



Australian Government

**MEA406 Repair/modify aircraft
non-primary structural sheet metal
components**

Release: 1

MEA406 Repair/modify aircraft non-primary structural sheet metal components

Modification History

Release 1 - New unit of competency

Application

This unit of competency requires application of hand skills and the use of maintenance publications to repair fixed and rotary wing aircraft non-primary structure sheet metal components under the guidance of a qualified person.

This unit is part of the Aeroskills Structures Maintenance Certificate II training pathway. It is used in workplaces that operate under the airworthiness regulatory systems of the Australian Defence Force (ADF) and the Civil Aviation Safety Authority (CASA).

Pre-requisite Unit

MEA101	Interpret work health and safety practices in aviation maintenance
MEA103	Plan and organise aviation maintenance work activity
MEA105	Apply quality standards applicable to aviation maintenance processes
MEA107	Interpret and use aviation maintenance industry manuals and specifications
MEA108	Complete aviation maintenance industry documentation
MEA109	Perform basic hand skills, standard trade practices and fundamentals in aviation maintenance

Competency Field

Aviation maintenance

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

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|----|--|-----|--|
| 1. | Prepare to perform routine repairs and minor modifications to aircraft non-primary structural sheet metal components | 1.1 | Applicable sheet metal repair scheme is determined in accordance with applicable maintenance documentation, enterprise procedures and qualified person guidance |
| | | 1.2 | All required materials and equipment are selected and organised in accordance with enterprise procedures and maintenance documentation |
| 2. | Perform routine repairs and minor modifications to aircraft non-primary structural sheet metal components | 2.1 | Sheet metal repairs are performed in accordance with approved repair scheme, ensuring that aircraft standard practices are used and standard process requirements are carried out while observing all relevant work health and safety (WHS) requirements, including the use of material safety data sheets (MSDS) and items of personal protective equipment (PPE) |
| | | 2.2 | Work area is cleaned of all waste material or adjustments |
| | | 2.3 | Under guidance of a qualified person, minor adjustments are made, where necessary, for components to operate within prescribed specifications |
| 3. | Complete routine repair and minor modification activities | 3.1 | Required documentation is accurately completed and correctly processed in accordance with enterprise procedures |
| | | 3.2 | Repaired components or assemblies are tagged, sealed and packaged or cradled in accordance with specified procedures, where required |

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.

- Sheet metal repairs include:**
- Removing corrosion by chemical and mechanical methods
 - Restoring protective coatings
 - Freehand precision hole generation
 - Removing and installing fastening devices
 - Routine repairs to non-primary structural sheet metal components

Work environment: Work is undertaken either autonomously or as part of a team and under the guidance of a qualified person.

Routine work is carried out using basic operational knowledge and a defined range of skills ('routine' work is that which follows a customary or regular course of procedure). All work outcomes are achieved by applying known solutions chosen from a limited range of pre-determined options consistent with enterprise procedures. This includes accepting responsibility for own work in terms of quality of outcomes using pre-determined specifications of quality.

Competency application: Competency applies to the routine repair and/or minor modification of aircraft non-primary structural sheet metal components. Note that 'primary structure/structural' refers to all components of an aircraft, the failure of which would seriously endanger safety, for example, wing or tailplane spars, main fuselage frames, engine bearers, portions of skin that are highly stressed. 'Non-primary' refers to any other items. Note also that the scope of any modification and the procedure to be followed will be provided by the qualified person.

Scope: Repairs/modification undertaken are limited to the scope of skills and knowledge included in the unit of competency MEA109 Perform basic hand skills, standard trade practices and fundamentals in aviation maintenance

Procedures and requirements include:

- Industry standard specified by manufacturers, regulatory authorities or the enterprise

Unit Mapping Information

Release 1 – equivalent to MEA406B Repair/modify aircraft non-primary structural sheetmetal components

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=ce216c9c-04d5-4b3b-9bcf-4e81d0950371>