

Table of Contents

1. <i>Australian Apprenticeships</i>	1
2. <i>DEWR – MISA – TRA – Benefits for Aviation MRO Sectors</i>	2
3. <i>DEWR’s Role in Provision of NVET Qualifications?</i>	3
4. <i>MISA – Manufacturing Industry Skills Alliance Role</i>	4

1. Australian Apprenticeships

The most pressing challenge facing civil aviation maintenance and manufacturing business today is a shortage of skills and labour. With workplaces under enormous strain, it is placing a handbrake on economic growth within the civil aviation industry.

Australia has faced skills and labour shortages during previous economic cycles but never so acutely as now, including a disconnect between CASA and national education.

Maintenance and manufacturing businesses need to support aircraft maintenance personnel apprenticeships for the long-term survival of aviation maintenance jobs in this country. The number of apprentices has always been proportional to the amount of flight hours flown within Australia.

Those school leavers that take STEM (Science, Technology, Engineering and Math) subjects at school have an advantage when seeking employment. For those that have not taken that pathway, there is a need for a pre-employment TAFE course, exactly like the NZ pre-employment course, as not all secondary schools have basic trade training.

Aircraft maintenance engineer apprenticeships are part of the “Aeroskills” training package. We know aviation apprenticeships cover skilled trades and it takes around three to four years to complete either the Avionics or Mechanical or Structural trades.

Traineeships are also available within a broad range of associated occupations and are typically completed over a one-to-two-year period. e.g., Specialised maintenance like Weight & Balance, NDI, Aircraft Surface Finisher, welder, engine overhaul, etc.

AMROBA is working with government and their agencies to develop career pathways that, hopefully, within a couple of years, see a full time theoretical/practical 2-year training course for the avionic and mechanical pathways. This course will enable a school leaver to continue their education to AQF IV trade qualifications in tertiary training prior to taking employment with maintenance organisations. To provide advancement, the qualified tradesperson can include, or, post qualifying as a tradesperson, do additional subjects of a AQF V diploma course to become a licenced aircraft maintenance engineer.

Alternatively, the standard pathway is through employment with aviation maintenance organisations that has the benefit of earning a wage while you study and gain the practical experience for your trade.

Apprenticeships Australia offers a range of schemes for funding and assistance to apprentices and trainees such as interest free trade support loans for tooling and everyday costs while completing your apprenticeship and a living away allowance if applicable.

Self-study and pass the CASA aircraft maintenance engineer examinations may be acceptable for an allied tradesperson but school leavers are looking for career pathways.

We cannot continue to do the same, this change is essential for the future.

2. DEWR – MISA – TRA – Benefits for Aviation MRO Sectors

Making the Department Employment & Workplace Relations (DEWR), *see item 3*, responsible for Annex 1 & 8 aircraft maintenance personnel training and qualification will provide industry direct input to the training packages required.

Instead of no government department or agency being responsible for training of maintenance personnel, DEWR, through MISA (*Manufacturing Industry Skills Alliance*), *see item 4*, will provide the aviation maintenance personnel training standards domestically to ICAO standards and to support each of the CASA licences.

In addition, in the future DEWR, through the TRA (*Trade Recognition Authority*), *see item 3*, should be able to assist with migration of qualified aircraft maintenance personnel' from foreign countries. like they could a few decades back.

The results of this government supported change will mean NVET qualifications will need to be identified for each licence system.

AMROBA suggests DEWR/MISA could no worse than adopt NZ aircraft maintenance personnel training packages by changing terminology from “**Aeronautical**” **Engineering** to “**Aircraft Maintenance**” **Engineering** and a starting workplan for DEWR/MISA is set.

A basic pre-employment training course such as **NZ aviation courses include:**

- **Certificate in Aeronautical Engineering (Pre-Employment Skills) (Level 3)**
- **Certificate in Aviation Engineering (Aircraft Manufacture) (Level 4)**
- **Certificate in Aeronautical Engineering (Applied Skills) (Level 4)**
 - *Aeronautical Composites,*
 - *Aeronautical Non-Destructive Testing,*
 - *Aircraft Mechanical,*
 - *Aircraft Powerplant,*
 - *Aircraft Structures, Composite/Metal*
 - *Armament,*
 - *Avionic Electrical Repair,*
 - *Avionic Instrument Repair,*
 - *Avionic Radio Repair,*
 - *Avionic Maintenance,*
 - *Rotorcraft.*
- **Diploma in Aeronautical Maintenance Certification-Engineer (Level 6)**
 - *Aeroplane, B1.1 & .2*
 - *Rotorcraft, B1.3 & 4*
 - *Powerplant Piston, B1 elective*
 - *Powerplant Turbine, B1 elective*
 - *Avionics B2*
 - *Electrical,*
 - *Instrument,*
 - *Radio*
- **Certificate in Aeronautical Engineering (Gas Turbine Overhaul) (Level III)**

Using these courses, originally made available around 2010 in NZ, enables a basic training plan to be developed and adopted to apply to the trade and licencing system in CASR Part 66. You never know, we might achieve some level of harmonisation that has resemblance with NZ and other Pacific nations trade and licencing standards.

It has taken the industry and politicians a long time to identify the right government department, DEWR, and this government is about to do this.

A government department that has regulatory responsibilities and direct links with both MISA and TRA that will provide VET qualifications for jobs in civil aviation.

CASA has been supportive of DEWR being responsible, as has the Department. What a massive benefit to our industry over the next few years as these courses become available.

VET qualifications for the various jobs in maintenance and manufacturing for the first time in Australia. *Back to the Front Page*

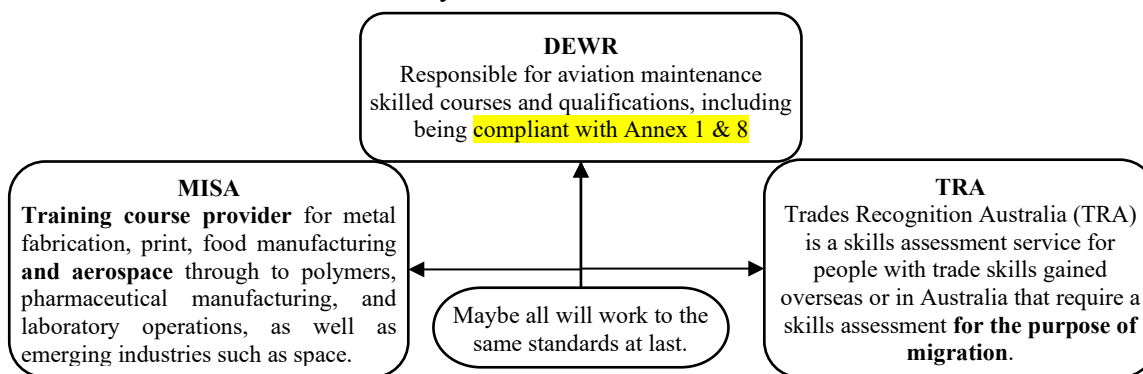
3. DEWR’s Role in Provision of NVET Qualifications?

AMROBA is impressed with the Hon Brendan O'Connor MP. Minister for Skills and Training and his Office support to provide applicable training courses for CASA’s aircraft maintenance engineer licence pathways. They have created a new Manufacturing Industries Skills Alliance (MISA) dedicated to providing trade based licencing courses.

In addition, the Chicago Convention’s responsibility for the competence of aircraft maintenance personnel will be given to the *Department of Employment and Workplace Relations* (DEWR), the government department responsible for providing skill courses supporting jobs in Australia. This will, for the first time, provide NVET qualifications not only for our licencing pathways, but for all aircraft maintenance personnel. see item 1.

AMROBA is impressed with the Department’s professional approach to the Convention’s Annex responsibility for the *competence of aviation maintenance personnel*. DEWR is already talking with MISA regarding the training courses and career pathways this industry needs.

Maybe DEWR, MISA and TRA (Trade Recognition Authority) can all be on the same track for the benefit of our industry sectors.



The outcome of the aviation manufacturing and maintenance personnel tertiary trade-based career pathway education system in Australia will be the provision of national qualifications that are both globally and nationally industry acceptable and CASA can confidently rely on to issue aircraft maintenance engineer licences that are also comparable to other major aviation trading nations.

This will enable career pathways to be traced through the aviation maintenance personnel qualification training system courses, especially if there is a LAME level of supervision and a LAME level of maintenance organisation management.

Students using the VET training packages courses to determine their career pathway, will be able to see ways to plan.

For instance, ICAO AME Training Manual in Chapter 3 identifies LAME specific training that not only includes LAME privileges training subjects but also LAME management knowledge subjects to manage an aircraft maintenance organisation at variable complexities of aircraft designs. They are added subjects to the trade training.

The ageing of the aviation maintenance population and falling numbers interested, in current generations, mean that across a wide range of aviation maintenance and manufacture, a significant number of workers have either retired or are about to retire, leading to substantial long term participation issues.

[Back to the Front Page](#)

4. MISA – Manufacturing Industry Skills Alliance Role.

A new training course provider with new responsibilities has been created by Government. Notice that Federal & State Skill Ministers are responsible for endorsing new training packages. Three manuals have been produced to guide the process.

Training Package Organising Framework

The implementation and success of the industry engagement arrangements will be underpinned by training package products development rules, owned by Skills Ministers, that are reviewed regularly to ensure they remain fit for-purpose. These rules, referred to as the Training Package Organising Framework (TPOF), comprise the:

- **Standards for Training Packages ('the Standards')** – setting the overarching design and development requirements of training products for endorsement by Skills Ministers.
- **Training Package Products Policy (TPPP)** – outlining the design rules that must be adhered to when developing or modifying a training product.
- **Training Package Products Development and Endorsement Process Policy (TPPDEPP)** – outlining the process for developing and seeking the endorsement of training products.

Skills Ministers will use these rules to ensure Jobs and Skills Councils produce high quality training products that:

- **Are user-centric**, ensuring the needs of learners, industry, trainers and assessors, training providers and regulators are met through genuine and balanced engagement with stakeholders, supporting relevant, transferable skills and labour market mobility across industries, sectors and occupations.
- **Are anchored in good design**, focussing on simplicity, consistency, longevity, flexibility, and accessibility. System-wide reforms will see the reduction of over-prescription, duplication, and narrow specificity in training products. Development and provision of industry-specific, cross-sector and foundational skills will enable learners to realise their individual learning potential, promote lifelong learning, and facilitate better VET, higher education, employment and career pathways.

Well, we have many jobs in aviation that currently do not have specific VET qualifications that meet other government department/agency standards as well as not supporting jobs in aviation maintenance.

VET training packages specify the knowledge and skills required by individuals to perform effectively in the workplace, known as 'competencies' and expressed in units of competency. Training packages also detail how units of competency can be packaged into nationally recognised skill sets and qualifications that align with the AQF.

Jobs and Skills Councils, MISA, are industry owned and led entities that are funded by the Commonwealth. MISA performance will be managed by the Commonwealth Government Department responsible for skills and training (DEWR).

Rotorcraft, piston powered aeroplanes and non-pressurised aircraft maintenance courses are needed to address the critical shortage of LAMEs. It will be a priority for MISA as civil aviation maintenance transitions to a normal trade based licencing system.

MISA will be under pressure from DEWR and especially industry that desperately needs to stop drain and attract/retain new apprentices through VET pathways that are applicable to the jobs in aviation maintenance.

For instance, businesses also need computer accounts, procurement, and records skills.

[Back to the Front Page.](#)