



Australian Government

MEA115 Plan and implement aeronautical product maintenance activities

Release: 3

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Modification History

Release 2.1 Equivalent to MEA115 Plan and implement aeronautical product maintenance activities. Minor amendments to references to regulations to allow flexibility in their application.

Release 2. Equivalent to MEA115 Plan and implement aeronautical product maintenance activities. Updated to meet training package policy requirements.

Application

This unit of competency describes the skills and knowledge required to plan, implement, and evaluate workshop maintenance activities in compliance with airworthiness regulatory requirements.

The unit applies to activities relating to the overhaul, repair, and modification of items of aeronautical product. It is used in workplaces that operate under the airworthiness regulatory systems of the Australian Defence Force (ADF) and the Civil Aviation Safety Authority (CASA).

This unit forms part of the CASA requirement for maintenance certification licences under Civil Aviation Safety Regulation (CASR) Part 66. Where a CASA licensing outcome is sought, users must refer to the licensing provisions in the MEA Aeroskills Companion Volume Implementation Guide.

Pre-requisite Unit

Nil.

Competency Field

Aviation maintenance management

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1. Plan aeronautical product maintenance activity

PERFORMANCE CRITERIA

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

- 1.1 Determine maintenance requirements from required sources
- 1.2 Analyse and prioritise maintenance tasks in line with identified maintenance requirements

ELEMENTS**PERFORMANCE CRITERIA**

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| | 1.3 Identify resource requirements and allocate to ensure timely and efficient completion of maintenance tasks |
| | 1.4 Record maintenance tasks to be performed according to organisational policy and procedures |
| 2. Implement aeronautical product maintenance activity | 2.1 Communicate and agree roles and responsibilities of maintenance personnel involved in maintenance tasks |
| | 2.2 Arrange resources and equipment required to perform maintenance tasks |
| | 2.3 Maintain regular liaison with maintenance personnel to ensure tasks are completed in required timeframe and continuity is maintained |
| | 2.4 Provide management and other stakeholders with regular updates on maintenance progress by way of written and verbal communication |
| | 2.5 Monitor maintenance activities to ensure compliance with prescribed instructions, policy, procedures and regulatory requirements |
| | 2.6 Provide advice and assistance with maintenance activities in line with workplace requirements |
| | 2.7 Resolve maintenance problems in line with applicable maintenance documentation |
| 3. Evaluate and report product maintenance outcomes | 3.1 Evaluate final maintenance outcomes against applicable maintenance documentation according to organisational policy and procedures |
| | 3.2 Collate, evaluate, and distribute maintenance reports to designated management personnel within required timeframe and according to regulatory requirements and organisational policy and procedures |
| | 3.3 Package required maintenance release documentation with items of aeronautical product that are being released to service |

Foundation Skills

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

Unit Mapping Information

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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 MEA115 Plan and implement aeronautical product maintenance activities

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Performance Evidence

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

- plan the maintenance of three different aeronautical products, each in a different context
- manage a workshop when performing each maintenance activity
- evaluate and report on the outcomes of each maintenance activity.

While undertaking the above aeronautical product maintenance, the candidate must:

- demonstrate planning and problem-solving techniques suited to above activities
- apply regulations, policies and procedures, including work health and safety (WHS) requirements
- manage personnel and resources, including determining resource requirements relating to:
 - required numbers of personnel and their availability
 - personnel qualifications, experience and authorisations
 - requirements relating to:
 - spares
 - consumables
 - special equipment, including component test stations
 - ground support equipment
 - personal protective equipment (PPE)
 - technical data
- provide advice and assistance when:
 - performing fault diagnosis and troubleshooting procedures
 - assessing damage
 - assessing repair cost-effectiveness
 - assessing replacement options
- address maintenance problems encountered, including those relating to:
 - lack of resources

- unanticipated breakdowns or faults
- changes in priorities
- produce verbal and written communication in English to the required level by way of maintenance notes, worksheets, status reports, briefs, and individual directives.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- basic planning and problem-solving techniques required for the product maintenance activities described in the performance evidence
- basic function and theory of operation of applicable items of aeronautical product
- cost-effectiveness considerations for different repair types
- philosophies and considerations associated with repair versus replacement options
- organisational procedures relating to aeronautical product maintenance activities found in:
 - aviation maintenance organisation manuals
 - organisational policy and procedures manuals
 - procedures manuals
 - quality manuals
 - safety manuals
 - standing instructions
- regulatory requirements relating to aeronautical product maintenance activities found in:
 - relevant aviation safety regulations
- organisational and airworthiness regulatory requirements for planning, undertaking, recording, reporting, and evaluating the maintenance activities described in the performance evidence, including for:
 - recording maintenance tasks to be performed
 - collating, evaluating, and distributing maintenance reports
 - troubleshooting, including test station operation
 - applying compliance requirements in prescribed workplace instructions
- organisational communication protocols relating to maintenance notes, worksheets, status reports, briefs, and individual directives
- equity, fraud, and ethics requirements set out in organisational code of conduct specific to the maintenance activities described in the performance evidence
- requirements of WHS legislation specific to the maintenance activities described in the performance evidence.

Assessment Conditions

The following conditions of assessment represent the requirements of the regulators (Australian Defence Force [ADF] and Civil Aviation Safety Authority [CASA]) and maintenance stakeholders, and must be rigorously observed.

Competency must be assessed on the job, off the job, or a combination of both. Where assessment occurs off the job, then an appropriate simulation must be used where typical aeronautical product maintenance situations are represented in the simulation scenarios and the elements and performance criteria are fully covered across the range of conditions.

The candidate must be permitted to refer to workplace procedures, product and manufacturing specifications, codes, standards, manuals, and reference materials.

The candidate must have access to:

- tools, equipment, materials, and documentation required to demonstrate the performance evidence above.

The preferred method for establishing candidate capability in regard to the required performance and knowledge evidence is via the records in the Maintenance Management Competency Log. Where the individual does not have Log evidence, evidence of capability may be gathered through direct observation, supervisor's reports, project work, samples, and questioning.

Assessors of this unit must satisfy the assessor requirements in applicable vocational education and training legislation, frameworks and/or standards.

Where the unit is to be used for CASA licensing purposes the assessor must also meet the criteria specified in the CASR Part 147 Manual of Standards.

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