



Australian Government

AVIF0020 Manage human factors and situational awareness in an aviation operational environment

Release: 2

AVIF0020 Manage human factors and situational awareness in an aviation operational environment

Modification History

Release 2. This is the second release of this unit of competency in the AVI Aviation Training Package.

Application

This unit involves the skills and knowledge required to manage human factors and situational awareness in an aviation operational environment in compliance with relevant regulatory, requirements and organisational practices.

It includes managing human performance and communicating effectively within an aviation environment. It also 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 non-technical skill requirements (mental, social and personal-management abilities) related to safety management duties of aviation operators and contributes to safe and effective performance in complex operational environments.

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

Work is performed independently or under limited supervision as a single operator or within a team environment.

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

Pre-requisite Unit

Not applicable.

Competency Field

F – Safety 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 Manage human performance

- 1.1** Pre- and post-operational personal condition is managed to ensure safe and effective performance
- 1.2** Individual performance when conducting system operations is monitored against workplace standards, procedures and requirements
- 1.3** Degradation of physiological condition is recognised and appropriate strategies are implemented to ensure safe task outcome
- 1.4** Degradation of psychological condition is recognised and appropriate strategies are implemented to ensure safe task outcome
- 1.5** Sources of stress are identified and managed to maintain a safe operating environment
- 1.6** Limitations to personal performance are communicated to others where necessary to maintain a safe operating environment

2 Communicate effectively

- 2.1** Effective listening skills are applied
- 2.2** Questions are used to gain additional information and to clarify understanding
- 2.3** Information received is clarified as required, interpreted, and accurately communicated or reported with due observation of ethics and protocols required of the operational environment
- 2.4** Communication is undertaken in varying situations with culturally diverse, familiar and unfamiliar individuals, teams and crews
- 2.5** Appropriate protocols and procedures are followed when using communications systems during routine and contingency operations
- 2.6** Responses are sought from and provided to others in a timely manner

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| 3 Maintain situational awareness | <p>3.1 Continuous monitoring of all critical factors relevant to the safe completion of task is undertaken</p> <p>3.2 Effective visual scan is applied, personnel interaction is maintained, and radio, inter-personnel communication, traffic information is used appropriately</p> <p>3.3 Trends towards unsafe situations are recognised and appropriate corrective action is employed in accordance with workplace procedures and regulatory requirements</p> <p>3.4 Breakdown in situational awareness is identified and appropriate corrective action is implemented to regain control</p> |
| 4 Assess situations and make decisions | <p>4.1 Operational threats, errors and undesired system states are identified and analysed</p> <p>4.2 Operational risks are assessed and reported in accordance with workplace procedures and regulatory requirements</p> <p>4.3 Potential solutions are identified and control measures are determined and implemented</p> <p>4.4 Determined plan of action is communicated and tasks are allocated to others as appropriate</p> <p>4.5 Plan of action is implemented and monitored to achieve optimum outcomes</p> <p>4.6 Plan of action and implementation process are re-evaluated and amended as required to achieve optimum task outcomes</p> <p>4.7 Extended operational changes resulting from action plan and related risks are monitored and managed to ensure a safe task outcome</p> |
| 5 Set priorities and manage tasks | <p>5.1 Priorities and workload are organised to ensure completion of all tasks relevant to operational safety and effectiveness</p> <p>5.2 Critical events and tasks are anticipated and managed to ensure completion within available time constraints</p> <p>5.3 System automation is used to reduce workload and to improve ability to perform mental and manipulative activities safely</p> |

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| | 5.4 | Fixation on single actions/functions is minimised |
| | 5.5 | Degraded human performance factors are identified and appropriate actions are taken to manage degraded performance of self or in others when necessary |
| 6 Work with others in managing situational awareness | 6.1 | Collaboration with others is undertaken to ensure safe completion of task |
| | 6.2 | Effective and efficient communications and interpersonal relationships are established and maintained with all stakeholders to ensure safe task outcome |
| | 6.3 | Team members are encouraged to participate in and contribute to safe task outcome |
| | 6.4 | Appropriate action is taken in conjunction with others to cooperatively correct any identified unsafe situations that may develop during the task |

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

AVI Training Package Companion Volume Implementation Guide available on VET Net: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=4725260a-0af3-4daf-912b-ef1c2f3e5816>