



Many of the following required changes have been previously agreed with CASA but the process of change proposed by CASA in the past has been not full adoption of another regulatory system, not giving effect to Convention Annex standards – but unique Australian proposals which we disagree with.

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General

For many years, AMROBA has made requests for changes, that don’t reduce safety, in regulations, MoSs, and other requirements imposed by CASA to remove mainly unnecessary red tape in the interest of making aviation engineering and maintenance attractive employment jobs for personnel.

CASA, under different regimes, have made statements to adopt/implement/harmonise requirements but very little has been done to make the changes. The government department and CASA has not made changes years after the deficiency with current requirements have been identified and acknowledged and, in many cases, CASA committed to make necessary changes.

The inaction or inability to progress previously identified changes has resulted in industry losing confidence in the ability of government/agencies to progress change.

How many CASA “workplans” do we need to see produced before there is action?

Industry, on the other hand, create workplans, implement and complete the tasks in a planned time. If they didn’t, aircraft would not be flying.

The industry is facing a massive hurdle to overcome the negative perceptions of jobs in aviation. School career advisors openly advise students against such a career. We have to impress on a limited number of employable available personnel that the aviation engineering and maintenance sectors are, or should be, an industry of choice for employment.

Apprenticeships are designed to support both the professional growth of workforce participants and business growth. Apprenticeships offer an efficient path to gaining valuable credentials and qualifications and thus are an important component of many career pathways. Today, training is seen as life-long concepts and employable personnel can therefore attain transportable skills and qualifications. The system is not supportive of apprenticeships and trade qualifications.

The fact is there are a limited number of employable personnel currently available to trade-based industries and only those industries that are providing academically based progressive trade training

pathways with competencies that, under the national recognised prior learning (RPL) system, are recognisable by other jobs seem to be having success in employing their workforce.

These industries have reviewed their training and adopted a progressive academic pathways where, to attain higher qualifications, you need qualifications at one level to advance to the next level or add another qualification at the same level.

Progressive academic pathways

Full adoption of the European Part 66 system would provide higher flexibility with additional licences and ratings, that would enable adopting and implementing a “progressive licence training pathways system”.

Local industry samples of “progressive academic pathways” implemented the same progressive pathway that EASA applied to the B2L avionics system licence. Those industry sectors that have adopted progressive training pathways had full support from unions, regulators and training sectors (National and State) to develop their progressive systems. Refer to AMROBA’s proposed [Progressive Training Pathways chart](#) at the end of this document.

Qualifying personnel in the engineering & maintenance sectors is the biggest hurdle to maintaining employment levels to support a growing general aviation and aerial work operational levels.

Engineering

Engineering matters would not exist today if CASA had fulfilled their previous commitment to re-align CASR Part 21 with FAR Part 21 and realign CAR Part 21 Subpart J with EASR CS-21 Subpart J.

- These tasks have been on the CASA’s workplan for many years but no realignment has happened.
- The time it takes for each regime of CASA to develop a workplan, is the cycle between elections.

New Government – new workplan – no outcomes and on it goes, year after year.

Consequential Changes

AMROBA is fully aware of the consequential regulatory changes that are associated with any change to the regulations or standards.

The realignment of CASR Part 21 with FAR Part 21 would remove current dated standards and processes and adopt modern standards and processes more globally amenable.

For instance, all manufacturers would need to implement quality manufacturing systems; Class 1, 2 & 3 component classifications deleted to bring Australia into line with global standards and practices. Responsibility for designs and manufactured products are placed on the designer & manufacturer. Changes that will encourage growth in manufacturing.

The realignment of CASA Part 66 with EASR Part 66 would add licences and ratings beneficial to the maintenance industry. The additional licences and ratings will need two-three years to transition and for industry see the benefits.

These two projects alone will have significant differences to current practices and will need 1-2 years transition period if the current participants are to be transitioned to the new system

The introduction of CASR Part 43 is a major change that aligns the maintenance industry with global standards. The consequential regulatory changes to adopt FAR Part 43 needed to start prior to the making of this part.

Of all the CASR Parts, this one changes many CASA documents and procedures & processes.

For instance, instead of a CASA Maintenance Release Form 918, the FAR system applies the ICAO system of maintenance release as “return/release to service” **signature for the maintenance been performed**. There is no signed release that expires in 100 hours.

e.g. The CASA 918 form can continue as an ‘Aircraft Flight and Technical Log by removing the top section related to being a maintenance release. This was proposed in the late 1990s by CASA.

This change brings Australia into line with global standards used by most ICAO member States.

Part 43 could take 2-3 years to fully implement. During this period, CASA field inspectors will need to work with industry participants, especially in GA & Aerialwork to smooth the transition without impacting on the industry's **positive safety culture**.



Maintenance Workplan Priority	Engineering Workplan Priority
Shortage of Maintenance Personnel	Harmonise with FAR/EASA
<p>1. Fast track foreign LAME System (ASAP)</p> <p>This is a very high priority due lack of available qualified personnel in Australia because of a failed AME training system under current regulations.</p> <ul style="list-style-type: none"> ➢ Acceptance of foreign LAMEs must be based on “experience” assessed by the employer, not on initial AME training programs for an initial AME licence. ➢ Certification for maintenance and release to service standards may look different in some countries but verifying what differences that country has with Annex 1 will, Annex 1 Chapter 4 should be the basis of acceptance. <p>Refer 1M below</p>	<p>1. Realign Part 21 with FAR Part 21</p> <p>CASA committed to urgently realign with FAR Part 21 a decade back. It is common knowledge globally that Australia’s aviation engineering regulations are at least 15 years out-of-date with modern global standards.</p> <ul style="list-style-type: none"> ➢ CASR 21 is based on ‘industry directed’ Australianised FAR Part 21. ➢ Aligning with FAR Part 21 is the basis of the BASA with the USA & FAA. ➢ Without realignment, this prevents agreements with other nations accepting Australian aviation designs, products, and services. <p>Refer 1E below</p>
<p>2. Realign Part 66 fully with EASR Part 66</p> <p>Although many state the FAA AMT is a better pathway, this is a high priority to adopt and implement the missing provisions that make the EASA AME licencing system work. It must be Australianised to meld with other legislation & Regulations. E.g. NVET standards</p> <ul style="list-style-type: none"> ➢ In realigning with EASR Part 66 A & B regulations, include adoption of the RTO exemption, the B2L & B3, as well as EASR Pt66 group ratings and using CAR 31 group ratings that worked under CAR 1988. <p>Refer 2M below</p>	<p>2. Realign Part 21 Subpart 21J including adding Design Engineer function.</p> <p>This issue was discussed with CASA about a decade ago and agreement was reached to urgently amend this regulatory requirement by aligning correctly with EASA CS 21 Subpart J — Design Organisation Approval, specifically regulation 21.A.245 Resources</p> <ul style="list-style-type: none"> ➢ Currently the designer aspects are not included but 2 verification engineers apply. ➢ Design + Verification + Release to service <p>Refer 2E below</p>
<p>3. Acceptance of NVET AQF qualifications in lieu of CASA Part 66 module examinations.</p> <p>This condition must be a result of a re-written CASR Part 66 and the current review of the NVET training being carried out by MISA. This review will provide various pathways to meet CASR Part 66 trade + licences.</p> <p>Refer 3M below.</p>	<p>3. Devolve Regulatory functions to ADOs (e.g. FAA/EASA)</p> <p>When adopting the changes to Part 21, the devolvement of functions to the CASR Part 21 Subpart J ADO must also comply with FAR Part 183 ADO functions to remain compliant with US/Australia BASA ADOs can alleviate CASA functions by providing industry locality engineering approval functions and services.</p> <p>Refer 3E below</p>
<p>4. Making of CASR Part 43 – adopt FAR Part 43</p> <p>Change reference to FAR Part 65 to CASR Part 66 and adoption of FAR Part 43 ACs is crucial to prevent errors like past part adoption of other nation’s regulations.</p> <ul style="list-style-type: none"> ➢ Adoption of FAA AC 43-9C, for example, will also address issues like details needed to be kept in maintenance records. ➢ Is FAR Part 43 right for Australia or add adoption of EASA CAMO amended to include CAR30 AMOs. <p>Refer 4M attached</p>	<p>4. Adoption of FAA VARMA Model</p> <p>Adoption of the FAA vintage aircraft replacement & modification program is linked to FAA AC 43-18 and AC 23-27 processes.</p> <ul style="list-style-type: none"> ➢ the US FAA’s Vintage Aircraft Replacement and Modification Article (VARMA) program enables parts that are manufactured outside of the traditional FAA design and production approval system to be used. ➢ The VARMA is aimed at streamlining arrangements for replacing a/c parts on vintage aircraft. <p>Refer 4E below</p>
<p>5. Lack of Specialised Skills</p> <p>Diminishing numbers of NDT Level III</p> <ul style="list-style-type: none"> ➢ An ageing workforce with few new starters ➢ Other specialised skills also diminishing numbers <p>Refer 5E below</p>	<p>5. International Agreements assist trade</p> <ul style="list-style-type: none"> ➢ Without BASAs with many nations, the manufacturing industry cannot sell their products globally. ➢ Coordination with DITRDCA and DFAT by whom? <p>Refer 5E below</p>

Each of the above required changes are needed urgently, some have been proposed by CASA for a long time. These are not the only changes that must happen but many not listed will be consequential actions as part of these items.

There are two basic sectors, engineering, and maintenance, that need action started this year and be completed prior to government putting regulatory changes on hold for the next election.

Some items can be completed without regulation change but may need some MoSs amendments or an instrument issued by CASA.

AMROBA is always available to discuss these issues and assist with solutions that benefit engineering/maintenance industry participants.

Amplification

1M. Fast track Foreign LAME System (ASAP)

AMROBA has submitted detailed processes that can be used based on previous methods of licencing experienced foreign LAMEs.

An acceptable foreign LAME is one where the foreign country lodged differences to Annex 1, Chapter 4 does not exclude the acceptance of the foreign licences.

Most countries have a system where the LAME signs the maintenance release, however described, and certifies completion of maintenance.

In addition, most countries have requirements for completion of critical maintenance to be signed by LAME complying with ICAO Annex 1, Chapter 4 AME privileges.

In Australia, the onus must be left with the employer to determine whether the LAME's experience is acceptable so the employer, once the LAME has completed initial company training, to be able to sign for completion of maintenance. After 1 month employment, the employed foreign LAME should be eligible to apply for an aviation law examination with CASA, applicable to CAR30/Part 145 LAME responsibilities.

It is up to the employer to identify further training that any of their staff require, not just the foreign LAME.

1E Realign Part 21 with FAR Part 21(ASAP)

Why is government keeping the engineering system in the past with a regulatory system not recognised or accepted by other major aviation nations?

AMROBA highlighted the need to realign CASR Part 21 with FAR Part 21 after major rewrite of FAR Part 21 in 2009. The FAR changes were made to harmonise more globally so their engineering businesses could trade with other nations. The change improved harmonisation with EASA, UK, Canada and Brazil.

Failure to realign our Part 21 regulations post 2009, has meant our regulations are very dated, meaning global trade and participation is being denied to our engineering and maintenance businesses.

CASA CEO Carmody gave a commitment to **urgently** realign CASR Part 21 with FAR Part 21 at a FAA-CASA bilateral meeting in Canberra years ago. No action since.

How can industry trust CASA to do anything seeing their own management committed to urgently realign with FAR Part 21 many years ago and no change has ever happened?

Civil aviation engineering has struggled for international recognition for decades, aligning with FAR Part 21 was one aspect to attain global recognition. This has been negated by CASA not staying aligned with FAR Part 21 that also underpins the Australian Bilateral Aviation Safety Agreement with the USA.

Refer previous submissions.

2M Realign Part 66 fully with EASR Part 66

Australia has an aging civil aviation maintenance workforce because employment to aviation maintenance jobs is not attractive and very costly to the unemployed today.

The current EASR Part 66 is designed to enable "progressive training pathways" that will be more attractive to young potential employees.

The EASA system is based on 4 mechanical training pathways for an 'airframer' who adds a type of engine to attain a licence. See [chart at end of document](#).

Adoption of the latest EASR Part 66 would enable NVET progressive training pathways to be implemented.

For instance, instead of a full blown B2 being the only option, adoption of EASA's Part 66, B2L avionic system licence would provide a progressive trade training and licencing training pathways to attract new employees.

Work is currently underway with MISA to develop multi progressive pathways for the B1.

AMROBA's progressive training proposal is at the end of this document.

EASA also included a B3 for aeroplanes under 2000Kgs, The B3 is a combined B1/B2 as applicable to this class of basic aeroplanes.

EASA Part 66 "ratings" must also be adopted and expanded in a similar manner to CAR31 group ratings.

AMROBA supports **urgent** adoption of EASR Part 66 group ratings classified into the following groups:

Group 1, Group 2 (a), (b), (c), Group 3 and Group 4.

Aeroplane/helicopters

Group 1: *complex motor-powered aircraft, helicopters with multiple engines, aeroplanes with maximum certified operating altitude exceeding FL290, aircraft equipped with fly-by-wire systems, gas airships other than ELA2 and other aircraft requiring an aircraft type rating when defined as such by CASA.*

CASA may decide to classify into Group 2, Group 3 or Group 4, as appropriate, an aircraft which meets the conditions set out in the first subparagraph, if it considers that the lower complexity of the particular aircraft justifies so.

Aeroplane/helicopters

Group 2: *aircraft other than those in Group 1 belonging to the following subgroups:*

(i) *subgroup 2a aeroplanes:*

— *single turboprop engine aeroplanes,*

— *those turbojet and multiple-turboprop aeroplanes classified by CASA in this subgroup because of their lower complexity.*

(ii) *subgroup 2b helicopters:*

— *single turbine engine helicopters,*

— *those multiple turbine engine helicopters classified by CASA in this subgroup because of their lower complexity.*

(iii) *subgroup 2c helicopters:*

— *single piston engine helicopters,*

— *those multiple piston engine helicopters classified by CASA in this subgroup because of their lower complexity.*

Aeroplanes

Group 3: *piston-engine aeroplanes other than those in Group 1.*

Others

Group 4: *sailplanes, powered sailplanes, balloons and airships, other than those in Group 1.*

To make it easier to attain a CASR Part 66 licence in GA, the airframe structures training could be metal and/or composite with wood being a selective option if employed with a business that maintains rag & stick aeroplanes.

Note: If metal or composite are selected, the other would need a bridging course/examination to remove the exclusion.

Wood would be a standard exclusion unless wood subject is a selective subject during training.

Foreign NAAs amend their regulations to assist employment in aircraft maintenance, it is time CASA adopted that policy so aviation jobs can be made more attractive to the available Australian employment pool.

2E Realign Part 21 Subpart 21J including adding CASA Design Engineer functions.

AMROBA and CAA's Part 21 project managers met not long after Part 21 was amended to add Subpart J and subpart M to address design organisation approvals and design engineer approvals.

The adopted subpart J from the EASRs, did not adopt fully or properly and lost aviation engineering standard of worker, supervisor and manager from the design system.

- The person developing the documentation, the design engineer, for a repair, modification or new item, is missing from CASR but not from EASRs.
- The engineer performing design verification is duplicated in CASRs but not in EASRs.
- The head of design that releases the design exists in both.

Like other engineering regulative amendments, nothing happens to correct identified issues.

Note: These amendments to Part 21 blindsided industry project committee members that had agreed to a CASR Part 146 design organisation approval system, the same as New Zealand.

3M. Progressive Training Model applied to Aviation Maintenance Personnel.

A progressive training system enabling a progressive licence system, will need cooperation between employers, unions, NVET course developers and acceptable competency-based training courses that align with a progressive AME licencing system. All need to be on the same page and supporting the proposal.

The first decision is to look at the Part 66 licenses, A, B1/B2 & C and their appropriateness to the Australian maintenance industry, accepting that CASA adopted the A and B1-1, 2, 3 & 4 and the B2 from European aviation law.

Many have put to AMROBA that the full avionic/mechanical trade level is the NVET AQF IV level, and a basic trade level is AQF III. Licencing is AQF V level, which is more a para-professional level.

AMROBA has taken all these inputs and reviews and suggests the following working model.

B1. The European *mechanical* licence system is based on airframes and airframe systems (including associated avionics, electrical and structures) applicable to each sub licence.

i.e. Airframe + associated electrical + associated avionics (basic level) + aircraft kind (small aeroplane, large aeroplane or helicopter + engine. (full)

The B1 already has progressive pathways that needs further development by adoption of EASR additional licences and group ratings.

B2. The European *avionics* licence system is based on a basic avionic qualification (B2L) with added avionic systems ratings to achieve a full B2 licence or a full B2 licence.

(requires CASA cooperation to adopt the EASR Part 66 B2L.)

The European “A” servicing licences are a subset of each of the B1 sub licences based on aircraft specific line servicing skills. Mainly focused on practical skills.

For the NVET system to adopt and implement a progressive training system so CASA can issue licences, employers, unions, associations, training course developers and CASA need to work together.

3 E Devolve Regulatory functions to ADOs (e.g. FAA/EASA)

AMROBA supports closer alignment with the FAA engineering methodology and the empowerment of Part 21 Subpart J ADOs, for the same reasons as past Australian regulators back to DCA introduced approved design organisations/individuals. Realignment of CASR Part 21 with FAR Part 21 will provide the foundations for this change. The FAR system has empowered ODAs and Manufacturers by devolving functions.

Design organisations/individuals can provide certification approvals in a timelier manner than CASA thus meeting client timeframes that government departments/agencies cannot provide.

FAA “The Administrator may delegate to a qualified private person, or to an employee under the supervision of that person, a matter related to— (A) the examination, testing, and inspection necessary to issue a certificate under this chapter; and (B) issuing the certificate.”

FAR Part 183, Subpart D—Organization Designation Authorization

“Consistent with an ODA Holder's qualifications, the Administrator may delegate any function determined appropriate under [49 U.S.C. 44702\(d\)](#).”

FAA Part 183, Organization Designation Authorization (ODA) means the authorization to perform approved functions on behalf of the Administrator.

44702(d) DELEGATION.

“(1) Subject to regulations, supervision, and review the Administrator may prescribe, the Administrator may delegate to a qualified private person, or to an employee under the supervision of that person, a matter related to— (A) the examination, testing, and inspection necessary to issue a certificate under this chapter; and

(B) issuing the certificate.

(2) The Administrator may rescind a delegation under this subsection at any time for any reason the Administrator considers appropriate.

(4) (A) With respect to a **critical system design feature** of a **transport category airplane**, the Administrator may not delegate any finding of compliance with applicable airworthiness standards or review of any system safety assessment required for the issuance of a certificate, including a type certificate, or amended or supplemental type certificate, under section 44704, until the Administrator has reviewed and validated any underlying assumptions related to human factors.

(B) The requirement under subparagraph (A) shall not apply if the Administrator determines the matter involved is a routine task.

(C) For purposes of subparagraph (A), the term critical system design feature includes any feature (including a novel or unusual design feature) for which the failure of such feature, either independently or in combination with other failures, could result in catastrophic or hazardous failure conditions, as those terms are defined by the Administrator.”

See previous submissions.

4M Making of CASR Part 43 – adopt FAR Part 43

CASR Part 43, when made, based on FAR Part 43 is the highest risk to general aviation survival unless transitional regulations are implemented so no business is impacted by consequential issues not addressed.

AMROBA members are concerned because every large change that CASA and its predecessor has introduced has seen many industry participants being not transitioned into the new regulatory system.

Transition without loss of one current participant must be the result. Regulatory systems introduced in the past have done irreparable damage that has squeezed participants out of aviation.

Adoption of FAR Part 43 requires CASA to top & tail the numerous FAA associated ACs and associated regulations, e.g. Part 91, to ensure those associated regulations have also been amended so FAR Part 43 can be implemented to perform the same functions in Australia.

CAR regulations, schedules, CAOs and other requirements that will be repealed need to be provided early to industry so CAR30 AMO manuals can be revised.

AMROBA is totally against the use of ICAO Annex 1, Chapter 4 description of a LAME, *Aircraft Maintenance Technician*, to identify the Repairman in Part 43. This title will give an impression that AMT are Part 1 LAMEs. It also affects many businesses that have identified employed positions as AMTs.

Part 43 needs to refer to CASR Part 66 and include FAR Part 65 Subpart E Repairman into CASR Part 66.

Adoptions that have added unique Australian terminology and requirements have failed in the past, time to stop these regulatory mistakes of the past and do adoption correctly so the changes introduced will work.

See previous submissions.

4E Adoption of FAA VARMA Model

Maintaining ageing aircraft is becoming increasing harder with relation to attaining parts and materials. There are many like newer parts and materials that are available that could be used except current processes add costs and make them unusable.

The FAA, a few years back, implemented their “*Vintage Aircraft Replacement and Modification Article program*” that introduced a more cost-effective process to use off-the-shelf items to replace legacy aircraft items using a streamlined process.

The FAA produced *AC 23-27 Substitution for Vintage Aircraft* that applies to small aircraft types certificated before January 1, 1980, that have a maximum certificated weight of 12,500 pounds (5700Kgs) or less, fixed wing, unpressurized, reciprocating engine or sailplanes. Follow-on type certificate (TC) models of the same aircraft, or a derivative thereof, which may be assigned a later TC date, also meet these criteria.

This advisory circular (AC) provides guidance for substantiating parts or materials substitutions to maintain the safety of old or out-of-production general aviation (GA) aircraft, or other GA aircraft where the parts or materials are either difficult or impossible to obtain. This AC also provides guidance about the data required to gain Federal Aviation Administration (FAA) approval for making these substitutions. This AC does not include specific approvals for installations.

AMROBA has requested CASA accept the FAA VARMA program by top and tailing the above AC as it provides clarity and processes not available in the Australian system.

AMROBA is available to provide CASA with an Australian version of the FAA AC.

See previous submissions.

5M Lack of Specialised Skills

As industry becomes more dependent on specialised specialist, in particular, level 3 NDI personnel. [List of Aviation Level 3](#) NDI personnel.

These level 3 are needed for some inspections, assessment and training needs of Level 1 & 2 NDI personnel by Level 3 NDI personnel.

As can be seen from the NANDTB list of qualified NDI Level 3, the availability is limited and list of training organisations is limited to 2 providing training in Brisbane Perth and Melbourne.

There are NDI level 2 NVET qualifications that could be recognised by CASA and adopted by MISA for qualification of CASA NDI approvals. These competencies are already contained in the Metal and Engineering Training Package. [MEMSS00002 - Non-Destructive Testing - Level 2 NDT practitioner](#)

It covers the skill and knowledge requirements that may lead to certification against AS 3998/ISO 9712 - LEVEL 2 in the following methods:

- MEM18001C Use hand tools
- MEM24002B Perform penetrant testing.
- [MEM24006B Perform eddy current testing.](#)
- [MEM24008B Perform ultrasonic testing.](#)
- MEM13013B Work safely with ionizing radiation.
- MEM24010B Perform radiographic testing.
- MEM24012C Apply metallurgy principles.

The question is why would an aviation NVET qualified person also need to be approved by NANDTB?

To maintain the NVET qualification, the Level 2 could do an examination with a NVET approved training organisation capable of providing the training.

5E International Agreements to assist trade

Unlike aerospace manufacturing, civil aviation design and manufactured products are restricted from global trade unless the CASA certified product is acceptable to other nations' Certification Authorities and governments. Each government/Aviation Authority ensures that the other nations system of certification, certificates and approvals is harmonised with their system of certification. This is why CAR Part 21 must be harmonised with FAR Part 21.

The basis of these agreements between nations and Aviation Authorities are set by the CMT.

Basically, since 2015, the [Certification Management Team](#) (CMT) consisting of Brazil (ANAC), EU (EASA), US (FAA) & Canada (TCCA) control the product certification standards and practices that we need to achieve to trade with selected nations by use of international agreements.

Excerpts from CMT's *Collaboration Strategy*:

“Moreover, increasing levels of domestic certification activity and validation projects from other emerging States of Design (Australia) are placing growing resource demands on the four authorities. Therefore, maximising the use of existing bilateral partnerships to fully recognise the findings made by the four partners is essential to reduce the efforts currently expended on validation programs.”

“Agreement among the CMT partners provides a critical foundation for harmonisation among ICAO member States and provides the ability needed to adapt without compromising the longstanding record of safe oversight of the aviation community.”

The CMT's agreed process to obtain recognition of certified products are:

- “Reciprocal Acceptance of Certificates and Approvals: An approval in the system of one party constitutes a valid approval in the other party's system without any technical involvement or issue by the Validation Authority (VA).
- Streamlined Validation of Certificates and Approvals: The issuance of an approval in the system of party leads to the issuance of an approval by the VA without any technical involvement.
- Validation Work Plan: The level of involvement (LoI) by the VA is established based on a set of risk based principles rather than a comprehensive review of compliance findings made by the Certifying Authority (CA). this process applies a work-plan that incorporates active management oversight to ensure common principles and procedures are applied to maximise reliance on the CA's findings.”

“ICAO Aeronautical product. Any aircraft, aircraft engine, aircraft propeller or a part there of including any associated computer system and computing software.”

At this moment there is no government/agency legislatively responsible to negotiate and obtain agreement similar to the current Bilateral Aviation Safety Agreement with the US government and the FAA.

This is a government function, industry has no role in setting up what are civil aviation free trade agreements.

When will government take responsibility to obtain such international agreements?

The Asia Pacific Rim countries would be a good start to obtain Bilateral/Multilateral Aviation Agreements so Australian Aeronautical products can be exported to those countries.

Amplification NVET Support – Aircraft Maintenance:

Currently the training courses for Licenced/Aircraft Maintenance Engineers listed under the NVET system are:

- Certificate II in Aeroskills
- Certificate II in Aircraft Surface Finishing
- Certificate III in Aircraft Surface Finishing
- Certificate III in Aeroskills (Mechatronics)
- Certificate III in Aircraft Life Support and Furnishing
- Certificate IV in Aeroskills (Avionics)
- Certificate IV in Aeroskills (Mechanical)
- Certificate IV in Aircraft Surface Finishing
- Certificate IV in Aeronautical Life Support Equipment
- Certificate IV in Aeroskills (Armament)
- Diploma of Aeroskills (Avionics)
- Diploma of Aeroskills (Mechanical)
- Diploma of Aviation Maintenance Management
- Diploma of Aeroskills (Non-Destructive Testing)
- Advanced Diploma of Aviation Maintenance Management
- Advanced Diploma of Aviation Non-Destructive Testing
- Advanced Diploma of Aeronautical Engineering
- Advanced Diploma of Avionic Engineering

For any potential employee researching training to support an aircraft maintenance engineer/aircraft maintenance technician job, these classifications do not assist with attracting future employees.

Nothing in aviation regulations or requirements link to these qualifications.

Industry Job Classifications -

- ❖ Aircraft Maintenance Engineer – non-pressurised, piston powered aeroplanes
- ❖ Aircraft Maintenance Engineer – pressurised, piston/turbine powered.
- ❖ Aircraft Maintenance Engineer – helicopters
- ❖ Licenced Aircraft Maintenance Engineer – B1.1 pressurised aeroplanes
- ❖ Licenced Aircraft Maintenance Engineer – B1.2 non pressurised, piston/turbine powered.
- ❖ Licenced Aircraft Maintenance Engineer – B1.3/4 helicopters
- ❖ Licenced Aircraft Maintenance Engineer – B2 avionics
- ❖ Licenced Aircraft Maintenance Engineer – Chief Engineer
- ❖ Licenced Aircraft Maintenance Engineer – Engineering Manager

Component maintenance

- ❖ Aircraft Maintenance Technician – Avionic component workshops
- ❖ Aircraft Maintenance Technician – Engine component workshops
- ❖ Aircraft Maintenance Technician – Mechanical Systems workshops
- ❖ Aircraft Technician Painter – Surface finishing/painting
- ❖ Aircraft Maintenance Manager – Workshop Managers
- ❖ Non-Destructive Inspection – Level 1 Non-Destructive Testing
- ❖ Non-Destructive Inspection – Level 1 Non-Destructive Testing
- ❖ Non-Destructive Inspection/Test – Level 3 Non-Destruction Inspection/Tests

Many other supporting jobs are not listed above but do exist.

What is and will be important is to provide bridging courses between future courses as proposed on this page.

Bridging courses, for example:

- B1.1 to B1.2
- B1.1 to B1.3/4
- B1.2 to B1.3/4
- B1.3/4 to B1.1
- B1.3/4 to B2

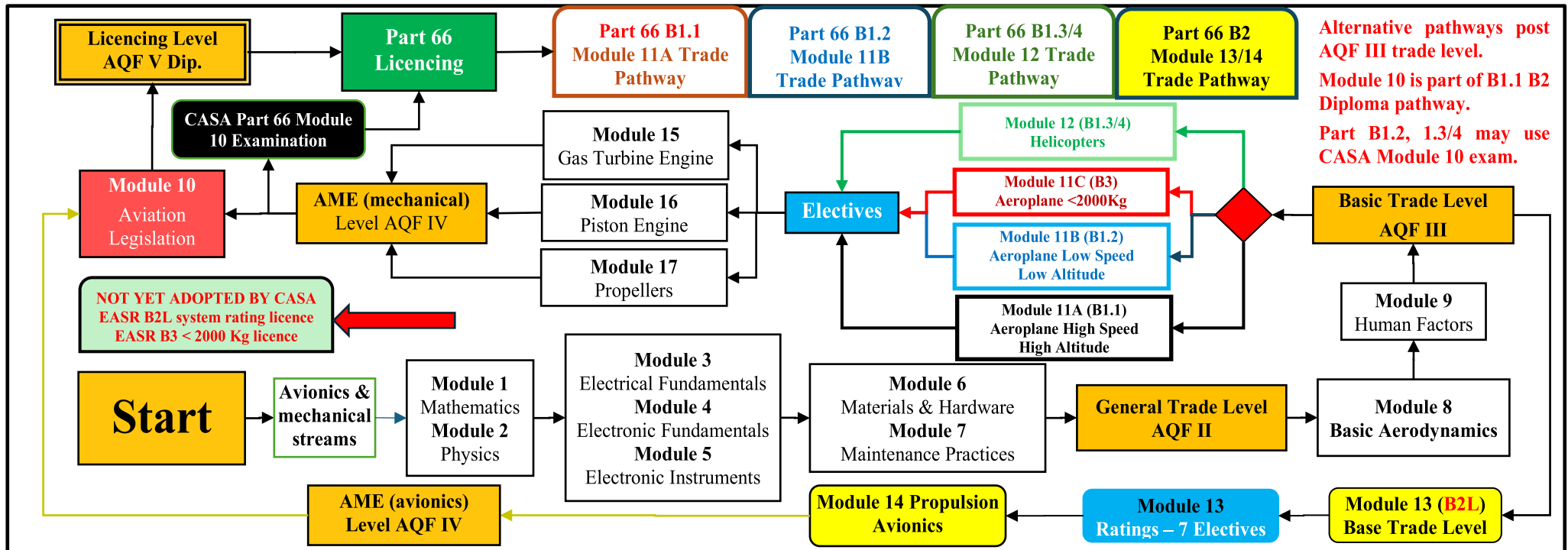
Acceptable Aviation Terminology Assists with Global Recognition

AMROBA, on behalf of members and others, recommend that CASR & DEWR should meet and agree to adopt international terminology for these jobs.

It will mean that employers will be able to attract potential employees easier because potential employees will be able to trace academic pathways to support careers in aircraft and aircraft component maintenance.

AMROBA

AMROBA's Proposed Progressive Trade/Licencing Training Pathways



Licencing	B1.1 Large aeroplane	B1.2 Small Aeroplanes	B1.3 Large helicopter	B1.4 Small helicopters	B3 Aeroplane <2000Kgs	B2 Avionics All Systems	B2L Avionics
Plus Module	10						
Specialised Tradespersons	AME Aeroplane Mechanical – High Speed/High Altitude	AME Aeroplane Mechanical – Low Speed/Low Altitude	AME Helicopter Mechanical turbine powered	AME Helicopter Mechanical piston powered	AME Mechanical piston powered	AME Avionics All systems	AME Avionics Systems
Modules	11A +15 and 17, if appl	11B + 16 and 17	12 + 15	12 + 16	11C	13 + 14	
Basic Tradesperson	Aircraft Maintenance Engineer						
Modules	1, 2, 3, 4, 5, 6, 7, 8, 9 avionic or mechanical pathway						

Note 1: The B1.2, 1.3/4 pathways are to be added pathways in addition to the NVET current B1.1 & B2 diploma courses.

Note 2: The B2L, based on EASR Part 66 B2L avionic system licence, added to address shortages in the avionics trade/licences.

Note 3: The B3, based on EASR Part 66 B3, added to address shortages in the GA mechanical trade/licences.

Note 4: The proposed Part 43 Repairman training streams not added but will need NVET training pathways.