



Australian Government

MEA601 Maintain aircraft egress systems

Release: 2

MEA601 Maintain aircraft egress systems

Modification History

Release 2. Equivalent to MEA601 Maintain aircraft egress systems with amended prerequisite codes.

Application

This unit of competency covers the maintenance of aircraft egress systems that contain explosive ordnance.

Maintenance covers the entire egress system, including the explosive ordnance. It involves the installation and removal of safety devices, disarming and rearming, inspecting, testing, replacing parts, cleaning and painting during the performance of scheduled or unscheduled maintenance. Maintenance may be performed individually or as part of a team.

The unit is part of the Aeroskills Aircraft Armament Certificate IV training pathway.

The unit is used in workplaces that operate under the airworthiness regulatory systems of the Australian Defence

Pre-requisite Unit

DEFEXO001	Work safely with explosive ordnance
MEA107	Interpret and use aviation maintenance industry manuals and specifications
MEA154	Apply work health and safety practices in aviation maintenance
MEA155	Plan and organise aviation maintenance work activities
MEA156	Apply quality standards during aviation maintenance activities
MEA157	Complete aviation maintenance industry documentation
MEA158	Perform basic hand skills, standard trade practices and fundamentals in aviation maintenance

Competency Field

Aviation maintenance

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes.		Performance criteria describe the performance needed to demonstrate achievement of the element.	
1.	Fit and remove safety devices	1.1	Safety devices are fitted to aircraft egress systems in accordance with standard operating and maintenance procedures
		1.2	Safety devices are removed from aircraft egress systems and are correctly stowed in accordance with standard operating and maintenance procedures
2.	Prepare for aircraft egress system maintenance	2.1	Applicable maintenance documentation is identified and obtained
		2.2	Aircraft egress system maintenance requirements are identified from applicable documentation
		2.3	Special tools and equipment required for the maintenance tasks are obtained and positioned
3.	Inspect, test and maintain aircraft egress systems	3.1	Aircraft egress systems are inspected in accordance with applicable maintenance documentation
		3.2	Relevant tests are safely conducted and results are recorded in accordance with standard enterprise procedures
		3.3	Required maintenance tasks are performed in accordance with applicable maintenance documentation and standard enterprise procedures while observing all relevant work health and safety (WHS) requirements, including the use of material safety data sheets (MSDS) and items of personal protective equipment (PPE)
		3.4	Emergency and contingency procedures are performed as required
4.	Remove and install aircraft egress system components	4.1	Non-explosive egress system components are removed and installed in accordance with applicable maintenance documentation and standard enterprise procedures while observing all relevant WHS requirements, including the use of MSDS and items of

PPE

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| | 4.2 | Explosive egress system components are removed and installed in accordance with applicable maintenance documentation and standard enterprise procedures while observing all relevant WHS requirements, including the use of MSDS and items of PPE |
| 5. Complete aircraft egress system maintenance operation | 5.1 | Removed non-explosive components are tagged and packaged for transportation in accordance with standard enterprise procedures |
| | 5.2 | Removed explosive components are tagged and packaged in accordance with procedures for packaging and transportation of explosive ordnance/dangerous goods |
| | 5.3 | Special tools and equipment are maintained in accordance with standard enterprise procedures |
| | 5.4 | Documentation and records are completed in accordance with standard enterprise procedures |

Foundation Skills

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

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Applicable maintenance documentation includes:

- Defect reports
- Maintenance releases containing details of unserviceabilities
- Modification orders or leaflets
- Service bulletins
- Instructions issued by airworthiness authorities
- Work instructions
- Servicing schedules
- Maintenance manuals
- Standards and drawings

	• Applicable airworthiness and explosive ordnance regulations • Standing instructions • Quality manuals • Safety manuals • Maintenance and explosives records
Required maintenance tasks include:	• Arming and de-arming • Cleaning • Component changes • Painting
Egress system components include:	• Non-explosive components: • barometric and gravitational sensing components • canopy jettison components • catapults • ejection seat railings and guns • inertia reels • parachute assemblies • pressure source bottles • survival equipment • Explosive components: • ejection handles • ejection seat cartridges and initiators • explosive connectors • explosive delay elements • flexible linear shaped charges • rocket motors • shielded mild detonating cord • special function cartridges
Procedures and requirements include:	• Industry standard procedures specified by manufacturers, regulatory authorities or the enterprise

Unit Mapping Information

Release 2. Equivalent to MEA601 Maintain aircraft egress systems

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 MEA601 Maintain aircraft egress systems

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Performance Evidence

Evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria under the specified conditions of assessment, and must include:

- applying relevant WHS procedures, including selection and use of PPE
- using MSDS
- fitment of applicable safety devices
- egress system disarming and rearming
- safely handling explosive components
- conducting tests involving continuity, gauging and measuring
- identifying and selecting applicable items of specialist equipment and tools
- using maintenance documentation, hand tools, specialist tools and equipment to perform egress system maintenance tasks
- preparing removed explosive components for safe storage or transportation.

It is essential that assessment confirms the ability to comply with organisational safety requirements and appropriate legislative and regulatory requirements while maintaining aircraft egress systems. The ability to work safely within an explosive ordnance environment, conduct applicable tests and maintain relevant documentation is critical.

This is to be established through demonstration of the ability to:

- render the system safe
- perform relevant inspections and tests, replace components (including disarming and re-arming the system)
- perform appropriate maintenance tasks.
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Knowledge Evidence

Evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- egress system construction, layout and operation
- operation, characteristics and limitations of aircraft egress systems
- effect of environmental conditions
- colour coding, marking and labels associated with egress systems

- operation, characteristics and limitations of specialist tools and equipment
- egress system test procedures
- safety precautions associated with explosive components
- requirements for handling and disposal of explosive components
- general WHS procedures applicable to egress system maintenance, including applicable PPE
- MSDS.

Assessment Conditions

- Competency should be assessed in the workplace or simulated workplace 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.
- Access will also be required to facilities and resources used in the storage, distribution or maintenance of explosive ordnance, including a licensed explosive site.
- The work plan should take account of applicable safety and quality requirements in accordance with the industry and regulatory standards.
- The following conditions of assessment represent the requirements of the Regulators (ADF and CASA) and maintenance stakeholders and must be rigorously observed.
- A person cannot be assessed as competent until it can be demonstrated to the satisfaction of the workplace assessor that the relevant elements and performance criteria of the unit of competency are being achieved under routine supervision on a range of tasks that is representative of the maintenance tasks, tests and the range of non-explosive and explosive components listed in the Range of Conditions.
- This shall be established via the records in the Log of Industrial Experience and Achievement or, where appropriate, an equivalent Industry Evidence Guide (for details refer to the Companion Volume Assessment Guidelines).
- Assessors must satisfy the requirements of the National Vocational Education and Training Regulator (Australian Skills Quality Authority, or its successors).

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