



Australian Government

**MEA325 Weigh aircraft and perform
aircraft weight and balance calculations as
a result of modifications**

Release: 1

MEA325 Weigh aircraft and perform aircraft weight and balance calculations as a result of modifications

Modification History

Release 1 - New unit of competency

Application

This unit of competency requires application of knowledge regarding aircraft weighing and the use of relevant maintenance publications and modification data (where applicable) to weigh a fixed and rotary wing aircraft and use the results to calculate centre of gravity and confirm that it is within limits. Weighing may be performed during scheduled or unscheduled maintenance and involve individual activities and the supervision of other personnel.

The unit covers competencies required to progress from an Aircraft Maintenance Engineer (AME) at Certificate IV to the granting of a chosen maintenance certification licence under Civil Aviation Safety Regulation (CASR) Part 66, in accordance with the licensing provisions in the Companion Volume Implementation Guide and the Companion Volume CASA Interface.

The skills and knowledge covered by the units of competency listed in the MEA Aeroskills Training Package for Aircraft Maintenance Engineer (Avionics or Mechanical as applicable) at Certificate IV are prerequisite to the attainment of the elements of competency specified in this unit. This includes full coverage of the CASR Part 66 Syllabus subjects/topics listed in the Companion Volume CASA Interface.

Pre-requisite Unit

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. Weigh aircraft | 1.1 The requirement for aircraft weighing is determined |
| | 1.1 Aircraft is weighed in accordance with the specified procedure while observing all relevant work health and safety (WHS) requirements |

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|--|-----|--|
| | 1.3 | Aircraft weighing results are provided to the Continuing Airworthiness Management Organisation (CAMO) |
| 2. Calculate the weight and balance impact of a modification | 2.1 | The new empty weight of the aircraft is determined and it is ensured that the weight is within the predetermined limits set by the CAMO |
| | 2.2 | The new empty weight centre of gravity of the aircraft is calculated and it is ensured that the centre of gravity is within the predetermined limits set by the CAMO |
| | 2.3 | Maintenance records are updated with new figures |

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.

Centre of gravity of the aircraft is calculated:

- Using the results obtained by weighing an aircraft
- Using the weight and moment arm data for a modification

Procedures and requirements include:

- Industry standard procedures specified by manufacturers, regulatory authorities or the enterprise

Unit Mapping Information

Release 1 – equivalent to MEA325B Weigh aircraft and perform aircraft weight and balance calculations as a result of modifications

Links

Companion Volume implementation guides are found in VETNet -

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