



Australian Government

DEFSIM021 Operate the simulator for testing purposes

Release: 1

DEFSIM021 Operate the simulator for testing purposes

Modification History

Release 1. This is the first release of this unit of competency in the DEF Defence Training Package Release 4.0.

Application

This unit describes the skills required to operate the simulator for testing purposes following maintenance. The unit includes identifying the testing requirement, conducting the test and analysing the results, and the documentation and certification processes. In the context of this unit, simulators are used to replicate land, air, sea and undersea systems to facilitate training and development.

Testing includes particular component tests or complete simulator operational tests. The simulator components include the complete simulator or, power control and distribution systems, computers and peripheral hardware, image generator and visual display systems, motion and control systems, sound systems and weapons systems.

The outcomes of the test include immediate fault finding and repair or scheduling the simulator for routine maintenance.

The skills and knowledge described in this unit must be applied within the legislative, regulatory and policy environment in which they are carried out. Organisational policies and procedures must be consulted and adhered to.

Those undertaking this unit would work independently, or as part of a team, with minimal supervision, while performing tasks, including problem solving, in a limited range of contexts. They would use discretion and judgement and take responsibility for the quality of their outputs.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

Simulator Operations

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Identify testing requirement

2 Undertake simulator tests

3 Complete the test sequence

PERFORMANCE CRITERIA

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

1.1 Identify and confirm the type of simulator testing to be undertaken

1.2 Identify the components to be tested

1.3 Consult simulator documentation for serviceability and access

1.4 Identify test parameters to be met

2.1 Prepare simulator for testing

2.2 Conduct specified tests

2.3 Act on and report monitoring systems warnings and alarms

2.4 Collect and analyse test data

2.5 Identify performance abnormalities

2.6 Determine remedial action if necessary

3.1 Complete certification and other documentation for future application

3.2 Report results as required

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 may be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to DEFSIM009 Operate the simulator for testing purposes

Links

Companion Volume Implementation Guides are found on VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6bdbab1e-11ed-4bc9-9cba-9e1a55d4e4a9>

Assessment Requirements for DEFSIM021 Operate the simulator for testing purposes

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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 includes:

- undertaking research and analysis related to simulator operating procedures
- following logical analysis techniques
- using appropriate information technology and software
- identifying, reviewing and analysing information that may impact on the simulator operational testing
- identifying simulator test abnormalities
- determining simulator testing remedial action
- negotiating and communicating effectively with key stakeholders.

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:

- operational capabilities and limitations of the relevant simulator
- simulator operating modules comprising the simulator system being worked on
- simulator operating procedures
- specified simulator tests
- complex analysis techniques
- legislative and regulatory requirements related to the simulator being evaluated
- organisational policy and procedures related to the relevant simulator
- product knowledge related to systems and/or equipment in service.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in workplace operational situations. Where this is not appropriate, assessment must occur in simulated workplace operational situations that reflect workplace conditions.

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.

Retail or commercial systems whose primary purpose is entertainment do not meet the requirements.

Individual domestic use systems whose primary purpose is entertainment do not meet the requirements.

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 PPE currently used in industry.

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