



Australian Government

Assessment Requirements for MEASTR0002 Modify and repair aircraft composite materials structures and components

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Modification History

Release 1. Unit code and title changed. Application changed. Elements and 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 MEA405 Repair/modify aircraft composite material structure/components.

Performance Evidence

There must be evidence the candidate has completed all the tasks outlined in the elements and performance criteria of this unit, and demonstrated the ability to:

- repair or modify aircraft composite material structures or components during scheduled or unscheduled maintenance using materials from each of:
 - prepreg materials hot cure (performed on one of carbon graphite, Kevlar, fibreglass or aluminium)
 - cold cure or wet lay-up (using either fibreglass or carbon graphite)
 - core materials (using one of aluminium, Nomex or foam)
- identify composite component applications in the aircraft structures being maintained
- identify various aircraft composite materials or resins and their basic properties by interpreting markings and other visual cues in the areas being maintained
- perform repairs or modifications of composite component cumulatively using the following methods:
 - external patch repair
 - scarf repair
 - stepped repair
 - wet lay-up repair
 - composite fastener hole repair
 - metal to metal and metal to composite bonding
- for the above repairs and modifications, correctly interpret or produce repair or modification scheme drawings or sketches to inform approach
- for the above repairs and modifications, select and use hand tools and machines to disassemble and assemble aircraft composite components, parts, sections and skin, including extraction and installation equipment, drilling and cutting equipment, and material fasteners.
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Knowledge Evidence

There must be evidence the candidate has knowledge of:

- how to obtain relevant material safety data sheets (MSDSs)
- the use of applicable items of personal protective equipment (PPE)
- work health and safety (WHS) procedures for repairing or modifying aircraft composite material structures or components
- maintenance documentation for repairing or modifying aircraft composite material structures or components
- aircraft construction principles
- composite terminology
- composite component construction methods, including structural assembly fastener identification.
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Assessment Conditions

The following conditions of assessment represent the requirements of the regulators Defence Aviation Safety Authority (DASA) and Civil Aviation Safety Authority (CASA) and maintenance stakeholders and must be rigorously observed.

Skills must have been demonstrated under routine supervision in the workplace or in a simulated environment that reflects workplace conditions and contingencies encountered in repairing or modifying aircraft composite material structures or components. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - required workplace procedures, manufacturing specifications, codes, standards, manuals, and reference materials relevant to repairing or modifying aircraft composite material structures or components
 - general-purpose tools and test equipment found in most routine situations.

Evidence of tasks demonstrating competency must be recorded in a log of industrial experience and achievement.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

Links

Companion Volume implementation guides are found in VETNet –

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