



Australian Government

Department of Education, Employment and Workplace Relations

MEA139A Perform aviation maintenance-related integrated logistic support management activities

Release: 2

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Modification History

Minor formatting and editorial changes made.

Unit Descriptor

This unit is part of Advanced Diploma training pathways. It covers the competencies required to perform a range of maintenance-related ILS activities at a managerial level within applicable airworthiness regulatory requirements. 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 relating to ILS elements and related data management and analysis tools in the maintenance-related management and support of systems throughout their life of type.

Applications include support of maintenance on aircraft, aircraft systems, avionic systems and items of aeronautical product.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable

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

1. Maintain logistic support analysis plans
 - 1.1. Logistic support analysis plans are reviewed in line with trends in system s affordability
 - 1.2. Revisions are proposed to logistic support analysis plans
2. Perform life cycle cost analysis
 - 2.1. Actual and anticipated costs ***through to life of type*** are identified
 - 2.2. Cost data is ***analysed***
3. Establish and maintain baselines for reliability, availability and maintainability
 - 3.1. Data on in-service reliability, availability and maintainability is gathered
 - 3.2. ***Data is reviewed*** against established baselines and action is initiated to deal from the established baselines
4. Revise logistic support analysis record data
 - 4.1. Logistic support analysis parameters are analysed using current data
 - 4.2. ***Analysis results*** are entered in the logistic support analysis record
5. Manage data
 - 5.1. ***A technical data management system*** is developed and managed in accord contractual and ***regulatory requirements***
 - 5.2. ***The relevance of technical data*** is monitored and amendment action is initiated necessary
 - 5.3. Logistic support management information systems are applied and support

Required Skills and Knowledge

Required skills

Look for evidence that confirms skills in:

- oral communication
- written communication
- populating and extracting data from databases
- task analysis
- applying ILS principles

Required knowledge

Look for evidence that confirms knowledge of:

- ILS management and support philosophy and practice
- logistic support analysis (LSA) concepts and methods, including:
 - preparation of LSA plans
 - management and conduct of LSA programs
 - supportability analysis
 - task analysis
 - LSA record population
- reliability, availability and maintainability (RAM) determination and application, including:
 - baseline determination and application
 - RAM modelling
 - reliability and maintainability apportionment
- data management concepts and methods

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 perform management-related ILS activities in support of the maintenance of aircraft, systems and items of aeronautical product.
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 relevant ILS management 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

<p>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.</p>	
Application	<p>Application of this unit may relate to:</p> <ul style="list-style-type: none"> • scheduled or unscheduled maintenance • individual or team-related activities
Life cycle cost analysis	<p>Life cycle cost analysis includes:</p> <ul style="list-style-type: none"> • the systematic identification and analysis of all actual and anticipated costs associated with implementing and sustaining a system throughout its service life
Costs through to life of type	<p>Costs through to life of type may arise from:</p> <ul style="list-style-type: none"> • operation • engineering support • maintenance support • supply support • facilities costs • personnel costs
Data analysis	<p>Data analysis:</p> <ul style="list-style-type: none"> • may be performed using enterprise databases and analysis tools
Data review	<p>Data is reviewed:</p> <ul style="list-style-type: none"> • using enterprise databases and analysis tools
Analysis Results	<p>Analysis results may include:</p> <ul style="list-style-type: none"> • in-service failure mode effects and criticality analysis • corrective maintenance analysis • reliability centred maintenance analysis • maintenance task analysis • repair level analysis
Regulatory requirements	<p>Regulatory requirements may be found in:</p> <ul style="list-style-type: none"> • Civil Aviation Regulations (CARs) or Civil Aviation Safety Regulations (CASRs) • AAP 7001.053 Technical Airworthiness Maintenance Manual
A technical data management	<p>A technical data management system should provide for:</p>

system	<ul style="list-style-type: none">• maintenance of all applicable technical data• retention of original and backup data in separate locations• storage in a manner that minimises the risk of data loss, theft or destruction
The relevance of technical data	<p>The relevance of technical data may be determined through:</p> <ul style="list-style-type: none">• monitoring engineering, maintenance and supply support activities• utilising user feedback

Unit Sector(s)

Integrated logistics support

Competency field

Co-requisite units

Not applicable