



Australian Government

MEA147A Perform airworthiness management and maintenance program tasks

Release 1

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Modification History

Release 1 - New unit of competency

Unit Descriptor

This unit of competency deals specifically with competencies required for employment within Civil Aviation Safety Regulation (CASR) Part 42 Continuing Airworthiness Management Organisations (CAMOs).

Application of the Unit

This unit involves the application of skills and knowledge required for employment within CAMOs on airworthiness review and maintenance program approval tasks. Work will typically be performed as a staff member of a CAMO as defined in the Part 42 Manual of Standards and in the associated Acceptable Means of Compliance and Guidance Material.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

MEA137A Write aviation technical publications

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. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

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| 1 | Perform airworthiness review tasks | 1.1 | Level of authorisation to perform airworthiness review tasks is determined |
| | | 1.2 | Continuing airworthiness records for the aircraft under review are obtained |
| | | 1.3 | Airworthiness status of the aircraft is determined |
| | | 1.4 | The aircraft is surveyed for compliance with regulations and with the aircraft's approved type design |
| | | 1.5 | The completion of any required corrective action is verified |
| | | 1.6 | A record of the review is written in accordance with CAMO procedures |
| | | 1.7 | The airworthiness review certificate is raised and issued in accordance with CAMO procedures, or, where applicable, a notice of decision not to issue an airworthiness review certificate is raised and issued |
| 2 | Perform maintenance program approval tasks | 2.1 | Level of authorisation to perform maintenance program approval tasks is determined |
| | | 2.2 | Maintenance programs are developed in accordance with applicable regulations and CAMO procedures |
| | | 2.3 | Variations to approved maintenance programs are developed in accordance with applicable regulations and CAMO procedures |
| | | 2.4 | Maintenance schedules are developed in accordance with CAMO procedures for inclusion in the maintenance program |
| | | 2.5 | A schedule of life-limited parts is developed in accordance with CAMO procedures for each maintenance program |
| | | 2.6 | Maintenance program approval documentation is raised and processed in accordance with regulatory requirements and CAMO procedures |
| | | 2.7 | Maintenance program variation approval documentation is raised and processed in accordance with regulatory requirements and CAMO procedures |

- 2.8 One-off extensions to maintenance task intervals are processed in accordance with CAMO procedures
- 2.9 Maintenance program approval records are raised and maintained in accordance with CAMO procedures
- 3 Perform reliability program tasks
 - 3.1 The requirement for a reliability program is determined
 - 3.2 The reliability program is developed and written in accordance with CAMO procedures
 - 3.3 Responsibilities for reliability program administration are determined and recorded in the program
 - 3.4 Reliability data sources are identified and data collection, recording, and analysis procedures and responsibilities are specified in the program details
 - 3.5 Performance standards are determined and recorded in the program details along with a process for regular review
 - 3.6 Procedures are developed for investigation when performance standards are exceeded and for the implementation and recording of corrective action
 - 3.7 Operation of the reliability program is monitored to ensure program effectiveness

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

Required skills include:

- communicating both verbally and in writing with CAMO staff, aircraft operators, aircraft type certificate holder and regulator staff
- writing and applying airworthiness review procedures
- determining aircraft airworthiness status and surveying aircraft for compliance with requirements
- raising and processing airworthiness review certificates
- developing and drafting maintenance programs
- revising maintenance programs
- maintaining maintenance program data
- obtaining and maintaining maintenance program approval
- setting up and operating a reliability program

Required knowledge

Required knowledge includes:

- continuing airworthiness management regulatory requirements
- the CAMO exposition and individual appointments and responsibilities
- aircraft design and design approval regulations
- aircraft type certificates and Maintenance Review Boards
- Airworthiness Directives
- manufacturer's maintenance data and flight manual
- aircraft weight and balance
- maintenance program development and review procedures
- reliability program design, data analysis methods and data presentation

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.

<p>Overview of assessment</p>	<p>A person who demonstrates competency in this unit must be able to perform tasks within a CAMO associated with airworthiness review, maintenance program development and review and reliability program development and operation.</p>
<p>Critical aspects for assessment and evidence required to demonstrate competency in this unit</p>	<p>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.</p> <p>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.</p>
<p>Context of and specific resources for assessment</p>	<p>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 competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.</p> <p>The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.</p>
<p>Method of assessment</p>	<p>This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with applying scientific principles and techniques in aeronautical engineering situations or other units requiring the exercise of the skills and knowledge covered by this unit.</p>

Guidance information for assessment	
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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. 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.

CAMO authorisations	CAMO authorisations may be found in the CAMO Exposition
Regulations and associated standards and advisory material	Regulatory requirements, standards and advisory material relating to continuing airworthiness management may be found in: <ul style="list-style-type: none"> • Civil Aviation Safety Regulations (CASRs) • CASR Part 42 Manual of Standards • CASR Part 42 Guidance Material and Acceptable Means of Compliance • Users Guide CASR Part 42 • CAAP 42M-2(0) Reliability Programs • FAA AC 20-157 How to prepare Reliability Assessment Plans for Aircraft Systems and Equipment • FAR Part 23 Airworthiness Standards for Airplanes in the Normal, Utility, Aerobatic or Commuter Categories • FAR Part 25 Airworthiness Standards for Airplanes in the Transport Category • EASA CS-23 Certification Specifications for Aeroplanes in the Normal, Utility, Aerobatic or Commuter Categories • EASA CS-25 Certification Specifications for Airplanes in the Transport Category • AC 21-15 (1) Supplemental Type Certificates
Application	Application of this unit may relate to: <ul style="list-style-type: none"> • scheduled or unscheduled maintenance • individual or team-related activities

Unit Sector(s)

Aviation maintenance

Custom Content Section

Not applicable.