MEA136 Assess aviation maintenance spares and manage repairable items

Release: 1

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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
	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 supply information systems include:	• Manual or computer-based systems • 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 maintenance requirements Include:	• service difficulty (defect) report investigation
	• 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.education.gov.au/Pages/TrainingDocs.aspx?q=ce216c9c-04d5-4b3b-9bcf-4e81d0950371