



**Australian Government**

**Assessment Requirements for MEA381  
Repair and/or overhaul aircraft pneumatic  
system components**

**Release: 2**

# Assessment Requirements for MEA381 Repair and/or overhaul aircraft pneumatic system components

## Modification History

Release 2. Equivalent to MEA381 Repair and/or overhaul aircraft pneumatic system 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 relevant WHS procedures
- using MSDS and relevant items of PPE
- using relevant maintenance documentation and aircraft/component manuals relating to pneumatic, pressurisation and air cycle air conditioning system components to:
  - recognise state of serviceability and overhaul or repair requirements
  - test and accurately and efficiently troubleshoot unserviceabilities and document the causes
  - dismantle and inspect component parts for serviceability and identify repair requirements as applicable
  - repair/replace/modify component parts
  - assemble, test for correct operation and adjust components.

The underlying skills inherent in this unit should be transferable across a range of repair and/or overhaul applications associated with aircraft components. It is essential that the maintenance procedures are interpreted and applied to ensure quality and safety standards are achieved.

This shall be demonstrated through application across a number of different aircraft components. Ability to assess component serviceability and interpret parts requirements will be necessary to supplement the required evidence. Capability to interpret inspection procedures and specifications (allowable limits) and apply them in practice is critical.

## 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:

- how to obtain relevant MSDS
- identification and use of items of PPE
- WHS procedures
- fault diagnosis techniques
- system and component operation
- repair and overhaul procedures and processes

- the use of pneumatic test rigs.

## 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 application of testing procedures should clearly indicate knowledge of system operation. Knowledge of system operation and the relationship of individual components will be necessary to supplement evidence of ability to troubleshoot component faults before undertaking any action. 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 at least one (1) component from each of the following groups:
  - valves, pumps, motors, expansion turbines, actuators, regulators, temperature sensors, mechanical pressurisation controllers, temperature controllers and thrust reversers
  - heat exchangers and pressure vessels
  - rigid and flexible pipelines, hoses, fittings and ducting.
- This must include demonstration of the following repair processes:
  - finishing or re-finishing of metal surfaces through processes, such as polishing and lapping
  - removal of corrosion within maintenance manual limits
  - replacement of seals and backing rings
  - replacement of bearings
  - application of surface treatments, such as alodining
  - restoration of paint finishes.
- 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>