



Australian Government

MEAARM0004 Inspect, test and troubleshoot aircraft stores management systems and components

Release: 1

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Modification History

Release 1. Application changed. Elements and Performance Criteria changed. Foundation Skills made explicit. Range of Conditions removed, and relevant information moved to Assessment Requirements. Assessment Requirements clarified. Supersedes and is equivalent to MEA604 Inspect, test and troubleshoot management systems and components.

Application

This unit describes the skills and knowledge required by members of the Australian Defence Force (ADF) who are required to apply explosive ordnance safety and handling procedures and hand skills and use maintenance documentation and publications to inspect, test and troubleshoot stores management systems (SMS) and components.

The unit applies to all aircraft with stores management systems.

The unit is used in workplaces that operate under the airworthiness regulatory systems of the Defence Aviation Safety Authority (DASA).

Any other relevant legislation, industry standards and codes of practice within Australia must be applied.

Pre-requisite Unit

MEAARM0002 Remove and install aircraft stores management system components

Competency Field

Aviation maintenance

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Prepare to inspect, test and troubleshoot aircraft SMS and components	1.1 Verify task from applicable documentation 1.2 Visually and physically check aircraft safety devices in accordance with technical publications and manuals 1.3 Visually identify correct SMS component for inspection, testing and troubleshooting 1.4 Select tools and ground support equipment in accordance with the

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
	task
2. Inspect SMS component	2.1 Visually and physically check and remove fitted firing devices in accordance with maintenance manual 2.2 Inspect SMS component in accordance with technical publications and manuals while observing all relevant work health and safety (WHS) requirements, including the use of material safety data sheets (MSDSs) and items of personal protective equipment (PPE) 2.3 Prepare aircraft for SMS component testing and troubleshooting in accordance with technical publications and manuals
3. Test and troubleshoot SMS component	3.1 Perform functional testing on SMS component for evidence of serviceability or malfunction in accordance with technical publications and manuals 3.2 Identify SMS component faults in accordance with technical publications and manuals 3.3 Obtain required specialist advice to assist with the troubleshooting process 3.4 Take required corrective action (repair or replace) in accordance with technical publications and manuals while observing all relevant WHS requirements, including the use of MSDSs and items of PPE
4. Complete and process documentation	4.1 Complete required SMS component inspection test and troubleshooting documentation in accordance with standard enterprise procedures 4.2 Forward completed documentation to Maintenance Control Section (MCS) in accordance with standard enterprise procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

- Reading skills to interpret maintenance manuals.
- Numeracy skills to interpret and communicate technical information and take and interpret system measurements.
- Writing skills to complete documentation.

Other foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEA604A Inspect, test and troubleshoot aircraft stores management systems and components (Release 1).

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ce216c9c-04d5-4b3b-9bcf-4e81d0950371>

Assessment Requirements for MEAARM0004 Inspect, test and troubleshoot aircraft stores management systems and components

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Performance Evidence

There must be evidence the candidate has completed all the tasks outlined in the elements and performance criteria of this unit, and demonstrated the ability to:

- inspect, test and troubleshoot aircraft stores management systems (SMS) and components under routine supervision on multiple different tasks involving the following SMS components:
 - mission computer
 - armament computer
 - encoder/decoder
 - control unit
 - head-up display (HUD)
 - multi-function display (MFD)
- perform functional testing by applying logic processes, taking and interpreting measurements, using test equipment and appropriate documentation and manuals to isolate SMS malfunctions and assess post-maintenance serviceability
- follow safety precautions relating to explosive ordnance handling and manual handling of SMS components while performing the above maintenance
- apply safety requirements and appropriate legislative and regulatory requirements while performing the above maintenance
- for the components being worked on:
 - verify the task to be completed by identifying each of:
 - maintenance restrictions
 - aircraft tail number
 - aircraft entered as unserviceable
 - nil stores fitted
 - check at least one of the following safety device types:
 - earth lead
 - aircraft safety pins
 - aircraft switches
 - check at least one of the following firing device types:
 - stores release cartridges

- chaff and flares
- gun system
- missiles
- loaded stores
- prepare aircraft for testing and troubleshooting by:
 - open panels
 - connect ground support equipment and test equipment
- obtain specialist advice from at least one of the following:
 - subject matter expert
 - manufacturer
 - systems program office.
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Knowledge Evidence

There must be evidence the candidate has knowledge of:

- the aircraft operating and maintenance environment
- aircraft SMS and interfaces with other aircraft systems
- work health and safety (WHS) procedures and policies for aircraft SMS components
- Aircraft SMS and component test procedures
- explosive ordnance safety and handling procedures
- technical publications and manuals, including:
 - aircraft publications
 - maintenance instruction manuals and process specifications
 - servicing or service bulletins or structural repair manuals
 - illustrated parts catalogues, aircraft wiring manuals or drawings
 - tooling, equipment or manufacturer's manuals
 - standard practices
 - enterprise aviation regulations and publications
- hardware and component attachment methods
- technical documentation procedures, including:
 - EE500 maintenance form
 - Computer-Aided Maintenance Management (CAMM2) system documents
 - SMS documentation.

Assessment Conditions

The following conditions of assessment represent the requirements of the regulator Defence Aviation Safety Authority (DASA) and maintenance stakeholders and must be rigorously observed.

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies encountered in inspecting, testing and troubleshooting aircraft SMS components. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - workplace procedures, manufacturing specifications, codes, standards, manuals, and reference materials relevant to inspecting, testing and troubleshooting aircraft SMS components
 - materials, tools and equipment specified in the maintenance manuals and applicable procedures
 - general and special-purpose tools and ground support equipment.

Evidence of tasks demonstrating competency must be recorded in a log of industrial experience and achievement. In addition, assessment methods may include questioning and observations in operational or simulated environments.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

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