AVIM5001 Operate a simulator
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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 operate a simulator, in compliance with relevant regulatory requirements of the Civil Aviation Safety Authority (CASA) and national operating standards. Use of this unit for simulation activities outside of an aviation context is to be in accordance with relevant regulatory, organisational or enterprise procedures.

It includes applying simulation operations safety, conducting pre-operation planning, controlling a simulation activity and performing post-operation activities.

This unit addresses technical skill requirements (physical, mental and task-management abilities) related to training and assessment duties of simulator operators, instructors and assessors, and contributes to safe and effective performance in simple and/or complex operational or training environments.

Operations are conducted as part of recreational, commercial and military simulation activities across a variety of operational contexts within the Australian aviation industry, or other vocational operating environments when required.

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

Pre-requisite Unit
Not applicable.

Competency Field
M – Training and Assessment

Unit Sector
Not applicable.
Elements and Performance Criteria

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<th>ELEMENTS</th>
<th>PERFORMANCE CRITERIA</th>
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<td>Elements describe the essential outcomes.</td>
<td>Performance criteria describe the performance needed to demonstrate achievement of the element.</td>
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1 Apply simulation operations safety

1.1 Access and egress to simulator is conducted in accordance with workplace procedures

1.2 Safety and emergency procedures are communicated and actioned as required

1.3 Simulator serviceability is monitored in accordance with workplace procedures

1.4 Effects of simulation sickness are communicated to participants and treated as required in accordance with workplace procedures

1.5 Workplace safety communications are followed in accordance with workplace procedures

2 Conduct pre-operation planning

2.1 Appropriate simulation equipment is selected

2.2 Simulation activity plan is developed in accordance with activity requirements

2.3 Operating manuals are used to support work practices

2.4 Simulation data is accessed to suit work practices, in accordance with workplace procedures

2.5 Simulation data is manipulated to suit work requirements, in accordance with workplace procedures

2.6 Simulation data is saved in accordance with workplace procedures

2.7 Simulation data is stored to suit work requirements, in accordance with workplace procedures

3 Control a simulation activity

3.1 Liaison with relevant personnel is conducted to determine simulation activity requirements

3.2 Simulation activity is commenced

3.3 Simulation equipment is employed

3.4 Communication with simulation activity participants is
3.5 Abnormal/unusual conditions are monitored and addressed
3.6 Variations to activity conditions are made as requested/required
3.7 Activity is ceased in accordance with simulation activity plan

4 Perform post-operation activities

4.1 Simulation results are saved in accordance with workplace procedures
4.2 Activity participants are debriefed as required
4.3 Simulator faults are recorded in accordance with workplace procedures
4.4 Simulation equipment is refurbished/maintained in accordance with workplace procedures

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.

Access and egress must include:
- appropriate and safe entry to simulator in accordance with organisational work health and safety (WHS)/occupational health and safety (OHS) and security policies
- appropriate and safe exit methodologies from simulators
- interpretation of signage, safety warnings and simulator status
- monitoring access of visitors to simulator and providing safety/security briefs as required

Simulator must include one or more of the following:
- associated simulator computer hardware and software
- desktop simulator
- full motion simulator
- flight training device
- operating system
- part-task trainer
- simulator
Abnormal/unusual conditions must include one or more of the following:

- single, multiple or team operator simulator
- synthetic training device
- virtual reality training system
- emergency communications
- equipment malfunction/failure
- hardware malfunction/failure
- loading stops
- motion stops
- participant simulation sickness
- personnel equipment malfunction/failure
- poor/unusual participant performance
- smoke or overheat warnings
- software malfunction/failure

Monitoring simulator serviceability must include:

- ensuring simulator is maintained to a level satisfactory to comply with organisational requirements
- recording hardware/software issues that may arise during the course of routine equipment operation
- submission of routine maintenance documentation

Simulation sickness effects must include:

- nausea subscale:
  - increased salivation
  - sweating
  - nausea
  - stomach awareness
  - burping
- oculomotor subscale:
  - fatigue
  - headache
  - eyestrain
  - difficulty focusing
- disorientation subscale:
  - vertigo
  - dizzy (eyes open)
  - dizzy (eyes closed) blurred vision

Appropriate simulation equipment must include one or more of the following:

- access database
- compact discs
- computer software subclass
- digital insertion devices
- gaming software
- personnel equipment (e.g. hearing protection, eye protection, clothing, footwear)
- software applications
• storage strategy within organisational databases
• synthetic environment software (e.g. SETHI)
• universal serial bus devices
• web-based database

Accessing simulation data must include one or more of the following:
• downloading from database
• inserting a digital storage device
• opening applications, directories and files

Unit Mapping Information
This unit replaces and is equivalent to AVIM5001A Operate a simulator.

Links
Companion Volume implementation guides are found in VETNet -
https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=4725260a-0af3-4daf-912b-ef1c2f3e5816