



Australian Government

MEACOM0015 Provide technical advice in the maintenance and management of aircraft and aeronautical product

Release: 1

MEACOM0015 Provide technical advice in the maintenance and management of aircraft and aeronautical product

Modification History

Release 1. Application changed. Elements and Performance Criteria changed. Foundation Skills made explicit. Assessment Requirements clarified. Supersedes and is equivalent to MEA127 Provide technical advice in the maintenance and management of aircraft and aeronautical product.

Application

This unit describes the skills and knowledge required to provide technical advice on the need for modifications, repairs, and scheduled or unscheduled maintenance on aircraft, aircraft systems, and items of aeronautical product.

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

MEAENG0003 Select and test engineering materials

Competency Field

Aviation maintenance management

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Develop an aircraft maintenance program and minimum equipment list	1.1 Determine requirements for an aircraft maintenance program from regulations, and organisational policies and procedures 1.2 Identify or draft applicable maintenance program according to regulatory guidelines 1.3 Submit proposed maintenance program for approval 1.4 Determine requirement for minimum equipment list from regulations, and organisational policies and procedures 1.5 Compile and submit minimum equipment list for approval according to regulations, and organisational policies and

Elements	Performance Criteria
	procedures
2. Develop a continuing airworthiness management organisation exposition	2.1 Determine need for continuing airworthiness management organisation exposition from regulations 2.2 Draft and submit continuing airworthiness management organisation exposition for approval according to organisational policies and procedures
3. Develop a maintenance organisation exposition	3.1 Determine requirement for maintenance organisation exposition from regulations 3.2 Draft maintenance organisation exposition according to regulatory guidelines, and organisational policies and procedures
4. Provide mechanical advice in aircraft maintenance	4.1 Provide independent technical input with regard to aircraft structure and mechanical systems and components 4.2 Use own knowledge of aircraft structures and seek specialist input to determine their airworthiness 4.3 Use own knowledge of aircraft mechanical systems and components and seek specialist input to determine their airworthiness
5. Provide avionic advice in aircraft maintenance	5.1 Provide independent technical input with regard to avionic systems and components 5.2 Use own knowledge of avionic systems and components and seek specialist input to determine their airworthiness
6. Evaluate and review aircraft maintenance and management system elements	6.1 Monitor aircraft operation and maintenance trends 6.2 Review maintenance management system elements against trends and propose amendments according to regulatory requirements, and organisational policies and 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.
- Writing skills to create a continuing airworthiness management organisation exposition.
- Numeracy skills to interpret and communicate 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 MEA127 Provide technical advice in the maintenance and management of aircraft and aeronautical product.

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for MEACOM0015 Provide technical advice in the maintenance and management of aircraft and aeronautical product

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Performance Evidence

There must be evidence the candidate has completed all the tasks outlined in the elements and performance criteria of this unit, and demonstrated the ability to:

- provide technical advice during the set-up of a maintenance control and management system for one aircraft and one aeronautical product according to required regulations, policies and procedures.

Technical advice must be provided to maintenance personnel, senior maintenance managers, or higher technical/regulatory authorities and must relate to at least one of the following:

- defect investigation and compilation of service difficulty report
- modification proposal
- repair scheme proposal
- proposed amendments to servicing schedule and maintenance data and program.

The set-up of each of the above systems must include:

- an aircraft maintenance program
- a minimum equipment list
- a continuing airworthiness management organisation exposition
- an aviation maintenance organisation exposition.

In the course of the above work, the candidate must:

- use own knowledge, trend data and specialist advice effectively to determine airworthiness and propose variations to maintenance schedules, repairs and modifications
- produce spoken and written communication in English to the required level.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- regulatory and organisational policies and procedures relating to aircraft and aeronautical product maintenance and maintenance control, including:
 - Civil Aviation Regulations (CARs) and Advisory Circulars (ACs)
 - Civil Aviation Safety Regulations (CASRs), Manuals of Standards and associated Acceptable Means of Compliance and Guidance Material
 - aviation maintenance organisation expositions
 - continuing airworthiness management organisation expositions
 - policy manuals
 - procedures manuals
 - quality manuals
- organisational policies and procedures relating to aircraft and aeronautical product maintenance and maintenance control, including:
 - work health and safety (WHS)
 - equity, fraud and ethics requirements set out in organisational code of conduct specific to the work described in the performance evidence
- key features of aircraft structure being maintained and managed, including:
 - primary and secondary structural components
 - seating and cargo restraints
- key features of aircraft mechanical systems and components being maintained and managed, including:
 - engines and engine systems and components
 - propellers and propeller system components
 - landing gear systems and components
 - hydro-mechanical systems comprising hydraulic, pneumatic, fuel and components
 - mechanical systems and components
 - electrical systems and components
 - oxygen
 - furnishings and safety equipment
- key features of aircraft power plants
- key features of avionic systems and components being maintained and managed
- key features of aircraft operation and maintenance trend data obtained from:
 - aircraft flight and technical records
 - service difficulty reports
 - maintenance worksheets
 - logbooks
 - continuing analysis maintenance program reports
 - data from manufacturers and other operators
- key features and characteristics of avionic systems and components, including:
 - electrical power generation and distribution
 - electrical systems
 - control and warning systems

- flight instruments
- aircraft data communication
- automatic flight and engine control systems
- communication systems
- navigation systems
- radar
- role equipment, such as forward looking infra-red (FLIR) pods.

Assessment Conditions

The following conditions of assessment represent the requirements of the regulators (DASA and CASA) and maintenance stakeholders and must be rigorously observed.

Skills must have been demonstrated under routine supervision in the workplace or in a simulated environment that reflects workplace conditions and contingencies encountered in providing technical advice in the maintenance and management of aircraft and aeronautical product, or a combination of both on- and off-the-job assessment. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - workplace procedures, manufacturing specifications, codes, standards, manuals, and reference materials relevant to providing technical advice in the maintenance and management of aircraft and aeronautical product
 - tools, equipment, and materials required to demonstrate the performance evidence above
 - specialist input from suitable personnel as required, including from:
 - professional engineers
 - non-destructive testing (NDT) technicians
 - licensed aircraft maintenance engineers (LAMEs) with applicable ratings
 - personnel with Civil Aviation Safety Regulation (CASR) Part 145 or Part 42F certifying authorities.

Evidence of tasks demonstrating competency must be recorded in a log of industrial experience and achievement.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

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