



Australian Government

MEA156 Apply quality standards during aviation maintenance activities

Release: 1

MEA156 Apply quality standards during aviation maintenance activities

Modification History

Release 1. Equivalent to MEA105 Apply quality standards applicable to aviation maintenance processes. Code changes due to changed titles.

Application

This unit of competency describes the skills and knowledge required to apply quality standards when, under routine supervision, performing scheduled and unscheduled aviation maintenance activities. Work may be performed individually or as part of a team.

The unit applies to maintenance tasks in a range of workplaces, including flight lines, aprons, hangars, and workshops. It is used in workplaces that operate under the airworthiness regulatory systems of the Australian Defence Force (ADF) and the Civil Aviation Safety Authority (CASA).

This unit forms part of the CASA requirement for maintenance certification licences under Civil Aviation Safety Regulation (CASR) Part 66. Where a CASA licensing outcome is sought, users must refer to the licensing provisions in the MEA Aeroskills Companion Volume Implementation Guide.

Pre-requisite Unit

MEA107	Interpret and use aviation maintenance industry manuals and specifications
MEA154	Apply work health and safety practices in aviation maintenance

Competency Field

Aviation maintenance

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. Analyse aviation	1.1 Identify and analyse aviation quality standards and specifications set out in maintenance documents and process

ELEMENTS	PERFORMANCE CRITERIA
quality standards	specifications
	1.2 Identify and confirm organisational quality requirements
2. Apply aviation quality standards	2.1 Apply standards required for individual and team-related activities
	2.2 Detect and report defects in the quality system and workplace hazards according to standard procedures
	2.3 Complete and process documentation accurately and clearly to enable information to be easily read or interpreted
3. Identify aviation quality improvement	3.1 Use performance monitoring measures to review product and service-related activities
	3.2 Identify opportunities for maintaining and improving product and service quality standards

Foundation Skills

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

Unit Mapping Information

Release 1. Equivalent to MEA105 Apply quality standards applicable to aviation maintenance processes.

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 MEA156 Apply quality standards during aviation maintenance activities

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Performance Evidence

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

- under routine supervision, apply quality standards when performing aviation maintenance work; the work must occur during one scheduled or one unscheduled maintenance activity, and must involve more than one person and single and multiple tasks.

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

- identify processes, workplace regulations, and ISO 9000 compliant documentation and specifications relating to quality standards in the workplace environment
- analyse and apply quality-related information from a range of industry manuals, in particular, amendment status block information, amendment procedures, specification and modification leaflet applicability, and changes to drawings
- differentiate the elements that constitute the quality system
- integrate quality standards with service-specific procedures
- identify and report workplace hazards according to required procedures
- identify aircraft hardware, materials, and components by marking, part number, size and shape
- identify actual and potential defects in the quality system, together with ongoing abnormalities of equipment or systems that may affect their quality
- identify potential areas for inspection process improvement as a quality system activity
- integrate quality processes in conjunction with other personnel in the workplace and workplace-specific procedures.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- typical quality systems applied in aviation maintenance contexts, and their operational features in the workplace
- key components of aviation maintenance quality documentation, including standards and specifications set out in:
 - industry-specific quality manuals
 - workplace regulations and procedures manuals

- ISO 9000 compliant documentation and specifications
- product and process specifications
- work instructions and worksheets
- regulatory and organisational-specific quality requirements and procedures, including procedures for:
 - identifying and reporting workplace hazards
 - detecting defects in a quality system
 - reporting maintenance-related incidents and errors
 - reducing maintenance related errors from simultaneous maintenance
 - procedures for deriving and developing quality inspection programs
 - identifying inspection process improvements
- performance monitoring measures relating to product and service standards
- relationship between the quality system and work health and safety (WHS) requirements, such as workplace hazard reporting
- relationship between the quality system and identification systems for aircraft hardware, materials, and components
- role of inspection in maintaining aircraft continuing airworthiness and reliability, including ageing aircraft inspection requirements
- key requirements relating to individual and organisational responsibility associated with 'on condition' maintenance
- inspection terminology and standards of inspection with regard to the quality system.

Assessment Conditions

The following conditions of assessment represent the requirements of the regulators (Australian Defence Force [ADF] and Civil Aviation Safety Authority [CASA]) and maintenance stakeholders, and must be rigorously observed.

Competency must be assessed in the work environment or by use of simulated activities, covering the application of quality standards in the aircraft maintenance environment.

This unit must be related in its assessment and application to all other units, particularly those that apply to the actual maintenance of aircraft.

Candidate capability of providing the required performance and knowledge evidence must be established via the records in the Log of Industrial Experience and Achievement or, where appropriate, an equivalent Industry Evidence Guide (for details refer to the Companion Volume Assessment Guidelines).

Assessors of this unit must satisfy the assessor requirements in applicable vocational education and training legislation, frameworks and/or standards.

Where the unit is to be used for CASA licensing purposes the assessor must also meet the criteria specified in the CASR Part 147 Manual of Standards.

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