



Australian Government

MEA367 Repair/modify aircraft composite structure using cold bonding

Release: 1

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Modification History

Release 1 - New unit of competency

Application

This unit of competency requires application of hand skills and the use of maintenance publications, applicable materials, tools and methods to repair aircraft composite material structure and components using cold cure repair techniques either on-aircraft or in the workshop during scheduled or unscheduled maintenance.

The unit is part of the Aeroskills Structures Maintenance Certificate IV training pathway, and of the Mechanical Certificate IV (Aircraft Maintenance Stream) 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

MEA401 Inspect aircraft structures

OR

MEA339 Inspect, repair and maintain aircraft structures

OR

MEA369 Inspect and maintain structures and related components of non-pressurised small aircraft

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. Plan repair/modification
 - 1.1 Extent of damage is correctly assessed to assist in determining repair procedure
 - 1.2 Structure is supported and prepared in accordance with the applicable maintenance manual to ensure personnel safety and freedom from damage
 - 1.3 Appropriate modification or repair scheme is identified in accordance with structural repair manual and/or approved data
 - 1.4 Specialist advice is obtained in establishing an approved repair scheme where a standard repair scheme cannot be identified or damage criteria are out of limits
 - 1.5 All materials and equipment required are organised
2. Repair/modify components using cold cure
 - 2.1 Lay-up of materials is checked to confirm that components meet required specifications and bagging equipment is correctly installed and operated
 - 2.2 Curing cycle is regularly monitored to ensure required specifications are met
 - 2.3 Components are checked for blemishes or delamination in accordance with quality procedures
 - 2.4 Component assemblies requiring further or special treatment are made ready for the appropriate processes
 - 2.5 Required maintenance documentation is completed and processed in accordance with standard enterprise procedures
 - 2.6 Completed assemblies are tagged, sealed or packaged as 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.

- Applicable materials and methods include:**
- Cold cure or wet lay-up (using either fibreglass or carbon graphite)
 - Core materials (using one of aluminium, nomex or foam)
- Procedures and requirements include:**
- Industry standard procedures specified by manufacturers, regulatory authorities or the enterprise

Unit Mapping Information

Release 1 – equivalent to MEA367A Repair/modify aircraft composite structure using cold bonding

Links

Companion Volume implementation guides are found in VETNet -

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