



Australian Government

MEAMEC0040 Maintain airframe systems of basic light fixed wing aircraft

Release: 1

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Modification History

Release 1. Application changed. Elements and Performance Criteria changed. Foundation Skills made explicit. Range of Conditions removed, and relevant information moved to Assessment Requirements. Assessment Requirements clarified. Supersedes and is equivalent to MEA351 Maintain airframe systems of basic light fixed wing aircraft.

Application

This unit describes the skills and knowledge required to apply hand skills and use system/component knowledge and applicable maintenance publications and test equipment to inspect, test and troubleshoot, and replace components of airframe systems of fixed wing aircraft that have fixed undercarriage and a normally aspirated engine driving a fixed pitch propeller, or a small gas turbine engine. This may be done during the performance of scheduled or unscheduled maintenance. Maintenance may be performed individually or as part of a team.

The unit is used in workplaces that operate under the airworthiness regulatory systems of the Civil Aviation Safety Authority (CASA) and the Defence Aviation Safety Authority (DASA).

Any other relevant legislation, industry standards and codes of practice within Australia must be applied.

Pre-requisite Unit

MEA107 Interpret and use aviation maintenance industry manuals and specifications

MEA154 Apply work health and safety practices in aviation maintenance

MEA155 Plan and organise aviation maintenance work activities

MEA156 Apply quality standards during aviation maintenance activities

MEA157 Complete aviation maintenance industry documentation

MEA158 Perform basic hand skills, standard trade practices and fundamentals in aviation maintenance

Competency Field

Aviation maintenance

Elements and Performance Criteria

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Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.

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1. Inspect basic light fixed wing airframe systems	1.1 Identify specific inspection requirements using relevant maintenance documentation and modification status, including system defect reports, when required 1.2 Check isolation tags and configure aircraft for safe system inspection and operation in accordance with maintenance manual 1.3 Visually or physically check airframe system components for external signs of defects in accordance with applicable maintenance manual while observing all relevant work health and safety (WHS) requirements, including the use of material safety data sheets (MSDSs) and items of personal protective equipment (PPE) 1.4 Identify and report defects in accordance with standard enterprise procedures
2. Test/adjust basic light fixed wing airframe systems and components	2.1 Prepare aircraft and system in accordance with applicable maintenance manual for the application of power or system operation 2.2 Functionally test airframe system in accordance with maintenance manual for evidence of serviceability or malfunction 2.3 Perform system adjustment or rigging in accordance with maintenance manual
3. Troubleshoot basic light fixed wing airframe systems	3.1 Use available information from maintenance documentation, inspection and test results, when required, to assist in fault determination 3.2 Use maintenance manual fault-diagnosis guides and logic processes to ensure efficient and accurate troubleshooting to line replacement level 3.3 Obtain required specialist advice to assist with the troubleshooting process 3.4 Locate airframe system faults and clearly identify and record the causes of the faults in maintenance documentation, when required, in accordance with standard enterprise procedures 3.5 Determine rectification requirements
4. Remove and install basic light fixed wing airframe system components	4.1 Render system safe in accordance with the applicable maintenance manual and fit isolation tags, when required, to ensure personnel safety 4.2 Carry out airframe system component removal in accordance with the applicable maintenance manual while observing all relevant WHS requirements, including the use of MSDSs and items of PPE 4.3 Complete and process required maintenance documentation 4.4 Tag, seal and pack removed components in accordance with

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	specified procedures 4.5 Check components to be installed to confirm correct part numbers, serviceability and modification status 4.6 Check mass balance of control surfaces to be installed in accordance with the applicable maintenance manual, when required 4.7 Carry out installation in accordance with the applicable maintenance manual 4.8 Complete required maintenance documentation and process in accordance with standard enterprise procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

- Reading skills to interpret maintenance documentation, procedures and manufacturer's instructions.
- Writing skills to complete maintenance documentation.
- Numeracy skills to interpret and communicate data and technical information.

Other foundation skills essential to performance are explicit in the performance criteria of this unit.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEA351 Maintain airframe systems of basic light fixed wing aircraft.

Links

Companion Volume implementation guides are found in VETNet – -

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=ce216c9c-04d5-4b3b-9bcf-4e81d0950371>