



Australian Government

MEA164 Perform airworthiness management and maintenance program tasks

Release: 1

MEA164 Perform airworthiness management and maintenance program tasks

Modification History

Release 1. Supersedes and equivalent to MEA147 Perform airworthiness management and maintenance program tasks. Revised as a result of changed prerequisites. Unit codes updated.

Application

This unit of competency describes the skills and knowledge required to perform airworthiness management and maintenance program approval tasks.

The unit applies specifically to those employed in 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.

This unit forms part of the Civil Aviation Safety Authority (CASA) requirement for maintenance certification licences under 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

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1. Perform airworthiness review tasks

PERFORMANCE CRITERIA

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

- 1.1 Determine level of authorisation required to perform airworthiness review tasks
- 1.2 Obtain continuing airworthiness records for aircraft under review

ELEMENTS**PERFORMANCE CRITERIA**

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|---|--|
| | 1.3 Determine airworthiness status of aircraft |
| | 1.4 Survey aircraft for compliance with regulations and with aircraft's approved type design |
| | 1.5 Verify completion of required corrective action |
| | 1.6 Write record of review according to CAMO procedures |
| | 1.7 Raise and issue airworthiness review certificate or alternatively a notice of decision not to issue an airworthiness review certificate according to CAMO procedures |
| 2. Perform maintenance program approval tasks | 2.1 Determine level of authorisation to perform maintenance program approval tasks |
| | 2.2 Develop maintenance programs according to applicable regulations and CAMO procedures |
| | 2.3 Develop variations to approved maintenance programs according to regulations and required CAMO procedures |
| | 2.4 Develop maintenance schedules for inclusion in maintenance program according to CAMO procedures |
| | 2.5 Develop schedule of life-limited parts for each maintenance program according to CAMO procedures |
| | 2.6 Raise and process maintenance program approval documentation according to regulatory requirements and CAMO procedures |
| | 2.7 Raise and process maintenance program variation approval documentation according to regulatory requirements and CAMO procedures |
| | 2.8 Process one-off extensions to maintenance task intervals according to CAMO procedures |
| | 2.9 Raise and maintain maintenance program approval records according to CAMO procedures |
| 3. Perform reliability program tasks | 3.1 Determine requirement for reliability program |
| | 3.2 Develop and write reliability program according to CAMO procedures |

ELEMENTS**PERFORMANCE CRITERIA**

- 3.3 Determine responsibilities for reliability program administration and record them in program
- 3.4 Identify reliability data sources and specify data collection, recording, and analysis procedures and responsibilities in program details
- 3.5 Determine and record performance standards in program details, along with a process for regular review
- 3.6 Develop procedures for investigating when performance standards are exceeded and for implementing and recording corrective action
- 3.7 Monitor operation of reliability program to ensure program effectiveness

Foundation Skills

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

Unit Mapping Information

Release 1. Equivalent to MEA147 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 MEA164 Perform airworthiness management and maintenance program tasks

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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:

- complete tasks required to manage and maintain the airworthiness of an aircraft during one scheduled maintenance program or one unscheduled maintenance program.

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

- write and apply procedures used during the airworthiness review
- determine aircraft airworthiness status and survey aircraft for compliance with regulations and requirements
- raise and process airworthiness review certificates
- develop and draft aircraft maintenance programs
- revise maintenance programs
- maintain maintenance program data
- obtain and maintain maintenance program approval
- set up and operate a reliability program
- communicate in English both verbally and in writing with continuing airworthiness management organisation (CAMO) staff, aircraft operators, aircraft type certificate holders, and regulatory staff.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- continuing airworthiness management regulatory requirements found in:
 - 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
- key requirements for managing and maintaining aircraft airworthiness set out in CAMO exposition, including those relating to:
 - individual appointments and responsibilities
 - CAMO authorisations
 - requirements for reporting airworthiness review outcomes
- aircraft design and design approval regulations
- key features and functions of aircraft type certificates and Maintenance Review Boards
- key features of Airworthiness Directives (ADs)
- procedures for sourcing and using manufacturer maintenance data and flight manuals
- key requirements relating to aircraft weight and balance
- maintenance program development and review procedures
- reliability program design
- data analysis methods and protocols for presenting data.

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, 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 encountered when performing airworthiness management and maintenance program tasks.

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.

Links

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