



Australian Government

MEA410B Maintain aircraft structure/components

Revision Number: 1

ME A410B Maintain aircraft structure/components

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit is part of the Mechanical AME Certificate IV training pathways. It covers the competencies required to remove corrosion damage from the structure and structural components of fixed or rotary wing aircraft. Where a CASA licensing outcome is sought this unit forms part of the CASA requirement for the granting of the chosen B1 Aircraft Maintenance Engineer Licence under CASR Part 66, in accordance with the licensing provisions in Section 3, Assessment Guidelines.
------------------------	--

Application of the Unit

Application of the unit	This unit requires application of hand skills and the use of maintenance publications to remove corrosion from aircraft structural materials. Applications include the metallic structure of fixed and rotary wing aircraft and structural components.
--------------------------------	---

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		
	ME A401B	Inspect aircraft structures

Employability Skills Information

Employability skills	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.
---	--

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare to remove corrosion damage	<p>1.1.Extent of damage is correctly assessed to assist in determining removal procedure.</p> <p>1.2.Structure is supported and prepared in accordance with the applicable maintenance manual to ensure personnel safety and freedom from damage.</p> <p>1.3.Appropriate <i>corrosion removal procedure</i> is identified in accordance with structural repair manual and/or approved data.</p> <p>1.4.Specialist advice is obtained in establishing an approved repair scheme where a standard corrosion removal procedure cannot be identified or damage criteria is out of limits</p> <p>1.5.All materials and equipment required are organised.</p>
2. Remove corrosion damage	<p>2.1.Corrosion removal is performed and protective coatings, sealants and jointing compounds applied, in accordance with approved repair scheme, ensuring that aircraft standard practices are used and process requirements are carried out.</p> <p>2.2.Structure/component is cleaned of all waste material or contaminants.</p> <p>2.3.Components are adjusted, where necessary, to operate within prescribed specifications.</p> <p>2.4.Required maintenance/repair documentation is completed and processed in accordance with standard enterprise procedures.</p> <p>2.5.Repaired components or assemblies are tagged, sealed and packaged or cradled in accordance with specified procedures, where required.</p>

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Look for evidence that confirms skills in:

- application of relevant OH&S procedures
- the use of approved maintenance documentation and aircraft publications relating to aircraft structure
- identifying various aircraft metals and their basic metallurgy properties by interpretation of markings, numbering systems or visual, chemical or mechanical means
- applying structural corrosion removal/treatment techniques
- restoring aircraft structure sealing and surface finishes

Required knowledge

Look for evidence that confirms knowledge of aircraft construction principles.

Evidence Guide

EVIDENCE GUIDE	
<p>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.</p>	
<p>Overview of assessment</p>	<p>A person who demonstrates competency in this unit must be able to apply hand skills and use maintenance publications to remove corrosion damage from aircraft structural materials while applying all relevant safety precautions.</p>
<p>Critical aspects for assessment and evidence required to demonstrate competency in this unit</p>	<p>The underlying skills inherent in this unit should be transferable into other areas that require similar techniques. It is essential that procedures take into account all safety precautions and quality requirements, standards and practices and processes associated with assembly.</p> <p>Evidence of knowledge about repair techniques and the use of the standard repair manual in a range of different repair situations will be necessary to supplement evidence of ability to plan and undertake structure and component repair.</p> <p>A person cannot be assessed as competent until it can be demonstrated to the satisfaction of the workplace assessor that the relevant elements of the Unit of Competency are being achieved under routine supervision on at least one task from each of Groups 1 to 3 in the Range Statement. This shall be established via the records in the Log of Industrial Experience and Achievement or, where appropriate, an equivalent Industry .</p>
<p>Context of and specific resources for assessment</p>	<p>Competency should be assessed in the work environment, using tools and equipment specified by aircraft maintenance manuals. It is also expected that general purpose tools, test and ground support equipment found in most routine situations would be used where appropriate.</p>
<p>Method of assessment</p>	
<p>Guidance information for assessment</p>	

Range Statement

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>	
Note	The Range Statements below are numbered to facilitate specification of the assessment requirements included in the Evidence Guide.
Corrosion removal procedure	<p>Corrosion removal procedure may include:</p> <ol style="list-style-type: none"> 1. Removing corrosion by chemical and mechanical methods 2. Restoring protective coatings 3. Applying sealants and jointing compounds
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
Procedures and requirements	Refer to industry standard specified by manufacturers, regulatory authorities or the enterprise

Unit Sector(s)

Unit sector	
--------------------	--

Competency field

Competency field	Aviation maintenance
-------------------------	----------------------

Co-requisite units

Co-requisite units		