



Australian Government

Assessment Requirements for MEA287 Repair or overhaul aircraft oxygen system components

Release: 2

Assessment Requirements for MEA287 Repair or overhaul aircraft oxygen system components

Modification History

Release 2. Equivalent to MEA287 Repair or overhaul aircraft oxygen 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 practices
- using approved repair/overhaul procedures and processes relating to oxygen components
- recognising the serviceability state and repair or overhaul requirements for oxygen pressure cylinders, valves, gauges, chemical generators, regulators, masks, pipes, hoses and fittings, and liquid dry breathing oxygen (LDBO) converters
- applying logic processes, and using test equipment and appropriate wiring diagrams and manuals to isolate component faults
- performing component testing to isolate/confirm component fault and assess post-repair/overhaul serviceability
- correctly disassembling, inspecting component parts, repairing/replacing/modifying component parts and assembling oxygen components
- applying product hygiene procedures.

The underlying skills inherent in this unit should be transferable across a range of repair or overhaul applications associated with oxygen system components. It is essential that the maintenance procedures are interpreted and applied to ensure quality and safety standards are fully observed, understood and complied with. Capability to interpret inspection procedures and specifications (allowable limits) and apply them in practice is critical.

Evidence of transferability of skills and knowledge related to repair is essential. This may be demonstrated through application across a representative range of oxygen components as listed in the Assessment Conditions.

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:

- component and system operation
- the basic function and operation of oxygen components to enable testing for fault isolation/confirmation, to determine repair or overhaul requirements, and serviceability status post-repair or overhaul
- basic principles/functions relating to oxygen components and associated with:

- pressure sensitive devices (bellows and controllers)
- vacuum system generation
- atmosphere and its properties.

Assessment Conditions

- Competency should be assessed in the work environment, or simulated work environment, using tools and equipment specified in maintenance manuals. It is also expected that applicable general and special-purpose tools and test equipment would be used where appropriate.
- Ability to assess component serviceability and interpret parts requirements will be necessary to supplement the required evidence. The application of testing procedures should also clearly indicate knowledge of system operation before undertaking any action. Knowledge of system operation and the relationship of individual components will be necessary to supplement evidence of ability to troubleshoot component faults. 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 across the following groups:
 - pressure vessels (testing and charging)
 - regulators, control valves and indicators
 - chemical oxygen generators
 - product hygiene.
- 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>