



Australian Government

AVIZ3052 Apply situational awareness in remote pilot aircraft systems operations

Release: 1

AVIZ3052 Apply situational awareness in remote pilot aircraft systems operations

Modification History

Release 1. This is the first release of this unit of competency in the AVI Aviation Training Package.

Application

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

It includes maintaining situational awareness, assessing situations and making decisions, setting priorities and managing tasks, and working with others in managing situational awareness.

This unit addresses aviation non-technical skill requirements (mental, social and personal-management abilities) of aviation 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 at time of publication.

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

Pre-requisite Unit

Not applicable.

Competency Field

Z – Situational Awareness

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

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

1 Maintain situational awareness

- 1.1 Continuous monitoring of all critical factors relevant to the safe progress of a flight is undertaken
- 1.2 Effective visual scan is applied, crew interaction is maintained, and radio, inter-crew communication, traffic information and RPAS are used appropriately
- 1.3 Trends towards an unsafe situations are recognised and appropriate corrective action is employed in accordance with workplace procedures and regulatory requirements
- 1.4 Breakdown in situational awareness is identified and is rectified promptly

2 Assess situations and make decisions

- 2.1 Operational problems are identified and analysed
- 2.2 Operational risks are assessed and reported in accordance with workplace procedures and regulatory requirements
- 2.3 Potential solutions are identified and control measures are decided and implemented
- 2.4 Determined plan of action is communicated and tasks are allocated to others as appropriate
- 2.5 Plan of action is implemented and monitored to achieve optimum outcomes
- 2.6 Plan of action and implementation process are re-evaluated and amended as required to achieve optimum outcomes
- 2.7 Extended operational changes resulting from action plan and related risks are monitored and managed to ensure a safe flight outcome

3 Set priorities and manage tasks

- 3.1 Priorities and workload are organised to ensure completion of all tasks relevant to flight safety
- 3.2 Safe and effective operation of the RPAS is prioritised ahead of competing tasks
- 3.3 Critical events and tasks are anticipated and managed to ensure completion within available time constraints

- 3.4 Technology is used to reduce workload and to improve ability to perform mental and manipulative activities safely
- 3.5 Fixation on single actions/functions is avoided
- 3.6 Signs and symptoms of fatigue are identified and appropriate actions are taken to manage fatigue of self or in others
- 4 **Work with others in managing situational awareness**
 - 4.1 Collaboration with others is undertaken to ensure safe completion of flight
 - 4.2 Effective and efficient communications and interpersonal relationships are established and maintained with all stakeholders to ensure safe flight outcome
 - 4.3 Crew members are encouraged to participate in and contribute to safe flight outcome
 - 4.4 Appropriate action is taken in conjunction with others to cooperatively correct any identified unsafe situations that may develop during an RPAS flight

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.

- Factors relevant to the safe progress of a flight must include one or more of the following:
- air traffic in the vicinity of a RPAS
 - becoming lost
 - changes in wind and weather conditions at destination
 - changes in wind and weather conditions en route
 - engine or equipment malfunction or failure
 - errors in navigation
 - exceeding nominated operating parameters and tolerances for RPAS
 - instrument or display malfunction or failure
 - running out of fuel/energy
 - security threat at RPAS control station

Managing tasks must
include:

- visual line of sight
- visual meteorological conditions

Unit Mapping Information

This unit replaces and is equivalent to AVIZ3052A Manage situational awareness in remote pilot aircraft systems (RPAS) operations.

Links

Companion Volume implementation guides are found in VETNet -

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