



**Australian Government**

**MEA50522 Diploma of Aeroskills  
(Non-Destructive Testing)**

**Release 1**

## **MEA50522 Diploma of Aeroskills (Non-Destructive Testing)**

### **Modification History**

Release 1. Supersedes and is equivalent to MEA50518 Diploma of Aeroskills (Non-Destructive Testing). Unit codes updated.

### **Qualification Description**

This qualification applies to individuals who perform non-destructive testing (NDT) on aircraft and aircraft components in accordance with AS 3669-2006 Non-destructive testing – Qualification and approval of personnel – Aerospace at Level 2 and in compliance with the regulatory requirements of the Civil Aviation Safety Authority (CASA) and of the Defence Aviation Safety Authority (DASA).

The qualification consists of:

- preliminary core common and technical stream units for individuals who do not have a Certificate IV in Aeroskills
- core units, consisting of:
  - common and technical stream units that relate to the aviation maintenance environment
  - technical stream and imported units relating to the NDT work environment
  - imported units that specifically cover the competencies required to perform each relevant NDT technique to the standard specified in AS 3669-2006 Non-destructive testing – Qualification and approval of personnel – Aerospace for Level 2 personnel.
- elective units, consisting of:
  - common units specific to either CASA or DASA regulatory requirements
  - technical stream and imported units that are applicable to various areas of employment in the NDT field.

The qualification provides two training pathways:

- one for Certificate IV qualified aviation tradespersons to progress to the Diploma level NDT qualification (the career path for uniformed ADF personnel and possibly some civilian personnel)
- one for progression to Diploma level NDT qualification from direct entry (the career path that may be followed by NDT personnel used by the maintenance organisations other than those operating under the ADF regulatory system).

The qualification also provides credits towards the MEA50422 Diploma of Aviation Maintenance Management, the MEA60222 Advanced Diploma of Aviation Maintenance Management and the MEA60322 Advanced Diploma of Aviation Non-Destructive Testing.

## Entry Requirements

Not applicable.

## Packaging Rules

To be awarded the MEA50522 Diploma of Aeroskills (Non-Destructive Testing), competency must be demonstrated in 25 to 34 units, consisting of

- 9 preliminary core units for individuals who do not have a Certificate IV in Aeroskills
- 22 core units
- 3 elective units.

**Core units** (preliminary): to be completed by individuals who do not have a Certificate IV in Aeroskills

Unit code	Unit title	Prerequisites
MEA107	Interpret and use aviation maintenance industry manuals and specifications	
MEA154	Apply work health and safety practices in aviation maintenance	
MEA155	Plan and organise aviation maintenance work activities	MEA154
MEA156	Apply quality standards during aviation maintenance activities	MEA107, MEA154,
MEA157	Complete aviation maintenance industry documentation	
MEA158	Perform basic hand skills, standard trade practices and fundamentals in aviation maintenance	
MEA399	Lay out and set up aircraft systems	MEA154
MEAMEC003 2	Apply basic aircraft design characteristics	MEA107, MEA154, MEA158
MEAMEC003 3	Apply basic aircraft power plant design characteristics	MEA107, MEA154, MEA158

## CORE UNITS

Unit code	Unit title	Prerequisites
MEA116	Apply work health and safety procedures at supervisor level in aviation maintenance	
MEA142	Manage self in the aviation maintenance environment	
MEA296	Use electrical test equipment in aviation maintenance activities	MEA107, MEA154, MEA155 MEA156, MEA157, MEA158
MEAAVI0038	Use electronic test equipment	MEA107, MEA154, MEA155 MEA156, MEA157, MEA158
MEACOM0022	Use computers in aviation maintenance-related integrated logistic support activities	
MEACOM0032	Communicate aviation technical and maintenance management knowledge	
MEASTR0018	Evaluate aircraft non-destructive tests	MEA158 MEACOM0032 MEM13013 MEM16010 MEM24002B MEM24004B MEM24006B MEM24008B MEM24010B MEM24012C
MEM09002	Interpret technical drawing	MEM12023 MEM12024 MEM13015 MEM16006
MEM09003	Prepare basic engineering drawing	MEM09002 MEM12023 MEM12024 MEM13015 MEM16006
MEM12003	Perform precision mechanical measurement	MEM11011 MEM12023

		(see Note 1) MEM13015 MEM16006
MEM13013	Work safely with ionising radiation	MEM11011 MEM13015 MEM16006
MEM15017B	Use and maintain reference standards	MEM11011B MEM12003B MEM12004B (see Note 2) MEM12005B MEM12023A (see Note 1) MEM18001C (see Note 1) MEM18002B (see Note 1)
MEM16010	Write reports	MEM13015 MEM14006 (see Note 3) MEM16006
MEM24002B	Perform penetrant testing	MEM18001C (see Note 1) MEM24012C
MEM24004B	Perform magnetic particle testing	MEM18001C (see Note 1) MEM24012C
MEM24006B	Perform eddy current testing	MEM18001C (see Note 1) MEM24012C
MEM24008B	Perform ultrasonic testing	MEM18001C

		(see Note 1) MEM24012C
MEM24010B	Perform radiographic testing	MEM13013B MEM18001C (see Note 1) MEM24012C
MEM24012C	Apply metallurgy principles	
MEM30007A	Select common engineering materials	
MEM30012A	Apply mathematical techniques in a manufacturing, engineering or related environment	
MSMENV472	Implement and monitor environmentally sustainable work practices	

### Notes

1. MEA158 is equivalent to the following three units combined MEM12023, MEM18001 and MEM18002.
2. MEA296 and MEA261 are together equivalent to MEM12004.
3. MEA155 is equivalent to MEM14006.

### ELECTIVE UNITS

Choose 3 units while observing the unit selection guidelines in column 4.

Unit code	Unit title	Prerequisites	Unit selection guidelines
MEA112	Plan and implement civil aircraft maintenance activities	All relevant technical units	Mandatory for CASA regulatory system
MEA113	Supervise civil aircraft maintenance activities and manage human resources in the workplace	All relevant technical units	Mandatory for CASA regulatory system
MEACOM0024	Supervise aviation maintenance teams and perform maintenance quality inspections		Mandatory for DASA regulatory system

MEM15010	Perform laboratory procedures	MEM11011 MEM13015 MEM16006	
MEM17002	Conduct workplace assessment	MEM11011 MEM13015 MEM16006	
TAEDEL301	Provide work skill instruction		

## Qualification Mapping Information

Release 1. Supersedes and is equivalent to MEA50518 Diploma of Aeroskills (Non-Destructive Testing).

## Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ce216c9c-04d5-4b3b-9bcf-4e81d0950371>