



Australian Government

**MEA419 Inspect and repair/modify aircraft
cabin/cockpit non-primary structure
components**

Release: 1

MEA419 Inspect and repair/modify aircraft cabin/cockpit non-primary structure 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 inspect for damage and repair aircraft non-primary structure metallic and non-metallic components of fixed and rotary wing aircraft cabins and cockpits during the performance of scheduled or unscheduled maintenance. Work may be performed individually or as part of a team.

This unit is part of the Aeroskills Life Support and Furnishing Certificate III and IV training pathways.

The unit 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. | Inspect for damage to aircraft cabin/cockpit non-primary structure metallic and non-metallic components | 1.1 | Metallic and/or non-metallic components are visually inspected for damage |
| | | 1.2 | Extent of damage is determined and confirmed to be within repair limits |
| 2. | Prepare to perform routine repairs and minor modifications to aircraft cabin/cockpit non-primary structure metallic and non-metallic components | 2.1 | Applicable metallic or non-metallic repair scheme is determined in accordance with applicable maintenance documentation and standard enterprise procedures |
| | | 2.2 | Modification instructions are obtained in accordance with standard enterprise procedures |
| | | 2.3 | All required materials and equipment are selected and organised in accordance with enterprise procedures and maintenance documentation |
| 3. | Perform routine repairs and minor modifications to aircraft cabin/cockpit non-primary structure metallic components | 3.1 | Metallic component repairs and minor modifications are performed in accordance with approved repair scheme or modification instructions, 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) |
| | | 3.2 | Work area is cleaned of all waste material |
| | | 3.3 | Minor adjustments are made, where necessary, for components to operate within prescribed specifications |

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| 4. Perform routine repairs and minor modifications to aircraft cabin/cockpit non-primary structure non-metallic components | 4.1 | Non-metallic component repairs and minor modifications are performed in accordance with approved repair scheme or modification instructions, ensuring that aircraft standard practices are used and standard process requirements are carried out while observing all relevant while observing all relevant WHS requirements, including the use of MSDS and items of PPE |
| | 4.2 | Work area is cleaned of all waste material |
| | 4.3 | Minor adjustments are made, where necessary, for components to operate within prescribed specifications |
| 5. Complete routine repair and minor modification activities | 5.1 | Required documentation is accurately completed and correctly processed in accordance with standard enterprise procedures |
| | 5.2 | 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.

Metallic and non-metallic components include:

- Aircraft crew and passenger seats
- Interior trim panels, including sidewalls, galleys, furnishings and partitions, passenger modules/pods, toilets, roof panels, overhead luggage stowage bins, non-structural floor panels and cargo compartment lining

Types of damage include:

- Corrosion, cracking and impact damage to metallic components
- Delamination, cracking and impact damage to non-metallic components

Metallic component repairs include:

- Removing corrosion by chemical and mechanical methods
- Restoring protective coatings
- Freehand precision hole generation
- Removing and installing fastening devices
- Fitting patches to cabin/cockpit non-primary structure sheet metal components

Non-metallic component repairs include:

- Composite patch, scarf and stepped repairs using fibreglass, sandwich honeycomb, nylon, Perspex, nomex core materials and matrix resins

Primary structure includes:

- All components of an aircraft, the failure of which would seriously endanger safety. In the fuselage this includes frames, longerons and stringers, structural floor panels and all additional parts of the pressure hull, such as skin, windows, doors and bulkheads

Procedures and requirements include:

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

Unit Mapping Information

Release 1 – equivalent to MEA419A Inspect and repair/modify aircraft cabin/cockpit non-primary structure components

Links

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