



Australian Government

Assessment Requirements for MEA389 Repair and/or overhaul propellers

Release: 2

Assessment Requirements for MEA389 Repair and/or overhaul propellers

Modification History

Release 2. Equivalent to MEA389 Repair and/or overhaul propellers 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 procedures, including the use of MSDS and PPE
- using relevant maintenance documentation, specifications and aircraft/component manuals to:
 - recognise state of serviceability and overhaul or repair requirements for propellers and propeller components as listed in the Range of Conditions
 - test and accurately and efficiently troubleshoot unserviceabilities and document the causes with regard to propeller components
 - dismantle and inspect propeller component parts for serviceability and identify repair requirements as applicable
 - repair/replace/modify propeller component parts
 - assemble, balance, test for correct operation and adjust propeller components and propellers
- correctly tagging, sealing and packaging completed 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 propeller 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
- the use of applicable items of PPE
- WHS procedures
- fault diagnosis techniques

- system and component operation
- repair and overhaul procedures and processes.

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 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 propeller, engine and constant speed unit operation, individually and as a system, 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) item from each of the following groups:
 - fixed pitch, constant speed, feathering and reversing propellers and spinners
 - anti-ice/de-ice equipment
 - propeller blades – metal
 - hardware.
- This must include demonstration of the following repair processes:
 - finishing or re-finishing of metal surfaces through processes, such as polishing, lapping and blending of damage within maintenance manual limits
 - removal of corrosion within maintenance manual limits
 - replacement of gaskets, 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>

