



Australian Government

AVIF0005 Implement aviation fatigue risk management processes

Release: 2

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Modification History

Release 2. ISC upgrade - a statement relevant to Defence Aviation has been added to the Application of the unit.

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 implement aviation fatigue risk management processes, in compliance with relevant regulatory requirements of the Civil Aviation Safety Authority and national operating standards.

It includes identifying, controlling, monitoring and reviewing the effectiveness of fatigue risk management processes as part of a safety management system (SMS).

Work involves managing the effects of fatigue on operational objectives using an SMS within a variety of operational contexts within the Australian aviation industry.

This unit addresses aviation non-technical skill requirements (mental, social and personal-management abilities) related to safety management duties that complement the technical skills of aviation personnel and contributes to safe and effective performance in complex aviation operational environments.

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

Work is performed independently or under limited supervision within a single-pilot or 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

F – Safety Management

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Identify fatigue hazards and assess risk

PERFORMANCE CRITERIA

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

1.1 Fatigue hazards are identified through organisational methods in accordance with workplace standards

1.2 Stakeholders are identified and involved in the risk assessment process

1.3 Likelihood and consequence of fatigue hazards are assessed and ranked against established organisational risk assessment criteria

2 Identify fatigue risk controls

2.1 Controls that reduce fatigue risk to as low as reasonably practicable (ALARP) are identified in accordance with workplace policies and procedures

2.2 Fatigue risk management documentation is completed and checked for accuracy

2.3 Fatigue risk management action plan is developed and communicated to all stakeholders

3 Control fatigue risk

3.1 Control selection is determined with consideration of effect on stakeholders

3.2 Fatigue risk control methods are communicated to stakeholders

3.3 Selected control method is implemented, monitored and evaluated

4 Monitor and review effectiveness of fatigue risk control

4.1 Implemented risk controls are regularly monitored against measures of success/effectiveness

4.2 Assistance is provided to review fatigue risk in own area of operation

4.3 Management of fatigue risk is continuously monitored and reviewed in own area of operation

4.4 Review results are used to improve fatigue risk control

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.

Non-essential conditions can be found in the Companion Volume Implementation Guide.

Workplace standards must include:	• current Australian Standard (AS)/New Zealand Standard (NZS) International Standard Organization (ISO) risk management standard
Organisational methods to identify fatigue risk hazards must include:	• predictive • proactive • reactive
Fatigue risk likelihood criteria must include:	• rare • unlikely • possible • likely • almost certain
Fatigue risk consequence criteria must include:	• negligible • minor • major • moderate • severe
Fatigue risk control methods must include:	• hierarchy of risk controls • elimination • substitution • engineered controls • administrative controls • personal protective equipment

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 AVIF0005 Implement aviation fatigue risk management processes

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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, performance criteria and range of conditions on at least one occasion and include:

- applying precautions and required actions to minimise and control the effects of fatigue when carrying out own work functions
- applying legislative restrictions on work duties to assist in managing fatigue
- communicating effectively with others
- determining appropriate fatigue risk levels and control methods through effective decision making
- determining and appropriately managing factors external to the workplace that may affect individual fatigue
- identifying and accurately predicting the effects of duty periods and off-duty periods on individual and team/crew fatigue
- identifying controls for treating fatigue risks
- implementing fatigue risk management processes to safely achieve operational objectives
- monitoring and reviewing effectiveness of fatigue risk controls
- reading and comprehending a variety of safety/technical texts
- researching and collecting data to monitor and evaluate risks
- solving problems to appropriately address identified fatigue risks
- writing, editing and proofreading documents to ensure clarity of meaning, accuracy and consistency of information.

Knowledge Evidence

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

- Australian and international aviation fatigue risk management standards
- change management procedures
- communication techniques and strategies to assist team/crew members identify and manage fatigue
- definitions of key terms utilised within fatigue risk management processes
- effects of fatigue on workplace performance
- fatigue hazard causes
 - restricted/split sleep patterns
 - multiple high workload periods across duty cycle
 - multiple sectors
 - high density airspace
 - long/extended duty cycles
 - extended wakefulness
 - circadian disruptions
 - circadian drift
 - individual workload
 - physiological human factors
 - psychological human factors
- fatigue hazard identification procedures
 - predictive
 - proactive
 - reactive
- fatigue risk assessment and analysis techniques and tools
- fatigue risk management processes within a safety management system (SMS)
- key provisions of relevant national and state/territory legislation, regulations, codes of practice, and workplace procedures related to fatigue risk management such as
 - Civil Aviation Orders
 - Defence Orders, Instructions and publications
- work health and safety (WHS)/occupational health and safety (OHS)safety assurance procedures
- safety promotion procedures
- security and safety implications of fatigue in the aviation workplace
- signs of fatigue in others in the aviation workplace
- sources of information on fatigue and fatigue 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
- relevant and appropriate materials, tools, equipment and personal protective equipment currently used in industry
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals
- acceptable means of simulation assessment.

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