



Australian Government

AVIZ0001 Maintain and manage situational awareness as pilot in command

Release: 1

AVIZ0001 Maintain and manage situational awareness as pilot in command

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 and knowledge required to maintain and manage situational awareness as pilot in command (PIC), in compliance with relevant regulatory requirements of the Civil Aviation Safety Authority (CASA) and national operating standards.

It includes establishing and maintaining own and flight crew situational awareness, setting crew priorities and task management, and working with others in managing situational awareness.

This unit addresses aviation non-technical skill requirements (mental, social and personal-management abilities) of a PIC, and contributes to safe and effective performance in complex aviation operational environments.

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

Work is performed independently and without supervision within a multi-crew 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

Z – Situation Awareness

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 Establish and maintain situational awareness of self and flight crew

- 1.1 Continuous active monitoring (effective lookout) of all critical factors relevant to the safe progress of a flight is undertaken
- 1.2 Situational awareness is applied to own and others' performance in accordance with relevant regulations and legislative requirements
- 1.3 Trends towards an unsafe situation are promptly recognised and appropriate corrective action is taken
- 1.4 Breakdown in flight crew situational awareness is identified and rectified promptly

2 Set crew priorities and manage tasks

- 2.1 Crew priorities and workload are allocated to ensure completion of all tasks relevant to the safety of the flight
- 2.2 Safe operation of aircraft is prioritised ahead of competing tasks
- 2.3 Critical events and tasks are anticipated and managed to ensure accurate completion within available time constraints
- 2.4 Technology is used effectively to reduce workload and to improve ability to safely perform mental and manipulative activities
- 2.5 Signs and symptoms of team fatigue are identified and actions are taken to manage fatigue of self or in others

3 Work with others in managing situational awareness

- 3.1 Collaboration with flight crew members is undertaken to ensure safe completion of flight operations
- 3.2 Effective and efficient crew communications and interpersonal relationships are established and maintained to ensure safe flight outcome
- 3.3 Flight crew members are encouraged to contribute to safe flight outcome
- 3.4 Appropriate actions are taken in conjunction with others to cooperatively correct identified unsafe situations that may develop at any point during the flight

- 3.5 Command decisions are communicated to other flight crew members to maintain and manage situational awareness

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

No equivalent unit.

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 AVIZ0001 Maintain and manage situational awareness as pilot in command

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:

- accepting responsibility for own performance
- advising pilot flying of deviations from planned operations
- analysing aircraft systems and flight environment information to identify actual and potential threats or errors
- applying relevant aeronautical knowledge
- avoiding fixation on a single task or function
- being assertive
- clarifying problems and making effective decisions
- communicating effectively with others
- cross-checking actions of other flight crew members
- interacting with and delegating tasks to flight crew members
- implementing work health and safety (WHS)/occupational health and safety (OHS) procedures and relevant regulations
- maintaining compliance with WHS/OHS requirements
- maintaining radio listening watch
- making effective decisions
- managing a flight crew incapacitation event in accordance with published procedures
- monitoring flight path, aircraft configuration and systems to achieve desired performance using a systematic scan technique
- operating electronic equipment, including communications equipment, to required protocols
- prioritising tasks to achieve safe flight performance
- promptly identifying, reporting and rectifying problems
- responding appropriately to cultural differences in the workplace
- selecting and using appropriate instruments, displays, communications equipment and aids
- taking initiative and responding to changing situations
- using visual systematic scanning technique with required attention to detail
- using flight radio and inter-crew communications
- using traffic information to establish and maintain situational awareness
- utilising available resources to collect flight environment information and to modify planned

operations as required.

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:

- CASR Part 61 Manual of Standards aeronautical knowledge relevant to the role of pilot in command
- cockpit management:
 - crew coordination:
 - distribution of responsibilities
 - working with a crew concept
 - crew cooperation:
 - small group dynamics (norms, atmosphere, pressure, communication, structure)
 - conflict management
 - leadership, style of management:
 - concern for performance
 - concern for people
 - democratic versus autocratic style
 - encouraging inputs and feedback
 - optimising flight crew performance in flight
 - correcting crew coordination deficiencies
 - communication:
 - verbal and non-verbal communication
 - one and two-way communication
 - effects of different communication styles
 - miscommunication (including cultural misunderstandings)
- effective decision-making processes:
 - identify problems and causal factors
 - assess component parts systematically and logically
 - employ analytical techniques to identify solutions and consider the value and implications of each
 - generate solutions and/or alternative courses of action
 - assess alternative solutions and risks with other flight crew members
 - determine course of action
 - communicate decision and delegate tasks to flight crew
 - monitor progress against agreed plan

- evaluate decisions in line with changing circumstances
- ensure decision-making is improvement-focused and directed towards achieving optimum outcomes
- fatigue risk management processes:
 - proactive
 - predictive
 - reactive
- hazard identification, risk analysis and control
- human performance and its limitations, including the senses, memory and situational awareness
- judgement and decision-making:
 - pilot judgement concepts:
 - types of judgement
 - motor skills and human factors
 - aeronautical decision-making:
 - decision-making concepts
 - pilot responsibilities
 - behavioural aspects
 - identification of hazardous attitudes:
 - physical factors
 - psychological factors
 - social influences and interface between people
 - pilot judgement awareness:
 - risk assessment
 - cockpit stress management
 - applying decision-making concepts:
 - practical application
 - managing resources
 - safety awareness
- relevant problems that may occur and actions to overcome them
- procedures for maintaining situational awareness
- procedures for transferring aircraft control between flight crew members
- standard radiotelephony phraseology
- systematic scanning techniques
- task allocation and management
- threat and error management (TEM) principles
- use of navigational computers and equipment
- workload, stress 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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