



Australian Government

MEA418 Perform basic repair of aircraft internal fittings during line maintenance

Release: 2

MEA418 Perform basic repair of aircraft internal fittings during line maintenance

Modification History

Release 2. Equivalent to MEA418 Perform basic repair of aircraft internal fittings during line maintenance with amended prerequisite codes.

Application

This unit of competency requires application of hand skills and the use of maintenance publications to repair aircraft internal fittings, such as internal doors that are not part of the pressure hull, overhead storage compartments and doors and cabin furnishing items that are manufactured from either sheet metal or non-metallic materials and are within the privileges of the Aircraft Maintenance Engineer (AME) A Licence.

Applications include fixed and rotary wing aircraft and work may be performed during scheduled or unscheduled maintenance.

This is one of the units required for the granting of the chosen Aircraft Maintenance Engineer A Licence under Civil Aviation Safety Regulation (CASR) Part 66, in accordance with the licensing provisions in the Companion Volume Implementation Guide.

Pre-requisite Unit

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

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Prepare to perform routine repairs and minor modifications to aircraft internal fittings	1.1 Applicable repair scheme is determined in accordance with applicable maintenance publications and enterprise procedures
	1.2 All required materials and equipment are selected and organised in accordance with enterprise procedures and maintenance publications
2. Perform routine repairs to aircraft internal fittings	2.1 Sheet metal repairs and non-metallic material 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
	2.3 Adjustments are made, where necessary, for components to operate within prescribed specifications
3. Complete routine repair activities	3.1 Required documentation is accurately completed and correctly processed in accordance with enterprise procedures

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.

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| Sheet metal repairs include: | <ul style="list-style-type: none">• Removing corrosion by chemical and mechanical methods• Restoring protective coatings to repaired areas• Freehand precision hole generation• Removing and installing fastening devices• Routine repairs to sheet metal internal fittings |
| Non-metallic material repairs include: | <ul style="list-style-type: none">• Repairs to fibreglass, sandwich honeycomb, nylon, Perspex, nomex core materials and matrix resins• Restoring protective coatings to repaired areas• Freehand precision hole generation• Removing and installing fastening devices |
| Procedures and requirements include: | <ul style="list-style-type: none">• Industry standard procedures specified by manufacturers, regulatory authorities or the enterprise |

Unit Mapping Information

Release 2. Equivalent to MEA418 Perform basic repair of aircraft internal fittings during line maintenance

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for MEA418 Perform basic repair of aircraft internal fittings during line maintenance

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Performance Evidence

Evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria under the specified conditions of assessment, and must include:

- applying relevant WHS procedures, including the use of PPE and MSDS
- using enterprise procedures, approved maintenance documentation and aircraft publications relating to aircraft sheet metal and non-metallic internal fittings
- identifying various materials used for internal fittings and their basic properties by interpretation of markings, numbering systems or visual, chemical or mechanical means
- handling and storing aircraft metals used for sheet metal internal fittings, including sealing agents, to industry standards
- identifying aircraft sheet metal assembly fasteners (metal and non-metallic) by interpretation of markings, numbering systems, size, shape and colour
- correctly interpreting applicable repair schemes and hand sketches
- using appropriate hand tools and power tools under supervision to remove and assemble aircraft sheet metal internal fittings
- performing under guidance and in accordance with enterprise procedures a range of routine metal and non-metal repair techniques
- applying corrosion removal/treatment techniques
- restoring sealing and surface finishes to repaired areas.

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 repair and assembly.

Evidence of knowledge about enterprise procedures relating to basic repair techniques and the use of the standard repair manual/practices in a range of different routine repair situations will be necessary to supplement evidence of ability to plan and undertake internal fitting repairs.

Knowledge Evidence

Evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- relevant WHS procedures
- how to obtain relevant MSDS
- the use of applicable items of PPE

- aircraft sheet metal component construction principles and repair techniques at a basic level
- aircraft non-metallic component construction principles and repair techniques at a basic level.

Assessment Conditions

- 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.
- The following conditions of assessment represent the requirements of CASA and must be rigorously observed.
- A person cannot be assessed as competent until it can be demonstrated to the satisfaction of the workplace assessor that the relevant elements and performance criteria of the unit of competency are being achieved under supervision but without intervention on a representative range of tasks involving the following:
 - sheet metal repairs involving:
 - removing corrosion by chemical and mechanical methods
 - restoring protective coatings to repaired areas
 - freehand precision hole generation
 - removing and installing fastening devices
 - routine repairs to sheet metal internal fittings
 - non-metallic material repairs involving:
 - repairs to fibreglass, sandwich honeycomb, nylon, Perspex, nomex core materials, and matrix resins
 - restoring protective coatings to repaired areas
 - freehand precision hole generation
 - removing and installing fastening devices.
- This shall be established via the records in the Log of Industrial Experience and Achievement or, where appropriate, an equivalent Industry Evidence Guide (for details refer to the Companion Volume Assessment Guidelines).
- Assessors must satisfy the requirements of the National Vocational Education and Training Regulator (Australian Skills Quality Authority, or its successors).
- Where the unit is to be used for CASA licensing purposes the Assessor must also meet the criteria specified in the CASR Part 147 Manual of Standards.

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