

Australian Government

Assessment Requirements for MEA419 Inspect and repair/modify aircraft cabin/cockpit non-primary structure components

Release: 1

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Modification History

Release 1 - New unit of competency

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 practices, including the use of MSDS and the selection and use of applicable items of PPE
- using enterprise procedures, approved maintenance documentation and aircraft publications relating to cabin/cockpit non-primary structure metallic and non-metallic components
- identifying aircraft cabin/cockpit non-primary structure components and their basic properties by interpretation of markings, numbering systems or visual, chemical or mechanical means
- handling and storing aircraft metallic and non-metallic components, including sealing agents, to industry standards
- identifying aircraft assembly fasteners by interpretation of markings, numbering systems, size, shape and colour
- visually inspecting metallic and non-metallic components for damage
- correctly interpreting, in accordance with enterprise procedures, applicable repair scheme/modification drawings and hand sketches
- using appropriate hand tools and machines to remove and assemble aircraft cabin/cockpit non-primary structure metallic and non-metallic components
- performing, in accordance with enterprise procedures, a range of routine non-primary structure sheet metal repair techniques, including metal scab patch repairs
- performing, in accordance with enterprise procedures, a range of routine non-primary structure non-metallic repair techniques
- applying corrosion removal/treatment techniques
- restoring sealing and surface finishes.

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

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:

- applicable WHS procedures, including how to obtain MSDS
- selection and use of applicable items of PPE
- construction methods used and assessment of common defects in aircraft crew and passenger seats, and in 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 deterioration and damage

- inspection methods
- identification and interpretation of metallic and non-metallic repair schemes applicable to cabin/cockpit non-primary structural components
- the various forms of corrosion
- the terms associated with composite materials
- requirements for handling and storing aircraft metals and composite materials including sealing agents, to industry standards
- means of identifying aircraft structural assembly fasteners (metal and composite) by interpretation of markings, numbering systems, size, shape and colour.

Assessment Conditions

- Competency should be assessed in the work environment or simulated 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 the Regulators (ADF and CASA) and maintenance stakeholders 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 on a representative range of components, inspecting for damage and performing repair tasks, as follows:
 - metallic component repairs involving:
 - 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 involving:
 - composite patch, scarf and stepped repairs using fibreglass, sandwich honeycomb, nylon, Perspex, nomex core materials and matrix resins.
- 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).

Links

Companion Volume implementation guides are found in VETNet https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=ce216c9c-04d5-4b3b-9bcf-4e81d 0950371