



**Australian Government**

# **MEA60111 Advanced Diploma of Aviation Maintenance Management (Avionics)**

**Release 2**

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## **Modification History**

Release 2 - Licensing requirements clarified. New elective MEA147A added to Elective Units Group A - equivalent

Release 1 - Unit codes updated as required. Imported financial management elective unit replaced by MEA146A - equivalent

## **Description**

This qualification may be of use to individuals employed in managerial positions in both the civil and ADF regulatory environments in the fields of avionic maintenance management and Integrated Logistic Support (ILS). It should also be noted that most of the maintenance management positions applicable to this qualification have airworthiness regulatory requirements regarding aviation maintenance experience. There is therefore no direct entry pathway to the qualification.

The qualification consists of:

- twenty five (25) common units and two (2) imported units, seventeen (17) of which are elective, that provide general competencies applicable to aviation maintenance managers
- four (4) para-professional avionic engineering units.

With regard to the employability skills, due to the high proportion of electives required by this qualification, the industry/enterprise requirements described for each employability skill are representative of the aviation maintenance industry in general and may not reflect specific job roles. Learning and assessment strategies for this qualification should be based on the requirements of the units of competency for this qualification.

## **Pathways Information**

Not applicable.

## **Licensing/Regulatory Information**

This qualification complies with airworthiness regulatory requirements of CASA and the ADF.

## Entry Requirements

Individuals seeking this qualification must meet at least one of the following criteria:

- at least five years current avionic maintenance experience
- Maintenance Engineer Licence (Avionics) issued by CASA
- Certificate IV in Aeroskills (Avionics)
- Diploma of Aviation Maintenance Management (Avionics).

## Employability Skills Summary

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	<ul style="list-style-type: none"> <li>• Understanding complex directions from senior managers</li> <li>• Understanding input from professional engineers, specialist personnel and technical representatives</li> <li>• Liaising with maintenance personnel, aircrew and specialists regarding maintenance problems</li> <li>• Talking to senior managers about maintenance and maintenance management problems and making presentations</li> <li>• Providing guidance to others and clearly describing faults, problems and spares requirements</li> <li>• Negotiating with team members, senior managers and aircraft owners/operators regarding timing and progress of work activities</li> <li>• Negotiating with potential suppliers of items of aeronautical product, piece parts and consumables</li> <li>• Negotiating with clients regarding the drafting of technical publications and maintenance data</li> <li>• Negotiating with senior managers regarding issues, such as activity timelines and budgetary matters</li> <li>• Understanding and interpreting regulations, procedures, instructions and maintenance publications</li> <li>• Giving written instructions, such as maintenance orders and compilation of maintenance documentation</li> <li>• Writing reports and proposals as required by regulations and organisational procedures</li> <li>• Interpreting organisational charts, wiring diagrams and system schematics, reading drawings relating to maintenance activities and interpreting fault diagnosis guides and logic charts</li> <li>• Using computers to obtain maintenance and maintenance management data, complete documentation and correspond using email</li> <li>• Networking with other maintenance managers and with others involved in maintenance-related integrated logistic support activities</li> </ul>
Teamwork	<ul style="list-style-type: none"> <li>• Performing tasks as an individual while being responsive to team members or colleagues and senior managers and allowing for relevant human factors</li> <li>• Working effectively with others who may be of different ages, gender, race, religion and political persuasion</li> <li>• Assisting team members with task definition and providing advice on work processes and troubleshooting</li> <li>• Matching team member skills and authorisations to the task and adapting to contingencies</li> </ul>

	<ul style="list-style-type: none"> <li>• Providing leadership and development of team commitment and dynamics</li> <li>• Monitoring and assessing team performance and providing mentoring and performance feedback</li> <li>• Gaining the trust and confidence of team members and resolving conflict within the team</li> <li>• Providing team members with the opportunity for ongoing competency development</li> </ul>
Problem solving	<ul style="list-style-type: none"> <li>• Identifying problems in a timely manner and developing practical solutions to maintenance problems not fully covered by maintenance data and to maintenance management problems</li> <li>• Proposing solutions to problems as repair schemes, modifications or as amendments to specified maintenance processes</li> <li>• Assisting with the resolution of complex problems as a team effort</li> <li>• Constantly reviewing problem solving skills and ability to effectively apply competencies to solve problems within the limits permitted by regulatory and organisational guidelines</li> <li>• Responding to emergencies or accidents in accordance with legislative, regulatory and organisational requirements</li> <li>• Using mathematical techniques to relate test results to system or component performance, to convert values between systems of measurement, to calculate weight and balance, to develop management solutions to problems, and in performing integrated logistic support procedures</li> </ul>
Initiative and enterprise	<ul style="list-style-type: none"> <li>• Adapting to new situations that arise as a consequence of regulatory changes, technology, contractual requirements, personnel management changes, operational circumstances, revised maintenance data, practices and procedures</li> <li>• Varying work practices and behaviour as a result of performance feedback from subordinates, peers and managers</li> <li>• Evaluating ideas to ensure that technical and regulatory aspects have been fully covered before proposing action that may result in modifications or changes to work processes</li> <li>• Applying human factors to avoid maintenance errors and maintain quality standards</li> <li>• Adapting competencies to the performance of a wide range of maintenance tasks</li> <li>• Managing a process of innovation and continuous improvement and a willingness to initiate, support and participate in the effective introduction of new work practices</li> <li>• Assessing risks and taking action to achieve a recognised benefit or advantage to the organisation as a consequence of revised processes and procedures</li> </ul>

	<ul style="list-style-type: none"> <li>• Evaluating software requirements and hardware enhancements</li> </ul>
Planning and organising	<ul style="list-style-type: none"> <li>• Clarifying task objectives and required outcomes through discussion with managers and team members</li> <li>• Planning the use of resources and allocating personnel and resources to tasks</li> <li>• Monitoring the time taken to complete tasks against team requirements or targets provided by management</li> <li>• Assessing work requirements for quotations</li> <li>• Collecting, analysing and organising information relating to assigned maintenance tasks and confirming the purpose and required work outcomes</li> <li>• Identifying contingency situations and taking action to resolve problems</li> <li>• Identifying the extent of impact on assigned work of changes in procedures, work instructions or regulatory requirements</li> <li>• Analysing customer requirements and organisational work capacity</li> <li>• Developing, managing and evaluating aircraft and component maintenance strategies and plans</li> <li>• Establishing clear task goals and deliverables</li> <li>• Reviewing or developing budgets and managing financial resources</li> <li>• Surveying and assessing organisational and customer needs</li> </ul>
Self-management	<ul style="list-style-type: none"> <li>• Accepting responsibility for managing individual workload to meet target completion times or fit in with team milestones</li> <li>• Assessing personal knowledge and skills when assisting team members with complex tasks and when proposing modifications, repair schemes, changes to maintenance practices or in managing integrated logistic support activities</li> <li>• Actively seeking opportunities to develop competencies and to apply them across a range of tasks and application of legislation, regulations, policy and procedures to achieve required outcomes and build confidence in own ideas and vision</li> <li>• Effectively manage personal work priorities and professional development</li> <li>• Identifying career paths and training opportunities that will assist in attaining career goals</li> </ul>
Learning	<ul style="list-style-type: none"> <li>• Taking advantage of learning opportunities that arise through training courses provided by the organisation or external providers and through mentoring and on-the-job training</li> <li>• Adapting competencies to accommodate new ideas and techniques</li> <li>• Using feedback from subordinates, peers and managers to identify ways in which competence can be improved</li> <li>• Mentoring and providing on-the-job training and induction</li> </ul>

	<p>training to team members</p> <ul style="list-style-type: none"><li>• Interpreting units of competency and applying them to attainment of identified career goals</li></ul>
Technology	<ul style="list-style-type: none"><li>• Operating aircraft and avionic systems, test equipment and ground support equipment, ground running engines and troubleshooting faults</li><li>• Using on-board maintenance systems and using maintenance-related software</li><li>• Maintaining aircraft systems, components and test stands</li><li>• Performance testing of aircraft systems and engines</li><li>• Storing and caring for components, parts, tools, test equipment and support equipment</li><li>• Complying with requirements to complete maintenance records, develop and revise maintenance data and propose amendments to technical publications</li><li>• Amending various forms of maintenance data</li><li>• Using computers and microfiche to obtain maintenance data and using computers to complete records, reports and documentation</li></ul>

## Packaging Rules

To be awarded the MEA60111 Advanced Diploma of Aviation Maintenance Management (Avionics), competency must be demonstrated in a total of **nineteen (19)** units of competency, as described below.

- If a Diploma of Aviation Maintenance Management (Avionics) has been attained, **nine (9)** of the required units will be already held and the number of additional units required is **ten (10)**.
- In all other cases the number of units required is **nineteen (19)**.

All units must be chosen as specified under the conditions set out below:

- **fifteen (15)** Core units consisting of engineering, common and imported units
- **four (4)** Elective units chosen from the common and imported units in Group A.

### Core units of competency

The **four (4)** para-professional engineering units listed below are mandatory for those who do not have a Diploma of Aviation Maintenance Management (Avionics).

Unit code	Unit title	Prerequisites
MEA272B	Apply basic scientific principles and techniques in avionic engineering situations	Nil
MEA273A	Select and test avionic engineering materials	Nil
MEM30007A	Select common engineering materials	Nil
MEM30012A	Apply mathematical techniques in a manufacturing engineering or related environment	Nil

Complete the **eleven (11)** Advanced Diploma/Diploma common and imported units listed below (those with a Diploma of Aviation Maintenance Management (Avionics) will already have MEA121B, MEA133B, MEA135A and MEA142B).

Unit code	Unit title	Prerequisites
MEA120B	Manage an aviation maintenance quality system	Nil
MEA121B	Manage aircraft/aeronautical product configuration	Nil
MEA123B	Manage aviation maintenance work environment	Nil



Unit code	Unit title	Prerequisites
	policy and practices	
MEA124B	Coordinate change programs in the aviation maintenance environment	Nil
MEA125B	Develop aviation maintenance personnel	Nil
MEA133B	Communicate aviation technical and maintenance knowledge	Nil
MEA134B	Establish, maintain and evaluate the organisation's occupational health and safety system	Nil
MEA135A	Use computers in aviation maintenance-related integrated logistic support activities	Nil
MEA141B	Manage risk in aviation maintenance	Nil
MEA142B	Manage self in the aviation maintenance environment	Nil
MSAENV672B	Develop workplace policy and procedures for environmental sustainability	Nil

### Elective units Group A

Plus **four (4)** of the elective Advanced Diploma/Diploma common and imported units listed below (those with a Diploma of Aviation Maintenance Management (Avionics) will already have one (1) of MEA136A, MEA137B and MEA140A). Units should be selected using the guidance in column four.

Unit code	Unit title	Prerequisites	Unit selection guidance
MEA115A	Plan and implement aeronautical product maintenance activities	Nil	
MEA122B	Manage aircraft/equipment system performance testing	MEA126B	
MEA126B	Manage aircraft maintenance activities	Nil	
MEA127B	Provide technical advice in the maintenance and management	MEA272B	Applicable to the CASA regulatory environment

Unit code	Unit title	Prerequisites	Unit selection guidance
	of aircraft and aeronautical product	MEA273A	
MEA128B	Provide engineering advice in the modification, maintenance and management of aircraft systems	MEA272B MEA273A	Applicable to the ADF regulatory environment
MEA129A	Investigate technical aspects of aviation occurrences	Nil	Applicable to the ADF regulatory environment
MEA130A	Manage deployed/detached aviation maintenance activities	Nil	Applicable to the ADF regulatory environment
MEA131B	Manage the custody, transfer and disposal of aircraft, aeronautical product and support equipment	Nil	
MEA132A	Manage budgetary resources in the aviation maintenance environment	Nil	MEA146A or PSPMNGT610A may be taken instead of this unit
MEA136A	Assess aviation maintenance spares and manage repairable items	MEA135A	
MEA137A	Write aviation technical publications	MEA135A	
MEA138B	Perform aviation technical publication management activities	MEA137A	
MEA139A	Perform aviation maintenance-related integrated logistic support activities	Nil	
MEA140A	Supervise aviation maintenance teams and perform maintenance quality inspections	Nil	For supervisors within the ADF regulatory system
MEA143B	Develop and manage maintenance error management programs	Nil	Applicable to the CASA regulatory environment

Unit code	Unit title	Prerequisites	Unit selection guidance
MEA146A	Prepare and manage aviation maintenance organisation budgets and financial plans	Nil	Alternative to MEA132A and to PSPMNGT610A
MEA147A	Perform airworthiness management and maintenance program tasks	MEA137A	Applicable to CAMO employment
PSPMNGT610A	Manage public sector financial resources	Nil	Alternative to MEA132A and to MEA146A

## Custom Content Section

Not applicable.