



Australian Government

AVIY3074 Launch remote pilot aircraft systems

Release: 1

AVIY3074 Launch remote pilot aircraft systems

Modification History

Release 1. This is the first release of this qualification in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to launch remote pilot aircraft systems (RPAS), in compliance with relevant regulatory requirements of the Civil Aviation Safety Authority and national operating standards.

It includes carrying out pre-launch procedures, taking off RPAS and responding to launch emergencies.

This unit addresses aviation technical skill requirements (physical, mental and task-management abilities) related to aircraft operational duties of flight crew and ground personnel, and contributes to safe and effective performance in complex aviation operational environments.

Operations are conducted as part of recreational, commercial and military aircraft activities across a variety of operational contexts within the Australian aviation industry.

Work is performed independently or under limited supervision within a single-pilot or multi-crew RPAS environment.

Licensing, legislative, regulatory or certification requirements are applicable to this unit.

Use for Defence Aviation is to be in accordance with relevant Defence Orders, Instructions, Publications and Regulations.

Pre-requisite Unit

Not applicable.

Competency Field

Y – Aircraft Operation and Traffic Management

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Carry out pre-launch procedures

- 1.1 Pre-launch briefing is conducted
- 1.2 Fail-safe checks are undertaken in accordance with aircraft flight manual (AFM) and company operations manual
- 1.3 Obstacle clearance calculations are completed as required
- 1.4 Air traffic control clearances are obtained as required
- 1.5 Approved pre-launch checklists are completed in accordance with AFM and company operations manual
- 1.6 RPAS is correctly positioned for launch
- 1.7 Airspace is determined as clear for launch

2 Take off RPAS

- 2.1 Launch power is applied and RPAS is maintained, aligned in the launch direction
- 2.2 RPAS is configured for nominated climb profile as required
- 2.3 Situational awareness, lookout and air traffic separation is maintained
- 2.4 Listening watch is maintained in accordance with regulatory requirements
- 2.5 Communication with others as appropriate is undertaken when launching an RPAS
- 2.6 After launch checks are performed in accordance with workplace policies and procedures

3 Respond to launch emergencies

- 3.1 Abnormal RPAS operations are identified
- 3.2 RPAS power settings are adjusted as required
- 3.3 Control is maintained to bring RPAS to a safe recovery
- 3.4 Associated emergency procedures are initiated, and checklists and other documentation are completed

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Unit Mapping Information

This unit replaces and is equivalent to AVIY3074A Launch remote pilot aircraft (RPAS).

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=4725260a-0af3-4daf-912b-ef1c2f3e5816>

Assessment Requirements for AVIY3074 Launch remote pilot aircraft systems

Modification History

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- adapting to differences in equipment and operating environment in accordance with standard operating procedures
- applying launch procedures in accordance with flight manual
- applying precautions and required action to minimise, control or eliminate identified hazards
- applying relevant legislation and workplace procedures
- checking and monitoring fail-safe functions
- complying with air traffic instructions and regulatory requirements
- identifying and correctly using relevant equipment
- identifying obstructions or other hazards that might hinder a safe launch
- implementing contingency plans
- implementing work health and safety (WHS)/occupational health and safety (OHS) procedures and relevant regulations
- interpreting and following operational instructions and prioritising work
- interpreting wind speed and direction
- modifying activities depending on workplace contingencies, situations and environments
- monitoring and anticipating operational problems and hazards and taking appropriate action
- monitoring work activities in terms of planned schedule
- operating electronic communications equipment to required protocol
- reading, interpreting and following relevant regulations, instructions, procedures, information and signs
- reporting and/or rectifying any identified problems promptly, in accordance with regulatory requirements and workplace procedures
- responding appropriately to cultural preferences
- selecting and using required personal protective equipment conforming to industry and WHS/OHS standards
- working collaboratively with others
- working systematically with required attention to detail without injury to self or others, or damage to goods or equipment.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- aeronautical decision-making processes
- air traffic requirements
- all pre-launch and after launch checks
- effective communication
- error management, including error types, causes and consequences
- factors affecting directional control of remote pilot aircraft systems (RPAS)
- fatigue risk management
- functions and effects of all RPAS controls
- human performance and its limitations, including the senses, memory and situational awareness
- in a Defence context, relevant Defence Orders and Instructions
- launch emergency procedures
- manufacturer specifications for operating a RPAS
- obstacle clearance techniques
- principles of RPAS aerodynamics
- problems that may occur when launching an RPAS and appropriate actions that should be taken in each case
- purpose and functions of RPAS
- relevant sections of Civil Aviation Safety Regulations and Civil Aviation Orders
- relevant WHS/OHS and environmental procedures and regulations
- required documentation
- RPAS launch performance
- stress, workload and time pressure management.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

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Assessment processes and techniques must be appropriate to the language, literacy and numeracy

requirements of the work being performed and the needs of the candidate.

Assessment must occur in workplace operational situations. Where this is not appropriate, assessment must occur in simulated workplace operational situations that reflect workplace conditions.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or simulations
- acceptable means of simulation assessment
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals
- relevant materials, tools, equipment and personal protective equipment currently used in industry.

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