



Australian Government

MEA136 Assess aviation maintenance spares and manage repairable items

Release: 1

MEA136 Assess aviation maintenance spares and manage repairable items

Modification History

Release 1 - New unit of competency

Application

This unit of competency requires application of skills and knowledge required to apply integrated logistic support (ILS) procedures in the assessment of spares and the management of repairable items, including aircraft and mechanical and avionic items of aeronautical product, during scheduled or unscheduled maintenance. Work may be performed individually or as part of a team.

The unit is part of the Aeroskills Diploma and Advanced Diploma training pathways. It is used in workplaces that operate under the airworthiness regulatory systems of Australian Defence Force (ADF) and the Civil Aviation Safety Authority (CASA).

Pre-requisite Unit

MEA135 Use computers in aviation maintenance-related integrated logistic support activities

Competency Field

Integrated logistic support

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes.		Performance criteria describe the performance needed to demonstrate achievement of the element.	
1.	Perform spares assessment activities	1.1	Enterprise spares assessment and supply information systems are identified and applied
		1.2	Maintenance data, spares usage data and trends are monitored and required holdings of spares are varied as required
		1.3	Spares availability problems are identified and

strategies are determined to resolve the problems

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| | | 1.4 | Where applicable, suitable substitute parts are identified and necessary engineering approvals obtained in accordance with applicable regulations, and organisational policies and procedures |
| | | 1.5 | Acceptable sources of substitute parts are identified and requirements for documentation, such as certification reports and release notes, are specified in accordance with regulatory requirements, and organisational policies and procedures |
| | | 1.6 | Configuration management (CM) requirements are observed in spares assessing |
| | | 1.7 | Data required for input to ILS records is provided where applicable |
| 2. | Manage repairable items | 2.1 | Maintenance and reliability data is monitored and changes to maintenance programs are proposed where necessary |
| | | 2.2 | Documentation is raised to allocate repairable items to maintenance facilities in accordance with contractual requirements, and organisational policies and procedures |
| | | 2.3 | Any specific investigation or additional maintenance requirements are specified |
| | | 2.4 | Data required for input to ILS records is provided where applicable |

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.

Spares assessment and

- Manual or computer-based systems

- supply information systems include:**
- Systems developed within the organisation or proprietary systems purchased by the organisation
- Suitable substitute parts are identified from:**
- Modification data
 - Drawings, standards and specifications in the case of piece parts and materials
 - Manufacturers catalogues and specifications in the case of complete components (items of aeronautical product)
- Applicable regulations, and organisational policies and procedures include:**
- Civil Aviation Regulations (CARs) and associated Advisory Circulars (ACs)
 - Civil Aviation Safety Regulations (CASRs), Manuals of Standards and associated Acceptable Means of Compliance and Guidance Material
 - Maintenance organisation expositions
 - Continuing airworthiness management organisation expositions
 - AAP 7001.053 Technical Airworthiness Management Manual
 - Organisational policy manuals
 - Quality manuals
 - Organisational procedures manuals
 - Work instructions
 - Defence regulations and instructions
 - Maintenance management plan
 - Standing instructions
- ILS records include:**
- Logistic support analysis plans
 - Life cycle costing data
 - Failure modes, effects and criticality analysis
 - Baselines for reliability, availability and maintainability
 - Life support analysis record data
- Repairable items include:**
- Removable structural components
 - Mechanical components
 - Items of role equipment
 - Hydraulic, pneumatic and fuel components
 - Items of safety equipment
 - Fire detection and extinguishing components
 - Engines and engine components
 - Propellers and rotors
 - Electrical system components
 - Instrument system components
 - Radio system components
 - Electronic systems components
- Investigation or additional**
- service difficulty (defect) report investigation

- maintenance requirements**
- Include:**
- Incident investigation
 - Warranty claims
 - Modifications
 - Compliance with airworthiness directives or special technical instructions
 - Service bulletin compliance

Unit Mapping Information

Release 1 – equivalent to MEA136A Assess aviation maintenance spares and manage repairable items

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 MEA136 Assess aviation maintenance spares and manage repairable items

Modification History

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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 on at least one occasion, and must include:

- using software packages relevant to spares assessing and repairable item management
- oral communication
- written communication
- problem solving
- application of regulatory and procedural requirements
- identification and resolution of problems relating to availability of spares.
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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:

- ILS principles relating to spares assessing, repairable item management and CM
- software packages used by the enterprise for spares assessment, supply management and repairable item management
- use of drawings, standards and specifications to identify substitute piece parts and materials
- use of catalogues and specifications to identify substitute components (items of aeronautical product)
- regulations, organisational policies and procedures relating to spares assessment and repairable item management
- work health and safety (WHS) requirements relating to substitute piece parts, materials and components
- fraud and ethics.

Assessment Conditions

- This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is, the candidate is not in productive work an appropriate simulation must be used where the range of conditions reflects realistic workplace situations encountered in spares assessment and management of repairable items, especially in relation to component or piece-part substitution.

- The candidate must have access to all tools, equipment, materials and documentation required and must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials. The assessment environment should not disadvantage the candidate.
- Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts.
- Assessors should gather a range of evidence that is valid, sufficient, current and authentic. The preferred method is the records in the Maintenance Management Competency Log. Where the individual does not have a Competency Log evidence can be gathered through a variety of ways, including direct observation, supervisor's reports, project work, samples and questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency.
- Assessors must satisfy the requirements of the National Vocational Education and Training Regulator (Australian Skills Quality Authority, or its successors).

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