



Australian Government

DEFSIM015 Fault find and repair simulator power distribution and control systems

Release: 1

DEFSIM015 Fault find and repair simulator power distribution and control systems

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 conduct fault finding and repairs to the simulator power distribution and control systems. This includes analysing fault reports, identifying and rectifying faults, conducting functional tests and the documentation and certification processes. In the context of this unit, simulator systems are used to replicate land, air, sea and undersea systems to facilitate training and development.

Power distribution systems may but is not limited to include power distribution software interfaces, programmable logic controllers, uninterruptible power supplies and control systems, power distribution cabinets/units, circuit breakers, emergency power/communication systems, emergency stop circuits and fire protection systems.

Simulator control systems include DC low voltage supplies, DC high voltage supplies, AC low voltage supplies (less than 600VAC), uninterrupted power supplies and control systems, power distribution cabinets/units, hydraulic systems and electric systems.

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 complex tasks, including complex 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.

PERFORMANCE CRITERIA

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

1 Receive and analyse fault report	1.1	Receive and analyse simulator power distribution and control system fault report
	1.2	Identify and select appropriate fault finding method(s) that will apply across the range of power distribution and control systems
	1.3	Prepare the simulator systems power distribution and control system for fault finding, including the isolation of all energy sources
2 Identify and find fault	2.1	Apply fault finding method(s)
	2.2	Identify and analyse fault indicators
	2.3	Identify the power distribution and control system fault
	2.4	Confirm that the fault is the one initially reported
3 Repair fault	3.1	Identify and confirm cause of fault
	3.2	Identify and confirm repair method(s)
	3.3	Complete power distribution and control systems repair
	3.4	Conduct post repair safety check
	3.5	Restart simulator systems power distribution and control system
4 Conduct functional test	4.1	Test simulator systems power distribution and control systems to ensure operational integrity
	4.2	Confirm operational parameters
5 Finalise repair process	5.1	Finalise simulator systems power distribution and/or control system repair reports including a detailed synopsis of the fault and the repair process and any

certification requirements

- 5.2 Report the operational status of the simulator systems power distribution and control system

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 DEFSIM001 Fault find and repair simulator power distribution and control systems

Links

Companion Volume Implementation Guides are found on VETNet -

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