

# **AVIF0009** Manage threats and errors as pilot in command

Release: 1

### AVIF0009 Manage threats and errors 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 manage threats and errors as pilot in command (PIC), in compliance with relevant regulatory requirements of the Civil Aviation Safety Authority (CASA) and national operating standards.

It includes recognising and managing actual and potential threats, recognising and managing actual and potential errors, recognising and managing undesired aircraft states, making effective decisions, and reporting and recording operational occurrences.

This unit addresses aviation non-technical skill requirements (mental, social and personal-management abilities) for a PIC, 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 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**

F - Safety Management

#### **Unit Sector**

Not applicable.

#### **Elements and Performance Criteria**

ELEMENTS PERFORMANCE CRITERIA

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Elements describe the essential outcomes.

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

#### 1 Recognise and manage actual and potential threats

- 1.1 Potential environmental or operational threats likely to affect flight safety are identified
- 1.2 Actual environmental or operational threats that affect flight safety are identified
- 1.3 Competing operational priorities and task demands that may represent a threat to flight safety flight are identified
- 1.4 Effective decisions are made to manage actual and potential threats, and countermeasure tasks are identified and allocated to appropriate flight crew members
- 1.5 Flight progress and effect of countermeasures are monitored and assessed to ensure a safe outcome
- 1.6 Alternative countermeasures are identified and implemented, and countermeasures are re-evaluated for effectiveness

#### 2 Recognise and manage actual and potential errors

- 2.1 Checklists and standard operating procedures are implemented to prevent aircraft handling, procedural or communication errors
- 2.2 Committed errors are identified and responded to before aircraft enters an undesired state
- 2.3 Aircraft systems are monitored using a systematic scan technique to collect and analyse flight information for potential or actual error recognition purposes
- 2.4 Flight operating environment is monitored to collect and analyse flight information for potential or actual error recognition purposes
- 2.5 Team performance is monitored to recognise potential or actual error occurrence
- 2.6 Effective decisions are made to manage actual and potential errors, and countermeasure tasks are identified and allocated to appropriate flight crew members before aircraft enters an undesired state
- 2.7 Effective decisions are made to manage actual and potential errors, and countermeasure tasks are identified and allocated to appropriate flight crew members to correct errors after aircraft enters an undesired state

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#### 3 Recognise and manage undesired aircraft states

- 3.1 Undesired aircraft states are recognised
- 3.2 Effective decisions are made to manage undesired aircraft states, and countermeasure tasks are allocated and prioritised to ensure an undesired aircraft state is managed effectively
- 3.3 Corrective actions to recover an undesired aircraft state are applied in a safe and timely manner

# 4 Make effective decisions

- 4.1 Relevant, current and sufficient information is gathered to assess and analyse situation for decision making
- 4.2 Problem-solving strategies and techniques are used to identify and generate options
- 4.3 Decisions are made and communicated to flight crew and implemented in a timely manner, in accordance with regulatory requirements and workplace procedures
- 4.4 Decisions and actions are evaluated for their effectiveness and positive outcomes
- 4.5 Decisions, their rationale and associated actions are documented and reported in accordance with regulatory requirements and workplace procedures
- 4.6 Operational decisions and actions taken to manage threats and errors are reported and recorded in accordance with appropriate workplace procedures and regulatory requirements

#### **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.

Multi-crew operational threats must include one or more of the following:

- events or errors that:
  - occur outside the influence of the flight crew
  - increase the operational complexity of the flight
  - · require crew attention and management if safety margins are

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#### to be maintained

Errors must include one or more of the following:

- individual or group actions or inactions that:
  - lead to a deviation from individual, group or organisational intentions or expectations
  - reduce safety margins
  - increase the probability of adverse operational events on the ground and/or during flight

Undesired aircraft states must include one or more of the following:

- incorrect aircraft systems configuration associated with a reduced margin of safety
- inappropriate flight mode awareness and selection
- misapplication of flight controls
- pilot induced aircraft position
- · pilot induced speed deviation

# **Unit Mapping Information**

No equivalent unit.

#### Links

 $\label{lem:companion} Companion \ \ Volume \ implementation \ guides \ are found \ in \ VETNet - \\ \underline{\ \ }\underline{\ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ }\underline{\ \ \ }\underline{\ \ \ }\underline{\ \ \ \ }\underline{\ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ \ }\underline{\ \ \ }\underline{\ \ \ \ }\underline{\ \ \ }\underline{\ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ }\underline{\ \ \ \ }\underline{\ \$ 

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