



Australian Government

MEA143 Develop and manage maintenance error management programs

Release: 2

MEA143 Develop and manage maintenance error management programs

Modification History

Release 2. Equivalent to MEA143 Develop and manage maintenance error management programs. Updated to meet training package policy requirements.

Application

This unit of competency describes the skills and knowledge required to develop and manage maintenance error management programs aimed at reducing human error rates in aviation maintenance organisations. Work may be performed individually or as part of a team.

The unit applies to all maintenance activities relating to aircraft and aeronautical product that are performed within the jurisdiction of the Civil Aviation Safety Authority (CASA) during scheduled and unscheduled maintenance.

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

Nil.

Competency Field

Aviation maintenance management

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1. Develop a maintenance error management program

PERFORMANCE CRITERIA

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

- 1.1 Clearly state aims and objectives of aviation maintenance error management program and structure the program according to regulatory requirements
- 1.2 Establish aviation maintenance error management program guidelines that encourage open and blame-free reporting of maintenance errors that are not due to negligence

ELEMENTS**PERFORMANCE CRITERIA**

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| | 1.3 | Clearly state disciplinary boundaries to apply in the event of negligence |
| | 1.4 | Specify an aviation maintenance error investigation procedure including, where applicable, compliance with regulatory procedures for reporting significant safety issues related to maintenance errors |
| | 1.5 | Specify an aviation maintenance strategy and procedure for developing and delivering staff training programs relating to maintenance error management |
| | 1.6 | Include reference to aviation maintenance error management program in applicable organisational policies and procedures |
| | 1.7 | Provide feedback of program results to personnel, and review analysis of accumulated data to identify maintenance error trends |
| 2. Manage a maintenance error management program | 2.1 | Review reported events to determine if they should be investigated within the procedures of the maintenance error management program |
| | 2.2 | Report significant safety issues related to aviation maintenance errors to CASA and/or the Air Transport Safety Bureau (ATSB) |
| | 2.3 | Investigate events applicable to the aviation maintenance error management program according to program procedures |
| | 2.4 | Analyse investigation results to determine required action and minimise probability of event recurrence |
| | 2.5 | Take required action and provide feedback to designated personnel |
| | 2.6 | Review event and resultant action to determine information to be forwarded to bodies external to the organisation |
| | 2.7 | Review accumulated data according to program procedures to determine and monitor maintenance error trends |

Foundation Skills

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

Unit Mapping Information

Release 2. Equivalent to MEA143 Develop and manage maintenance error management programs.

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 MEA143 Develop and manage maintenance error management programs

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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:

- develop a maintenance error management program for an aircraft or aeronautical product aimed at reducing human error rates in an aviation maintenance organisation
- manage the developed program and respond to identified maintenance errors and significant safety issues.

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

- apply regulations and advisory material required for the maintenance error management program
- specify training requirements
- identify and address human factors with the potential to affect job performance
- apply trend analysis to maintenance data
- demonstrate written and oral communication skills to the required level.

The above maintenance error management program must include procedures for:

- investigating events and safety issues
- reviewing accumulated data.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- regulatory requirements and associated guidelines relating to the maintenance error management program, including:
 - Civil Aviation Safety Regulations (CASRs), Manuals of Standards and associated Acceptable Means of Compliance and Guidance Material
- regulatory procedures for reporting significant safety issues, including:
 - major defect report (MDR)
 - service difficulty report (SDR)
 - confidential aviation incident report (CAIR)

- organisational policies and procedures relating to the maintenance error management program, including:
 - aviation maintenance organisation expositions
 - quality manuals
 - safety manuals
 - procedures manuals
 - work instructions
- human factors with the potential to affect maintenance error management
- key features of investigative processes
- methodology for trend analysis
- procedures for specifying training requirements
- equity, fraud and ethics requirements set out in organisational code of conduct specific to the work described in the performance evidence.

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.

This unit may be assessed on the job, off the job, or a combination of both. Where assessment occurs off the job, an appropriate simulation must be used where the range of conditions reflects realistic workplace situations encountered when developing and managing maintenance error management programs.

The candidate must be permitted to refer to relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals, and reference materials.

The candidate must have access to:

- all tools, equipment, materials, and documentation required to demonstrate the performance evidence above.

Candidate capability of providing the required performance and knowledge evidence must be established via the records in the Maintenance Management Competency Log. Where the individual does not have a Competency Log, evidence of capability can be gathered through direct observation, supervisor's reports, project work, samples and questioning.

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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