

# MEAMEC0056 Inspect and maintain structures and related components of non-pressurised small aircraft

Release: 1

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#### **Modification History**

Release 1. Application changed. Performance Criteria changed. Foundation Skills made explicit. Range of Conditions removed, and relevant information moved to Assessment Requirements. Assessment Requirements clarified. Supersedes and is equivalent to MEA369 Inspect and maintain structures and related components of non-pressurised small aircraft.

#### **Application**

This unit describes the skills and knowledge required to apply procedures and techniques associated with the inspection and maintenance of non-pressurised small aircraft structures during scheduled or unscheduled maintenance, including special inspections required after events, such as heavy landings, overstress or flight through heavy turbulence.

The unit also covers the performance of a limited range of minor metal and composite repairs that are classified as elementary maintenance. Also required is an application of procedures and techniques associated with the removal and installation of related structural and non-structural components, including items such as internal trim, seats and emergency equipment. Work may be performed individually or as part of a team.

This unit covers removable components that are installed using bolts or screws. Where component removal and installation require the removal and installation of rivets, this is covered by the unit MEAMEC0058 Perform major modifications and repairs to small aircraft metal structure.

The unit is used in workplaces that operate under the airworthiness regulatory systems of the Civil Aviation Safety Authority (CASA) and the Defence Aviation Safety Authority (DASA).

Any other relevant legislation, industry standards and codes of practice within Australia must be applied.

### Pre-requisite Unit

 ${\tt MEA107}$  Interpret and use aviation maintenance industry manuals and specifications

MEA154 Apply work health and safety practices in aviation maintenance

MEA155 Plan and organise aviation maintenance work activities

MEA156 Apply quality standards during aviation maintenance activities

MEA157 Complete aviation maintenance industry documentation

MEA158 Perform basic hand skills, standard trade practices and fundamentals in aviation maintenance

#### Competency Field

Aviation maintenance

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## **Elements and Performance Criteria**

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Inspect aircraft structure	1.1 Use relevant maintenance documentation to identify specific inspection requirements
	1.2 Undertake appropriate preparation and access to the aircraft structure to allow for proper inspection in accordance with maintenance documentation
	1.3 Visually or physically check aircraft structure for signs of deformation defects or damage in accordance with maintenance documentation and approved procedures while observing all relevant work health and safety (WHS) requirements, including the use of material safety data sheets (MSDSs) and items of personal protective equipment (PPE)
	1.4 Assess damage or defects against damage or wear limits specified by structural repair manual or other approved data to determine if repair or replacement is required
	1.5 Complete maintenance documentation and process in accordance with standard enterprise procedures
2. Maintain aircraft structure	2.1 Perform minor repairs classified as elementary maintenance in accordance with approved repair methods ensuring that aircraft standard practices are used, and process requirements are carried out while observing all relevant WHS requirements, including the use of MSDSs and items of PPE
	2.2 Employ preventative maintenance techniques to preserve the integrity of aircraft structure
	2.3 Obtain required specialist or supervisory advice to assist with the troubleshooting process
	2.4 Clean work area of all waste material or contaminants
	2.5 Complete required maintenance documentation and process in accordance with standard enterprise procedures
3. Remove components	3.1 Support and prepare structure in accordance with the applicable maintenance manual to ensure personnel safety and freedom from damage to aircraft or component during component removal
	3.2 Carry out component removal in accordance with the applicable maintenance manual while observing all relevant WHS requirements, including the use of MSDS and items of PPE
	3.3 Complete required maintenance documentation and process in

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Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
	accordance with standard enterprise procedures
	3.4 Tag and prepare removed components for transport, where applicable and in accordance with specified procedures
4. Install components	4.1 Check structural and/or non-structural components to be installed to confirm correct part numbers, serviceability and modification status
	4.2 Carry out component installation in accordance with the applicable maintenance manual while observing all relevant WHS requirements, including the use of MSDS and items of PPE
	4.3 Remove support or safety equipment at an appropriate time to ensure personnel safety and freedom from structural damage
	4.4 Complete required maintenance documentation and process in accordance with standard enterprise procedures

#### **Foundation Skills**

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

- Reading skills to interpret maintenance documentation and procedures.
- Writing skills to complete maintenance documentation.
- Numeracy skills to interpret and communicate technical information.

Other foundation skills essential to performance are explicit in the performance criteria of this unit.

#### **Unit Mapping Information**

Release 1. Supersedes and is equivalent to MEA369 Inspect and maintain structures and related components of non-pressurised small aircraft.

#### Links

Companion Volume implementation guides are found in VETNet - <a href="https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ce216c9c-04d5-4b3b-9bcf-4e81d0950371">https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ce216c9c-04d5-4b3b-9bcf-4e81d0950371</a>

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