



**Australian Government**

**Assessment Requirements for MEA509  
Manufacture, repair and alter aircraft  
related fabric components**

**Release: 2**

# Assessment Requirements for MEA509 Manufacture, repair and alter aircraft related fabric components

## Modification History

Release 2. Equivalent to MEA509 Manufacture, repair and alter aircraft related fabric components with amended prerequisite codes.

## 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 WHS practices relating to fabric component manufacture, repair and alteration, including the selection and correct use of PPE, where applicable
- handling, storing and organising transport of equipment
- using MSDS
- using maintenance publications, drawings and documentation relating to fabric component manufacture, repair and alterations
- applying basic sewing techniques associated with the manufacture, repair and alteration of aircraft fabric components
- using hand sewing techniques
- using basic drawing tools
- calculating dimension and allowable dimension variations
- completing measurements and estimating fabric requirements and other material requirements
- using pre-checking and inspection techniques to anticipate cutting problems and to avoid reworking and wastage
- using relevant hand and power tools
- using the limited workplace technology related to cutting, including tools, equipment, calculators and measuring devices
- cleaning and maintenance of equipment and tools.

The underlying skills inherent in this unit should be transferable across a range of aircraft life support equipment maintenance activities. It is essential that fabric component manufacture, repair and alteration procedures and safety precautions are fully observed, understood and complied with. Ability to interpret fabric component requirements and apply them in practice is critical.

This is to be demonstrated through demonstration of the ability to perform appropriate manufacturing, repair and alteration tasks that are within the bounds of the individual's authority.

## 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 regulations, standards, enterprise procedures and maintenance publications
- WHS procedures relating to fabric component manufacture, repair and alteration, including the selection and use of PPE
- how to obtain MSDS
- basic sewing techniques using *AS 2860-1986 Textiles – stitch types – classification and terminology*
- construction principles of fabric components
- cutting equipment and techniques
- design features of finished items
- fabric types, common faults and inspection procedures
- impact of cutting on fabrics
- geometric drawing processes and techniques
- reading and interpreting specifications
- types of corrosion and contamination that may affect aircraft fabric components.

## Assessment Conditions

- Competency should be assessed in the workplace or simulated workplace using materials, tools and equipment specified in the maintenance manuals and applicable procedures. It is also expected that general and special-purpose tools and ground support equipment would be used where appropriate.
- The work plan should take account of applicable safety and quality requirements in accordance with the industry and regulatory standards.
- 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 under routine supervision on the following tasks:
  - recognising the limits of own authority
  - correctly manufacture three fabric components from technical instructions using machine sewing and at least one other assembly method (hand sew, press fit, adhere or staple)
  - recognising at least three faults and identifying limits of repair for the fabric components
  - altering a fabric component to meet customer requirements.
- 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-4e81d0950371>