# AIRCRAFT MAINTENANCE TECHNICIAN

### EDUCATIONAL PATHWAYS

#### **Entry Level**

Employers require applicants who have completed at least Year 10 but most prefer applicants who have successfully completed Years 11 & 12 This qualification is not suited and should not be used for people who are not employed in an aerospace engineering environment. It is not suited and should not be used for school students unless they are formally engaged in a traineeship in accordance with the Australian Apprenticeships policy.

#### **MEA20418 - Certificate II in Aeroskills**

This gualification applies to employees in aviation maintenance workshops who are required to perform repair and overhaul tasks on a limited range of aircraft electrical, hydraulic, pneumatic, electro-hydraulic and electro-pneumatic components, or who perform simple repairs on a limited range of structural components.

Units of competency that comprise this qualification are a mix of common units that apply to all technical employment streams covered by the MEA Aeroskills Training Package (core units) and technical stream units that are specific to a technical employment stream (elective units). The qualification provides significant credits towards higher level Aeroskills certificates.

#### MEA30118 - Certificate III in Aircraft Surface Finishing

This qualification is applicable to employees of aircraft maintenance organisations, or of specialist aircraft surface finishing organisations who are required to prepare the surfaces of aircraft and aircraft components for the application of surface finishes, apply paint, specialist finishes and decals or stencils. Also required is the application of aircraft registration markings, national markings and organisational logos.

#### **TRADE QUALIFICATIONS**

The following three qualifications are available depending on which industry role you are employed in. Each of these three qualifications define the exit from an apprenticeship and may apply to either aircraft maintenance performed on flight lines/ramps and in hangars, or to avionic component repair and overhaul performed in workshops. These outcomes are defined in two streams either aircraft maintenance stream or component maintenance workshop stream.

#### MEA40618 - Certificate IV in Aeroskills (Avionics)

This qualification applies to employees of Continuing Airworthiness Management Organisations (CAMOs) or to members of the Australian Defence Force (ADF) who perform scheduled inspections, fault diagnosis and repair, and modification of aircraft electrical, instrument and radio systems and system components.

#### MEA40718 - Certificate IV in Aeroskills (Mechanical)

This qualification applies to employees of Civil Aviation Maintenance Organisations (AMOs) or to members of the Australian Defence Force (ADF) who perform scheduled inspections, fault diagnosis and repair, and modification of airframes and airframe mechanical, hydraulic and pneumatic systems and components, and of aircraft engines and (where applicable) propellers.

#### MEA41318 - Certificate IV in Aeroskills (Structures)

This gualification applies to employees of Civil Aviation Maintenance Organisations (AMOs) or to members of the Australian defence Force (ADF) who are engaged in the repair and modification of aircraft structures. The qualification defines the exit from apprenticeship and may apply to work performed in hangars on the structure of complete aircraft and to work performed in workshops on structural components. The training pathways provide for work on both metal and composite structures. In some cases, primarily in the General Aviation sector, individuals may be also required to work on aircraft with wooden structures and/or fabric coverings. The applicable competencies are covered in the units MEA357 Inspect, test and repair aircraft fabric surfaces, MEA358 Re-cover aircraft fabric surfaces and MEA359 Inspect and repair aircraft wooden structures.

#### MEA50118 Diploma of Aeroskills (Avionics)

The qualification applies to individuals seeking the grant of a Civil Aviation Safety Authority (CASA) B2 Aircraft Maintenance Engineer Licence covering the supervision, performance and certification of avionic maintenance on aircraft that are type-rated by CASA for maintenance purposes. The qualification satisfies CASA requirements for the grant, under Civil Aviation Safety Regulation (CASR) Part 66, of Aircraft Maintenance Engineer Licence B2 when the skills and knowledge requirements align with CASA syllabus requirements in the Companion Volume CASA Interface and training has been delivered in accordance with the requirements of CASR Part 147 MEA50219 Diploma of Aeroskills (Mechanical)

#### The qualification applies to individuals seeking the grant of a Civil Aviation Safety Authority (CASA) B1 Aircraft Maintenance Engineer Licence covering the supervision, performance and certification of airframe, engine, electrical and structural maintenance on aircraft that are type-rated by CASA for maintenance purposes. The qualification satisfies CASA requirements under Civil Aviation Safety Regulations (CASR) 1998, for the grant of Aircraft Maintenance Engineer Licences in sub-categories B1.1, B1.2, B1.3 and B1.4 when the knowledge and skills requirements align with CASA syllabus requirements in the Companion Volume Implementation Guide Interface with CASA, and training has been delivered in accordance with the requirements of CASR Part 147.

For further information or advise contact mae@agrifooditab.com.au











National Careers Institute

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### CAREER PATHWAYS/SPECIALISATIONS

#### Surface Finisher

An Aircraft Surface Finisher carries out a range of treatments on the surface of an aircraft. You might spray paint surfaces or apply new printed materials and markings. Aircraft Surface Finishers may remove corrosion and other materials and apply protective treatments and sealants. Aircraft Surface Finishers should have a keen eye for detail and excellent observational skills. You'll need to be able to work as part of a team and manage your time well. Aircraft Surface Finishers must be safety-focused and should be able to prioritise tasks when necessary.

#### Structural Maintenance

This role relates to the bones of the aircraft and requires you to assist with the construction of the frames, trusses, fuselage, wings and engine cowlings. You may be required to weld, fabricate, join or form metal to construct these components of the plane. You could also be required to work with a range of high- tech fibre -reinforced and composites as well as wood and fabric depending on the type of aircraft you are working on.

#### Mechanical Maintenance

As a mechanical maintenance person, you will be required to overhaul, repair, modify, service and test airframe and engine components in a workshop environment after they have been removed from the aircraft structure. These include landing fear, wheels and brakes, pressurisation, pneumatic and hydraulic devices, environmental control systems, fire detection and prevention systems, undercarriage and ice and rain protection systems.

#### **Avionics maintenance**

Avionics specialists assist in the installation, maintenance modification, repair and fault diagnostics of electrical, electronic instrumentation and radio systems, as well as other electrical and electronic components and accessories on aircraft. These include generator ad power distribution systems, protection systems, autopilot and integrated flight systems, environmental control systems as well as radar and communication systems.

#### Aerospace Engineer

Aerospace engineers design build and test spacecraft, aircraft and other types of equipment used in aerospace exploration and research. They apply engineering principles specifically to creating devices that can perform specific functions in astronautical research. Professionals in this position often work for either government-run or private aerospace research companies. They have specialized knowledge that allows them to plan and develop equipment suitable for working in extreme environments. Their work requires them to apply their technical knowledge to overcome mechanical design challenges.



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### HINTS ON HOW TO APPLY FOR THIS JOB

## The 11 steps below outline the process you could follow to assist you to secure an apprenticeship as an aircraft technician -

**Step 1.** identify your strengths and weaknesses, especially in maths and literacy as these are essential to being successful in an aero skills career. Intermediate maths with a solid pass mark is the minimum. Additionally, subjects like technical drawing and metalwork, woodwork or engineering will give you some basic hand spatial and situational awareness skills that employers look for.

- Step 2. decide where you want to work; are you willing to relocate to get your dream job? There may be more opportunities in cities than in regional areas.
- **Step 3.** do some research, as to who the key employers are in this industry and choose the aircraft maintenance specialisation that you most like then make enquiries to see if they will take on apprentices.
- **Step 4**. research information about these employers or companies that you would like to work for; find out what the entry requirements or essential criteria are that must be met; such as do you need to complete an aptitude or other entry test before getting an interview?
- **Step 5.** make a shortlist of potential prospective employers to contact. You may also like to chat to your job search agent or search some of the online employment agencies such as SEEK, Jobsearch, Indeed or LinkedIn to find job vacancies for aircraft maintenance personel in your region.
- **Step 6**. create a quality resume by identifying key elements that should be included therein, and incorporate your academic achievements, experience, interests and passions.
- **Step 7.** identify and practice some interview skills with friends, parents or career advisors to learn tips on how best to perform in an interview.
- **Step 8.** contact potential employers by writing or directly calling them to demonstrate your interest and communication skills. Prospective employers highly value self-starters and prospective career aspirants with initiative who take such steps to seek for themselves employment as an apprentice.
- Step 9. talk with the prospective employer about the work they do and if they would be interested in taking you on as an apprentice. If you are still at school, you may be able to take up a school-based apprenticeship. There are opportunities available in some schools that allow you to take on a part-time apprenticeship known as a School-Based Apprenticeship or Traineeship (SBAT). Ask your school if they support this government initiative and ask the employer if they would be interested in such an arrangement. SBATs are a really good way to allow you to finish school and at the same time learn and earn as an apprentice.
- **Step 10**. Your employer should contact the Australian Apprenticeship Support Network (AASNs) https://www.australianapprenticeships.gov.au/ for further information on how to sign you up.
- **Step 11**. sign up to your apprenticeship with your employer (and support of your family if you are under 18 years old) to start "learning and earning" to be an aircraft maintenance technician.

For further information or advise contact

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### HAVE YOU CONSISDERED THESE RELATED JOBS?

#### Check out the industry links below for further information on a career as an aircraft technician.

	Australian Defence Force Jobs	
	International Air Transport Association (IATA)	
QANTAS 🤿	Qantas Apprenticeship program	

Here are some other jobs that you might consider in the Aeroskills industry -

- ⇒ <u>Aircraft Fabricator</u>
- ⇒ <u>Airfield Engineer</u>
- ⇒ <u>Aerospace Engineer</u>
- ⇒ **<u>Fitter and Machinist</u>**
- ⇒ <u>Mechanical Fitter</u>
- $\Rightarrow$  <u>Aircraft surface finisher</u>



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