



Australian Government

MEA147 Perform airworthiness management and maintenance program tasks

Release: 1

MEA147 Perform airworthiness management and maintenance program tasks

Modification History

Release 1 - New unit of competency

Application

This unit of competency deals specifically with skills and knowledge required for employment within Civil Aviation Safety Regulation (CASR) Part 42 Continuing Airworthiness Management Organisations (CAMOs) on airworthiness review and maintenance program approval tasks associated with scheduled and unscheduled maintenance.

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.

Pre-requisite Unit

MEA137 Write aviation technical publications

Competency Field

Aviation maintenance

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes.

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

- | | |
|--|--|
| 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

Foundation Skills

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

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

- | | |
|---|--|
| CAMO authorisations | <ul style="list-style-type: none">• CAMO authorisations may be found in the CAMO Exposition |
| Regulatory requirements, standards and advisory material relating to continuing airworthiness management are 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

Unit Mapping Information

Release 1 – equivalent to MEA147A Perform airworthiness management and maintenance program tasks

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 MEA147 Perform airworthiness management and maintenance program tasks

Modification History

Release 1 - New unit of competency

Performance Evidence

Evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria under the specified conditions of assessment on at least one occasion, and must include:

- communicating in English both verbally and in writing with CAMO staff, aircraft operators, aircraft type certificate holder and regulatory 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.

Knowledge Evidence

Evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- 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 (ADs)
- 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.

Assessment Conditions

- 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 assessment environment should not disadvantage the candidate.
- Assessors must be satisfied that the candidate can competently and consistently perform all elements and performance criteria of the unit of competency, including required knowledge, and be capable of applying the competency in new and different situations and contexts.
- 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.
- Assessors should gather a range of evidence that is valid, sufficient, current and authentic. The preferred method is the records in the Maintenance Management Competency Log. Where the individual does not have a Competency Log 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.
- 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.
- The Assessor must meet the criteria specified in the CASR Part 147 Manual of Standards.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ce216c9c-04d5-4b3b-9bcf-4e81d0950371>