



Australian Government

Department of Education, Employment and Workplace Relations

MEA136A Assess aviation maintenance spares and manage repairable items

Revision Number: 2

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Modification History

Minor formatting and editorial changes made.

Unit Descriptor

This unit of competency is part of the Aeroskills Diploma and Advanced Diploma training pathways. It covers the competency required to assess spares and manage repairable items in aviation maintenance activities while complying with relevant airworthiness regulations. The unit is used in workplaces that operate under the airworthiness regulatory systems of the ADF and CASA.

Application of the Unit

This unit requires application of competencies required to apply ILS procedures in the assessment of spares and the management of repairable items.

Applications include aircraft and mechanical and avionic items of aeronautical product.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

MEA135A	Use computers in aviation maintenance-related integrated logistic support activities
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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. Perform spares assessment activities | <p>1.1. Enterprise <i>spares assessment and supply information systems</i> are identified and applied</p> <p>1.2. Maintenance data, spares usage data and trends are monitored and required holdings of spares are varied, as required</p> <p>1.3. Spares availability problems are identified and strategies are determined to resolve the problems</p> <p>1.4. Where applicable, <i>suitable substitute parts</i> are identified and necessary engineering approvals obtained in accordance with <i>applicable regulations, organisational policy and procedures</i></p> <p>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, organisational policy and procedures</p> <p>1.6. Configuration management requirements are observed in spares assessing</p> <p>1.7. Data required for input to <i>ILS records</i> is provided where applicable</p> |
| 2. Manage repairable items | <p>2.1. Maintenance and reliability data is monitored and changes to maintenance programs are proposed, where necessary</p> <p>2.2. Documentation is raised to allocate <i>repairable items</i> to maintenance facilities in accordance with contractual requirements, organisational policy and procedures</p> <p>2.3. Any specific <i>investigation or additional maintenance requirements</i> are specified</p> <p>2.4. Data required for input to ILS records is provided, where applicable</p> |

Required Skills and Knowledge

Required skills

Look for evidence that confirms skills in:

- 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

Required knowledge

Look for evidence that confirms knowledge of:

- ILS principles relating to spares assessing, repairable item management and configuration management
- 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
- OHS requirements relating to substitute piece parts, materials and components
- fraud and ethics

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 effectively apply organisational procedures and ILS principles relating to the assessment of spares and the management of repairable items.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	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. 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.
Context of and specific resources for assessment	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, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. 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.
Method of assessment	
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.

Application	Application of this unit may relate to: • scheduled or unscheduled maintenance • individual or team-related activities
Spares assessment and supply information systems	Spares assessment and supply information systems may be: • manual or computer-based systems • systems developed within the organisation or proprietary systems purchased by the organisation
Suitable substitute parts	Suitable substitute parts may be 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, organisational policy and procedures	Applicable regulations, organisational policy and procedures may include: • Civil Aviation Regulations (CARs) and associated Advisory Circulars (ACs) • 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 Maintenance Manual • organisational policy manuals • quality manuals • organisational procedures manuals • work instructions • defence regulations and instructions • maintenance management plan • standing instructions
ILS records	ILS records may 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	Repairable items may 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 maintenance requirements	Investigation or additional maintenance requirements may include: • service difficulty (defect) report investigation • incident investigation • warranty claims • modifications • compliance with airworthiness directives or special technical instructions • service bulletin compliance

Unit Sector(s)

Integrated logistics support

Competency field

Co-requisite units

Not applicable