



Australian Government

**Assessment Requirements for MEA357
Inspect, test and repair aircraft fabric
surfaces**

Release: 2

Assessment Requirements for MEA357 Inspect, test and repair aircraft fabric surfaces

Modification History

Release 2. Equivalent to MEA357 Inspect, test and repair aircraft fabric surfaces 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 relevant WHS procedures, including the selection and use of PPE and MSDS
- using approved maintenance documentation and aircraft publications relating to aircraft fabric surfaces
- testing the soundness of fabric surfaces
- recognising and assessing fabric surface damage and deterioration
- recognising defective doping
- identifying and applying applicable repair and surface rejuvenation schemes.

The underlying skills inherent in this unit should be transferable across a range of inspection and testing applications associated with maintenance of aircraft fabric surfaces. It is essential that the procedures take into account all aircraft and personal safety precautions, especially with regard to the use of finishing scheme materials.

This shall be demonstrated through application across a range of aircraft fabric surfaces. Ability to interpret inspection, testing and repair procedures and specifications (allowable limits) and apply them in practice is critical.

The application of the procedures should also clearly indicate knowledge of structural flight loads.

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:

- WHS hazards associated with fabric covering processes and how to obtain relevant MSDS and use PPE
- regulatory requirements relating to the repair of fabric surfaces
- industry publications relating to the repair of fabric surfaces
- aircraft fabric surface covering and finishing materials and principles
- fabric-covered component attachment methods
- types of fabric and related characteristics
- types of tape, cord and thread and their relative advantages and disadvantages

- cements and finishing scheme materials, their characteristics, uses, storage requirements and related safety precautions
- inspection and testing requirements for existing fabric coverings and new fabric prior to use
- the criteria for fabric rejuvenation, repairs and repair methods, including the need for re-balancing of flight control surfaces after fabric rejuvenation or repair
- the application of flight loads to fabric-covered surfaces, and related failure mechanisms.

Assessment Conditions

- Competency should be assessed in the work environment or simulated work environment using tools and equipment specified in maintenance documentation. It is also expected that applicable general-purpose tools and test 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 under routine supervision on all of the following:
 - inspection/testing for:
 - blockage of drainage and water and dirt collection points
 - deterioration of finishing scheme
 - deterioration of fabric tensile strength
 - damage to inspection panels and zips
 - repair of fabric surface:
 - by surface rejuvenation
 - by stitching
 - by unsewed doped-on repair
 - correct application of finishing scheme
 - recognition of requirement to re-balance fabric-covered control surfaces after rejuvenation or repair of fabric covering.
- 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).
- Where the unit is to be used for CASA licensing purposes the Assessor must also meet the criteria specified in the CASR Part 147 Manual of Standards.

Links

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