



Australian Government

**MEA241 Perform aircraft weight and
balance calculations as a result of
modifications**

Release: 1

MEA241 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 mathematical formulae to calculate the weight and balance effect of components installed in fixed and rotary wing aircraft during modification incorporation and may involve individual activities or supervision of other personnel.

The unit covers competencies required to progress from an Aircraft Maintenance Engineer at Certificate IV to the granting of a B2 Aircraft Maintenance Engineer Licence in the Avionics category 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.

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.

- | | | |
|--|-----|--|
| 1. Calculate the weight and balance impact of a modification | 1.1 | The requirement for aircraft weighing is determined |
| | 1.2 | The new empty weight of the aircraft is determined and it is ensured that the weight is within the predetermined limits set by the Continuing Airworthiness Management Organisation (CAMO) |
| | 1.3 | The new empty weight centre of gravity of the aircraft |

is calculated using the weight and moment arm data for a modification and it is ensured that the centre of gravity is within the predetermined limits set by the CAMO

- 1.4 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.

Procedures and requirements include:

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

Unit Mapping Information

Release 1 – equivalent to MEA241C 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>