Australian Government

Assessment Requirements for MEA397 Test aircraft piston engines after repair or overhaul

Release: 1

Assessment Requirements for MEA397 Test aircraft piston engines after repair or overhaul

Modification History

Release 1 - New unit of competency

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 include:

- applying relevant WHS procedures, including the use of MSDS and items of PPE
- using relevant maintenance manuals and standard enterprise procedures to:
  - prepare engines for test running
  - install engines in test rigs or test cells
  - selecting and installing the correct propeller or test club
  - test run and adjust engine parameters, where applicable
  - troubleshoot faults identified during the test run
  - record engine operating parameters
  - remove engines from the test rig or test cell
  - complete documentation
- configuring and inhibiting serviceable engines for transport or storage.

It is essential that the maintenance procedures (including the use of correct fuels and lubricants) are interpreted and applied to ensure quality and safety standards are achieved.

Evidence of transferability of skills and knowledge related to engine test running is essential. This shall be demonstrated through application across a number of engine test runs. Capability to interpret test procedures and specifications (allowable limits) and apply them in practice is critical. The application of testing procedures should also clearly indicate knowledge of system operation.

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
- test rig or test cell operation

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- engine test requirements
- engine operating parameters and adjustment methods.

Assessment Conditions

- Competency should be assessed in the work environment or simulated work environment in an applicable engine test rig or test cell. It is also expected that general-purpose tools and test equipment found in most routine situations would be used where appropriate.
- Knowledge of system operation and the relationship of individual components will be necessary to supplement evidence of ability to troubleshoot engine 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 a representative range of engine test runs.
- 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

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