



Australian Government

MEA140 Supervise aviation maintenance teams and perform maintenance quality inspections

Release: 2

MEA140 Supervise aviation maintenance teams and perform maintenance quality inspections

Modification History

Release 2. Equivalent to MEA140 Supervise aviation maintenance teams and perform maintenance quality inspections. Updated to meet training package policy requirements.

Application

This unit of competency describes the skills and knowledge required to manage and supervise aviation maintenance teams, and perform maintenance quality inspections in the Australian Defence Force (ADF) and contractor organisations maintaining ADF aircraft and items of aeronautical product. Work may be performed individually or as part of a team.

The unit applies to supervising an aviation maintenance team during a range of scheduled and unscheduled maintenance activities, including configuration changes, incorporating modifications, and repairs and overhauls.

The unit is used in workplaces that operate under the airworthiness regulatory systems of the ADF and the Civil Aviation Safety Authority (CASA).

Candidates must have been appointed as a maintenance quality inspector (MQI) or independent inspector in order to be assessed for this unit of competency.

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

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1. Plan aviation maintenance for teams

PERFORMANCE CRITERIA

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

- 1.1 Identify and analyse maintenance tasks from available maintenance data or schedule according to organisational procedures

ELEMENTS

PERFORMANCE CRITERIA

- | | |
|---|--|
| | 1.2 Organise team workload in order of priority taking into consideration required maintenance tasks and specified timeframes |
| | 1.3 Identify and obtain required resources |
| | 1.4 Check tools and support equipment for serviceability and currency of calibration, where applicable |
| 2. Implement team aviation maintenance activities | 2.1 Allocate maintenance tasks to team members after consideration of individual experience, qualifications, and task authorisations |
| | 2.2 Brief team members on their responsibility and function in the team |
| | 2.3 Authorise team members to operate required items of ground support and test equipment |
| 3. Provide guidance | 3.1 Provide guidance to team members appropriate to complexity or criticality of maintenance task and experience level of individual |
| | 3.2 Provide guidance in determining cause of complex faults, or faults not covered in maintenance manual fault diagnosis guides |
| 4. Monitor and certify aviation maintenance quality | 4.1 Check maintenance activities and guide personnel to ensure that maintenance is performed and certified according to required documentation, policies, and procedures |
| | 4.2 Perform check inspections on completed work or work stages and certify the work according to regulatory requirements, and policies and procedures |
| 5. Perform human resource management activities at the supervisor level | 5.1 Identify and address human factors affecting job performance |
| | 5.2 Minimise the possibility of maintenance errors |
| | 5.3 Maintain sound teamwork by supporting the identification of contributing factors |
| | 5.4 Support sound employment relations |
| 6. Perform workplace | 6.1 Deliver on-the-job training |

ELEMENTS

training tasks

PERFORMANCE CRITERIA

- 6.2 Complete Supervisor's Verification section of the Workplace History Sheets (Section 3) of the Log of Industrial Experience and Achievement
- 6.3 Provide expert witness verification of competency for workplace assessors, when required
- 6.4 Provide opportunities for individuals to develop competencies

Foundation Skills

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

Unit Mapping Information

Release 2. Equivalent to MEA140 Supervise aviation maintenance teams and perform maintenance quality inspections.

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 MEA140 Supervise aviation maintenance teams and perform maintenance quality inspections

Modification History

Release 2. Equivalent to MEA140 Supervise aviation maintenance teams and perform maintenance quality inspections. Updated to meet training package policy requirements.

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:

- manage and supervise an aviation maintenance team in the Australian Defence Force (ADF) or a contractor organisation maintaining ADF aircraft and items of aeronautical product during one scheduled or one unscheduled maintenance activity.

The above maintenance team must be performing maintenance activities on both an aircraft and items of aeronautical product.

During the course of the work, the candidate must:

- review maintenance data found in applicable sources in order to plan team maintenance activities, including:
 - maintenance records
 - maintenance manuals
 - servicing schedules
 - computer maintenance data systems
 - service bulletins
 - special technical instructions
 - modification orders
 - repair instructions
 - observations and feedback from maintenance personnel and aircrew
 - internal work instructions or management directives
- determine resource requirements for the maintenance activity, including:
 - personnel in required numbers with required experience, qualifications, and task authorisation
 - spares
 - consumables
 - tools
 - special equipment
 - ground support equipment
 - personal protective equipment (PPE)
- provide guidance to team members, including guidance relating to:

- damage assessment
- assessment of repair cost effectiveness
- assessment of replacement options
- monitor the quality of the maintenance activities to ensure they comply with regulatory requirements
- perform maintenance quality inspections
- demonstrate the following skills to the required level:
 - oral communication
 - written communication
 - planning
 - supervision
 - inspection
 - advanced troubleshooting
 - people management
- deliver on-the-job training
- apply work health and safety (WHS) requirements in the workplace.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- principles of supervision
- high level technical knowledge applicable to the job
- fault diagnosis techniques
- key features and uses of maintenance data and documentation applicable to maintenance activities described in the performance evidence:
 - operating manuals
 - maintenance manuals
 - organisational policy manuals
 - quality manuals
 - safety manuals
 - procedures manuals
 - safety data sheets (SDS)
 - work instructions
 - Defence instructions and standards
 - standing instructions
- regulations, policies and procedures relating to supervision and certification of maintenance, including:
 - AAP 7001.053 Technical Airworthiness Management Manual
 - federal and state or territory WHS legislation
- human factors with the potential to affect job performance in aviation maintenance activities, and associated guidelines

- key principles of employment relations and conditions relating to the work described in the performance evidence, including:
 - relevant sections of industrial awards
 - content of enterprise agreements
 - conditions of employment and service that apply to the particular workplace
- equity, diversity and fraud requirements set out in organisational code of conduct specific to the work described in the performance evidence
- factors to consider when determining resource requirements for maintenance activity plan, including:
 - personnel in required numbers with applicable experience, qualifications and task authorisation
 - spares
 - consumables
 - tools
 - special equipment
 - ground support equipment
 - PPE
- use of PPE
- use and procedures for obtaining confined space entry permits
- techniques to avoid maintenance errors
- key features of the Log of Industrial Experience and Achievement, including responsibility for making entries and responsibility for certifying entries
- role of supervisors in assisting workplace competency assessors
- techniques for delivering on-the-job training.

Assessment Conditions

The following conditions of assessment represent the requirements of the regulators (ADF and the Civil Aviation Safety Authority [CASA]) and maintenance stakeholders, and must be rigorously observed.

This unit may be assessed on the job, or a combination of both. Where partial assessment occurs off the job an appropriate simulation must be used where the range of conditions reflects realistic workplace situations encountered when supervising aviation maintenance teams and performing maintenance quality inspections. The competencies covered by this unit would be demonstrated by an individual working as a team leader.

Candidates must have been appointed as a maintenance quality inspector (MQI) or independent inspector in order to be assessed for this unit of competency.

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:

- tools, equipment, materials, and documentation required to demonstrate the performance evidence above, including items of ground support and test equipment required for the following maintenance activities:
 - power carts
 - hydraulic rigs
 - pneumatic rigs
 - stands and docking
 - component test stands.

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 Civil Aviation Safety Regulation (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>