



Australian Government

Department of Education, Employment and Workplace Relations

MEA414A Remove light corrosion from aircraft

Revision Number: 2

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Modification History

Minor formatting and editorial changes made. Prerequisite unit version code updated.

Unit Descriptor

This unit covers the competencies required to remove light corrosion from the surfaces of aircraft structure. No licensing requirements apply to this unit at the time of publication, but compliance with legislation and regulations governing handling and disposal of hazardous materials is included in the unit. This 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 skills and knowledge relating to the removal of light corrosion from the surfaces of aircraft structure.

Applications include fixed and rotary wing aircraft.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

MEA101B	Interpret occupational health and safety practices in aviation maintenance
MEA103B	Plan and organise aviation maintenance work activity
MEA105C	Apply quality standards applicable to aviation maintenance processes
MEA107B	Interpret and use aviation maintenance industry manuals and specifications
MEA108B	Complete aviation maintenance industry documentation
MEA109B	Perform basic hand skills, standard trade practices and fundamentals in aviation maintenance

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. Identify corrosion damage | 1.1. Signs of corrosion are identified through visual inspection
1.2. The type of corrosion is identified
1.3. The severity of corrosion damage is determined and damage more severe than light surface corrosion is documented and reported in accordance with standard enterprise procedures |
| 2. Remove light corrosion | 2.1. The applicable corrosion removal method is selected in accordance with enterprise procedures
2.2. OHS requirements are identified and complied with and PPE is checked for correct fit and function
2.3. Materials and tools required for corrosion removal are assembled
2.4. Surface is prepared and corrosion removed using the selected removal method |
| 3. Clean area and equipment | 3.1. Surface is cleaned of all chemical residue and mechanical media, in accordance with enterprise procedures, ready for the next process
3.2. Equipment is cleaned in accordance with enterprise procedures or manufacturer's instructions
3.3. Equipment is checked for serviceability and unserviceable items are dealt with in accordance with enterprise procedures
3.4. Waste material is removed and disposed of or stored in accordance with legislative, regulatory and enterprise procedures
3.5. Documentation is completed in accordance with standard enterprise procedures |

Required Skills and Knowledge

Required skills

Look for evidence that confirms skills in:

- applying OHS procedures relating to light corrosion removal, including the selection and correct use of PPE
- recognising types of corrosion and damage that exceeds light surface corrosion
- applying enterprise procedures for removal of light corrosion
- selecting and using applicable corrosion removal methods, equipment and tools
- using MSDS
- cleaning surfaces following corrosion removal
- correctly disposing of waste materials
- cleaning and maintaining equipment and tools

Required knowledge

Look for evidence that confirms knowledge of:

- relevant enterprise procedures and maintenance publications
- OHS procedures relating to the removal of aerospace coatings, including PPE
- how to obtain MSDS
- types of chemicals used for corrosion removal and methods of application
- mechanical methods that can be used for corrosion removal
- cleaning methods following corrosion removal
- environmental legislation and regulations relating to the storage, use and disposal of hazardous materials

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 remove light corrosion from the surfaces of aircraft structure in accordance with specified procedures while using the correct PPE and observing all relevant safety precautions and environmental protection processes.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	The underlying skills inherent in this unit should be transferable across a range of tasks involving the removal of light corrosion damage from the surfaces of aircraft structure. It is essential that applicable processes, cleanliness requirements and safety precautions, including the correct use of PPE, and application of environmental protection procedures are fully observed, understood and complied with. Ability to interpret corrosion removal procedures and apply them in practice is critical. Evidence of transferability of skills and knowledge related to the removal of light corrosion is essential. This is to be demonstrated through corrosion removal using mechanical, manual and chemical means across a range of aircraft tasks. The work plan should take account of applicable safety and quality requirements in accordance with the industry and regulatory standards. 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 a representative range of light corrosion removal tasks using applicable mechanical, manual and chemical removal methods as listed 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 Evidence Guide.
Context of and specific resources for assessment	Competency should be assessed in the workplace or simulated workplace using materials, tools and equipment specified in the maintenance manuals and applicable procedures. It is also expected that general and special purpose tools and ground support equipment would be used where appropriate.

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
Procedures and requirements	Refer to industry standard procedures specified by manufacturers, regulatory authorities or the enterprise
Signs of corrosion	Signs of corrosion may include: • surface deformed • paint blistered or flaked • powder • discolouration
Types of corrosion	The type of corrosion may be: • uniform etch • pitting • intergranular • exfoliation • filiform • galvanic
OHS requirements	OHS requirements are identified from relevant: • state/territory/Commonwealth OHS legislation, regulations and codes • procedures manual • safety manual • work instructions • maintenance organisation manual • MSDS • Defence regulations and instructions • standing instructions
Materials and tools	Materials and tools may include: • micro grinder • sanders • plastic media blasting equipment • abrasive pads

	• wet/dry abrasive papers • chemicals • PPE applicable to task
Selected removal methods	Selected removal methods may include: • light mechanical using micro grinder, sander or plastic media blasting • manual removal using wet/dry abrasive papers or abrasive pads • chemical
Legislative, regulatory and enterprise procedures	Legislative, regulatory and enterprise procedures may include: • state/territory/Commonwealth environmental legislation, regulations and codes for the storage and disposal of hazardous and toxic materials • MSDS • maintenance organisation manual • procedures manual • work instructions • relevant Defence regulations and instructions • standing instructions

Unit Sector(s)

Aviation maintenance

Competency field

Co-requisite units

Not applicable