MEA143B Develop and manage maintenance error management programs

MEA143B Develop and manage maintenance error management programs

Modification History

Minor formatting and editorial changes made.

Unit Descriptor

This unit of competency is part of the Aeroskills Advanced Diploma training pathways. It covers the competencies required to develop and manage maintenance error management programs within the civil aviation maintenance environment, as required by CASA.

Application of the Unit

This unit requires application of competencies relating to the development and management of maintenance error management programs aimed at reducing human error rates within aviation maintenance organisations.

Applications include all maintenance activities relating to aircraft and aeronautical product that are performed within the jurisdiction of CASA.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

1. Develop a maintenance error management program	1.1. The aims and objectives of the maintenance error management program are clearly stated and the program is structured in accordance with ***regulatory requirements***
	1.2. The maintenance error management program encourages open and blame free (unless negligent) reporting of maintenance errors
	1.3. Disciplinary boundaries are clearly stated for application in the event of negligence
	1.4. A maintenance error investigation procedure is specified, including compliance, where applicable, with ***regulatory procedures for the reporting of significant safety issues*** related to maintenance errors
	1.5. A strategy and procedure is specified for the development and delivery of staff training programs relating to maintenance error management
	1.6. Reference to the maintenance error management program is included in ***applicable organisational policies and procedures***
	1.7. Provision is made for feedback of program results to the workforce, and for analysis of accumulated data to identify maintenance error trends
2. Manage a maintenance error management program	2.1. Reported events are reviewed to determine if they should be investigated within the procedures of the maintenance error management program
	2.2. Significant safety issues related to maintenance errors are reported to CASA and/or the Australian Transport Safety Bureau (ATSB)
	2.3. Events applicable to the maintenance error management program are investigated in accordance with program procedures
	2.4. The results of the investigation are analysed to determine appropriate action to minimise the probability of a recurrence of the event
	2.5. Necessary action is taken and feedback is provided to the workforce
	2.6. The event and resultant action are reviewed to determine what information, if any, should be forwarded to bodies external to the organisation
	2.7. Accumulated data is reviewed in accordance with the program procedures to determine and monitor maintenance error trends

Manufacturing Skills Australia

Required Skills and Knowledge

Required skills

Look for evidence that confirms skills in:

- written and oral communication
- use of regulations and advisory material to set up a maintenance error management program
- specification of training requirements
- application of human factors
- trend analysis

Required knowledge

Look for evidence that confirms knowledge of:

- relevant regulations and advisory material
- human factors
- investigative processes
- trend analysis
- how to specify training requirements
- equity, fraud and ethics

Evidence Guide

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
Overview of assessment	A person who demonstrates competency in this unit must be able to develop and manage a maintenance error management program within an aviation maintenance organisation.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts.
	Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways, including direct observation, supervisor's reports, project work, samples and questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency.
Context of and specific resources for assessment	This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is, the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The candidate must have access to all tools, equipment, materials and documentation required and must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials. The assessment environment should not disadvantage the candidate.
Method of assessment	
Guidance information for assessment	

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Application	Application of this unit may relate to: • scheduled or unscheduled maintenance • individual or team-related activities
Regulatory requirements and associated guidelines	Regulatory requirements and associated guidelines include: • CASR, Manuals of Standards and associated Acceptable Means of Compliance and Guidance Material
Regulatory procedures for the reporting of significant safety issues	Regulatory procedures for the reporting of significant safety issues include: • Major Defect Report (MDR) • Service Difficulty Report (SDR) • Confidential Aviation Incident Report (CAIR)
Applicable organisational policies and procedures	Applicable organisational policies and procedures may include: • maintenance organisation expositions • quality manual • safety manual • procedures manual • work instructions

Unit Sector(s)

Aviation maintenance management

Competency field

Co-requisite units

Not applicable