



Australian Government

**MEA109 Perform basic hand skills,
standard trade practices and fundamentals
in aviation maintenance**

Release: 1

MEA109 Perform basic hand skills, standard trade practices and fundamentals in aviation maintenance

Modification History

Release 1 - New unit of competency

Application

This unit of competency is applicable to all Aeroskills maintenance training pathways. It requires application of basic hand skills and standard trade practices in the maintenance of aircraft and aircraft components.

The competency applies to the selection and use of hand and power tools and equipment associated with scheduled and unscheduled on-aircraft or workshop-related activities in the aircraft maintenance environment that involve:

- laying out and fabricating simple items from common aircraft materials
- assembling items using a representative range of common types of aircraft attachment hardware for which relevant fits and clearances, appropriate safety locking devices and fasteners, including lockwire, are correctly selected and applied
- assembling/connecting a range of common aircraft connectors and plumbing, applying safety locking devices, where applicable
- assembling/connecting aircraft control cables and applying safety locking devices, where applicable
- the use of lubrication equipment and lubricants.

Work may be performed individually or as part of a team and in accordance with industry standard procedures specified by manufacturers, regulatory authorities or the enterprise.

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

Where a CASA licensing outcome is sought this unit forms part of the CASA requirement for the granting of the chosen maintenance certification licence under Civil Aviation Safety Regulation (CASR) Part 66, in accordance with the licensing provisions in the Companion Volume Implementation Guide.

Pre-requisite Unit

- MEA105 Apply quality standards applicable to aviation maintenance processes
- MEA108 Complete aviation maintenance industry documentation

Competency Field

Aviation maintenance

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes.

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

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|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Assess task requirements | 1.1 Available information from relevant documentation and/or other sources, including communication with other personnel, is interpreted and assessed to determine the task and tooling requirements |
| 2. Select tools and/or equipment | 2.1 Hand and/or power tools or equipment, including lubrication equipment and lubricants, are selected for appropriate application to the required task
2.2 All tools and/or equipment to be used are checked for condition or calibration, where necessary
2.3 Unsafe or faulty tools or equipment are identified and marked for repair according to enterprise procedures |
| 3. Use tools and/or equipment | 3.1 Tools and/or equipment are used according to standard practices to ensure the correct outcome is produced
3.2 Tools and/or equipment use is carried out without damage to components or tooling in a safe and efficient manner
3.3 Operational maintenance of tools or equipment is undertaken according to standard workshop procedures |

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| 4. | Store tools and/ or equipment | 4.1 | Tools and/or equipment are stored safely and securely in accordance with enterprise procedures |
| 5. | Apply standard trade practices | 5.1 | Simple items are manufactured using basic engineering hand skills |
| | | 5.2 | Common types of aircraft attachment hardware are correctly selected and used |
| | | 5.3 | Common types of safety locking devices and fasteners are correctly selected and used |
| | | 5.4 | Aircraft components, devices and hardware are lockwired in the correct manner, using the appropriate wire gauge |
| | | 5.5 | Common types of aircraft connectors and plumbing are accurately assembled or connected |

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

The use of tools and equipment includes:

- The related manipulative skills required to perform aircraft maintenance in areas where access is extremely limited

Unit Mapping Information

Release 1 – equivalent to MEA109B Perform basic hand skills, standard trade practices and fundamentals in aviation maintenance

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=ce216c9c-04d5-4b3b-9bcf-4e81d0950371>