



Australian Government

MEACOM0027 Develop and manage maintenance error management programs

Release: 1

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Modification History

Release 1. Application changed. Elements and Performance Criteria changed. Foundation Skills made explicit. Assessment Requirements clarified. Supersedes and is equivalent to MEA143 Develop and manage maintenance error management programs.

Application

This unit describes the skills and knowledge required to develop and manage maintenance error management programs aimed at reducing human error rates in aviation maintenance organisations during the performance of scheduled and unscheduled maintenance. 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.

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

Nil

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 a maintenance error management program	1.1 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
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
	1.3 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 that meet requirements 1.6 Include reference to aviation maintenance error management program in applicable organisational policies and procedures 1.7 Provide feedback on 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 Identify and address human factors that potentially affected job performance 2.5 Analyse investigation results to determine required action and minimise probability of event recurrence 2.6 Take required action and provide feedback to designated personnel 2.7 Review event and resultant action to determine information to be forwarded to bodies external to the organisation 2.8 Review accumulated data according to program procedures to determine and monitor maintenance error trends

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 information and procedures.
- Numeracy skills to interpret technical information relating to errors and error maintenance program data.
- Writing and oral communication skills to develop and report on maintenance error management programs.

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

Unit Mapping Information

Release 1. Supersedes and is 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 MEACOM0027 Develop and manage maintenance error management programs

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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:

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

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 (AMC/GM)
- 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 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 developing and managing maintenance error management programs, or a combination of 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 developing and managing maintenance error management programs.
 - all tools, equipment, materials, and documentation required to demonstrate the performance evidence above.

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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