 taking off a RPA, including Day Visual Flight Rules (Day VFR) • in Defence context, relevant Defence Orders and Instructions • Flight Manual • Manual of Standards • En Route Supplement Australia (ERSA) • approved operators manuals • approved checklists • workplace procedures and instructions and job

- Applicable regulations and legislation may include:
- Performance includes tolerances specified in either of:
- specification
 - induction and training materials
 - conditions of service, legislation and industrial agreements including workplace agreements and awards
 - relevant Civil Aviation Safety Regulations and Civil Aviation Orders
 - relevant Defence Orders and 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