



Australian Government

Department of Education, Employment and Workplace Relations

MEA605A Inspect, test and troubleshoot aircraft stores suspension systems and components

Release: 2

MEA605A Inspect, test and troubleshoot aircraft stores suspension systems and components

Modification History

Minor formatting and editorial changes made.

Unit Descriptor

This unit of competency is part of the Armament Certificate IV training pathway. It covers the competencies required to inspect, test and troubleshoot aircraft stores suspension systems (SSS) and components.

The unit was developed from the ADF Enterprise unit DDDRARM402A Inspect, test and troubleshoot aircraft stores suspension systems and components and is equivalent to that unit.

Application of the Unit

This unit applies to members of the ADF who are required to apply explosive ordnance safety and handling procedures, hand skills and the use of maintenance documentation/publications in the inspection, testing and troubleshooting of SSS and components.

The unit applies to all aircraft fitted with SSS.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

MEA603A	Remove and install aircraft stores suspension systems and components
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Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

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| 1. Prepare to inspect, test and troubleshoot aircraft SSS and components | 1.1. The task is <i>verified</i> from applicable <i>documentation</i>
1.2. Aircraft <i>safety devices</i> are checked in accordance with relevant <i>technical publications</i>
1.3. Correct <i>SSS component</i> is visually identified for inspection, testing and troubleshooting
1.4. Appropriate tools and ground support equipment are selected in accordance with technical publications and manuals |
| 2. Inspect SSS component | 2.1. <i>Firing devices</i> are <i>checked</i> and removed if fitted
2.2. SSS component is inspected in accordance with technical publications and manuals
2.3. Aircraft is <i>prepared</i> for testing and troubleshooting of SSS component in accordance with technical publications and manuals |
| 3. Test and troubleshoot SSS component | 3.1. SSS component is functionally tested in accordance with applicable technical publications and manuals for evidence of serviceability or malfunction
3.2. SSS component faults are identified in accordance with technical publications and manuals
3.3. <i>Specialist advice</i> is obtained when required to assist with the troubleshooting
3.4. <i>Corrective action</i> is taken in accordance with technical publications and manuals |
| 4. Complete and process documentation | 4.1. <i>Applicable</i> documentation is completed for SSS component inspection, testing and troubleshooting
4.2. Completed documentation is forwarded to MCS |

Required Skills and Knowledge

Required skills

Look for evidence that confirms skills in:

- applying all safety procedures relating to aircraft SSS
- applying hand skills in removal and installation of SSS components
- using ground support equipment and test equipment
- applying system and component knowledge and logical fault-finding procedures and applicable maintenance data in the troubleshooting of SSS and component faults
- performing system functional tests and checks to isolate system faults and assess post-maintenance serviceability
- explosive ordnance safety and handling procedures
- manual handling of SMS components

Required knowledge

Look for evidence that confirms knowledge of:

- the aircraft operating and maintenance environment
- aircraft SSS and component operation and interfaces with other aircraft systems
- hardware and component attachment methods
- OHS procedures and policies
- explosive ordnance safety and handling procedures
- technical publications and manuals
- technical documentation procedures

Evidence Guide

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

A person who demonstrates competency in this unit must be able to inspect, test and troubleshoot SSS and components while observing all relevant safety precautions.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

The underlying skills inherent in this unit should be transferable across a range of aircraft SSS and system component inspection, testing and troubleshooting activities. It is essential that assessment confirms the ability to comply with organisational safety requirements and appropriate legislative and regulatory requirements while maintaining SSS. The ability to work safely within an explosive ordnance environment, conduct applicable tests and maintain relevant documentation is critical, including checking specifically for:

- failure to check aircraft safety devices are installed
- failure to ensure firing devices checked and removed if fitted
- commencing task prior to initiating documentation
- failure to comply with relevant OHS procedures and policies.

Evidence of transferability of skills and knowledge related to SSS and component inspection, testing and troubleshooting is essential. This is to be established through demonstration of the ability to:

- render the system safe
- perform relevant inspections and tests
- troubleshoot faults and perform appropriate rectification action.

The work plan should take account of applicable safety and quality requirements in accordance with the industry and regulatory standards.

A person cannot be assessed as competent until it can be demonstrated to the satisfaction of the workplace assessor that the relevant elements of the unit of competency are being achieved under routine supervision on a range of inspection, testing and troubleshooting tasks involving the SSS components listed in Groups 1 to 3 in the Range Statement. This shall be established via the records in the Log of Industrial Experience and

	Achievement or, where appropriate, an equivalent Industry Evidence Guide.
Context of and specific resources for assessment	Competency should be assessed on aircraft and/or simulator using materials, tools and equipment specified in the maintenance manuals and applicable procedures. It is also expected that general and special purpose tools and ground support equipment would be used where appropriate.
Method of assessment	In addition to evidence provided in the Log of Industrial Experience assessment methods may include questioning and observation in operational or simulated environments. The unit may be assessed independently or in conjunction with unit MEA604A Inspect, test and troubleshoot aircraft stores management system and components.
Guidance information for assessment	

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Task verification	Task verification may include: • maintenance restrictions • aircraft tail number • aircraft entered as unserviceable • nil stores fitted
Documentation	Documentation may include: • EE500 • CAMM2 documents • SMS documentation
Safety devices	Safety devices may include: • earth lead • aircraft safety pins • aircraft switches
Technical publications and manuals	Technical publications and manuals may include: • 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
Note	Range statements listed below are numbered to facilitate specification of the assessment requirements included in the Evidence Guide
SSS component	SSS components may include: 1. Bomb release unit 2. Pylon 3. Missile launcher
Firing devices and checking	Firing devices may include:

	• stores release cartridges • chaff and flares • gun system • missiles • loaded stores Checked may include: • visually • physically
Aircraft preparation	Prepared may include: • panels opened • GSE and test equipment connected
Specialist advice	Specialist advice may be obtained from: • subject matter experts • manufacturer • systems program office
Corrective action	Corrective action may include: • repair • component replacement
Applicable	Applicable may include: • aircraft documentation • stores suspension system component documentation
Application	Application of this unit may relate to: • scheduled or unscheduled maintenance activities • individual or team-related activities
Procedures and requirements	Refer to industry standard procedures specified by manufacturers, regulatory authorities or the enterprise

Unit Sector(s)

Aviation maintenance

Competency field

Co-requisite units

Not applicable