

Remove Regulatory Duplication

Aviation has been continually [regulatory] reformed ever since a Parliamentary Inquiry in the late 1980s. What that inquiry identified was unnecessary administrative duplication by the Authority of other Authorities certificates/approvals. Economic reform to remove duplication started to happen with the adoption of FAR Part 21 and the issue of aircraft Type Acceptance Certificates. This was followed up with the making of CARs 42 ZD & ZN enabling the use of foreign AMOs without the need for CASA to approve foreign AMOs. CASA reversed this decision when they made CASR Parts 42/145. The bureaucrats reintroduced duplication. The next stage that never eventuated was the automatic acceptance of foreign NAA (those responsible for issuing their manufactured aircraft type certificates) approved training facilities/courses for pilots and maintenance engineers.

What wasn't predicted back then, was re-applying AME type ratings for aircraft between 10 to 18 seat aircraft. CASA predecessors had replaced these maintenance engineer type ratings with group ratings decades earlier. EASA Part 66 now includes group ratings. Forget history and you will repeat the mistakes.

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Missing “Adopted” Benefits

When CASA decided to [selectively] adopt EASA Parts M, 66, 145 and 147 they obviously did not adopt those provisions that actually provided savings to the aviation maintenance industry. The biggest difference not adopted under Part 145 is the EASR difference between certifying personnel (AME/LAME) and supporting personnel (LAME). The EASR Part 145 base maintenance standards have not been fully or correctly adopted. It is now time for the real benefits of approved maintenance organisations to be adopted.

An ideal regulatory system is one that sets clear and concise standards and if applicants meet the standards, then they are **entitled** to the certificate, licence or authorisation. An inefficient system is one where applicants have to satisfy a CASA staff member.

To understand why our regulatory system is like it is, you have to understand the different cultures that the industry regulator has imposed at different periods of aviation history.

1. The Melbourne based Department was about providing an ICAO compliant system refined to support an aviation system for Australia. A period of steady growth.
2. The Canberra based Department became known as Fort Knox as the Canberra bureaucracy increased red tape and administrative requirements.
3. The Canberra based Agency started on economic reforms but the government culture of Canberra returned to increasing red tape for the VH registered aircraft sectors and ever increasing “satisfy” instead of clear and concise standards to be met to obtain a licence, certificate or authorisation.

The Melbourne based Authority were about applying ICAO standards in a way that aviation could provide services to all corners of Australia, especially rural Australia. E.g. smaller aircraft to suit smaller populations in rural Australia. An AME licencing system designed to meet rural needs and also compatible with our own education system. Adopting another system has not resulted in jobs in Australia. The focus of regulatory development should be on the creation of jobs.

Knee jerk adoptions of a foreign regulatory system that have proven to be not compatible to other Australian systems has negatively impacted on our industry.

For instance, amendments to Part 21 based on EASA design organisations is a known mistake.

Partial adoption of the EASA Part 66 AME licencing system is another mistake.

Partial adoption of EASA maintenance parts has also imposed costs for no improved safety.

None of these changes that have been introduced has created jobs within the VH aviation industry. In fact, those remaining in the industry continually complain about the lack of qualified personnel available to support this industry. The growth in the non-regulated non-VH registered sectors are not providing the skills or qualifications to support commercial aviation from within Australia.

EASA & CASA utilise prescriptive requirements whereas the FAA mainly uses performance-based requirements. The CAA(UK) is leading the European drive towards performance based.

Safety is always a given now as it was when the Melbourne based aviation Authority was able to create businesses, jobs and safety.

Though the airlines have grown, very few benefits to other sectors have eventuated as red tape costs have prevented the benefit of aviation to communities and commercial sectors of aviation. No rural community will want the cost of maintaining an underused airport.

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Trade Training Changes Needed

Time to fully adopt the EASR Part 145 base maintenance conditions correctly and enable Part 145 to create jobs and reduce costs as a result. The importance of having a properly functional trade training system where AQF IV trade certificate holders can be approved as ‘certifying staff’ within a Part 145 base maintenance sector. Part 66 LAMEs would then be used as supporting staff as well as ‘certifying staff’. However, the NVET training system must provide both an avionics and mechanical trade qualification that meets, as a minimum, the ICAO minimum trade training curricula.

The differences between ‘certifying staff’ and ‘supporting staff’ in the EASA system has not been implemented in Australia. It is important to note that ‘Certifying Staff’ (C/S) can be authorised by the AMO even though they do not have a Part 66 licence.

There is more flexibility within the EASR system than what has been imposed in Australia.

1. Aircraft C/S means staff authorised by a maintenance organisation to release an aircraft to service under the Part 145 approval.
 - a. Part 145.30 (j), enables a maintenance organisation, by derogation, to have C/S and S/S qualified according to the Appendix IV to EASA Part-145

(Convention Annex 1, 4.2.2.4, When a Contracting State authorizes an approved maintenance organisation to appoint non-licensed personnel to exercise the privileges of 4.2.2, the person appointed shall meet the requirements of 4.2.1 [LAME].)

2. EASA Part 66/145 also defines four categories of C/S holding Part 66 licences.
 - a. Line maintenance
 - i. A Cat ‘A’ LAME within limitations endorsed on Part 145 issued authorisation;
 - ii. ‘B1’ LAME within category, including Cat A and including limited avionic maintenance
 - iii. ‘B2’ LAME within category, not including Cat A and including avionic maintenance limited with powerplants and mechanical systems.
 - b. Base Maintenance
 - i. Cat ‘C’ person: Release aircraft to service following base maintenance even if not having certifying privileges
 - ii. ‘B1’ & ‘B2’ Support Staff (S/S) authorised by the Part 145 to certify “required inspections” post specified maintenance.

(Convention Annex 1, 4.2.2.1. (... the privileges of the holder of an aircraft maintenance engineer licence shall be to certify the aircraft, or parts of an aircraft, as airworthy after an authorized repair, modification or installation of an engine, accessory, instrument, and/or item of equipment”)

The similarities with the FAA Part 145 inspectorate system are obvious. A system that was abandoned a few decades back in Australia.

To enable certifying staff not holding Part 66 licences to certify completion of work within Australia would require the trade training system to become ICAO compliant.

This could be achieved if CASA removed the one Part 66 module not associated with trade training NVET system. Part 66 module 10 should be a stand-alone examination provided by CASA addressing subjects contained in Chapter 3 of the ICAO AME training manual.

All the other Part 66 modules should be the responsibility of the Education Department to provide trade qualifications compatible to the Part 66 modules, excluding module 10.

Maybe then a maintenance organisation could employ qualified personnel that they could be authorised in the same manner as EASR Part 145 allows.

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Associated Trade Qualifications

EASA maintenance regulations enables the employment of competent staff that have associated trade qualifications. It has been part of the regulatory system in the past and is crucial to reassure mature aged qualified tradespersons to change direction and seek new employment pathways. Many associated trades provide the hand skills required that enables on-the-job training and experience which can provide a person with equivalent skills and learned knowledge to pass the module examinations to become a LAME.

General aviation especially has always relied on allied tradespersons joining aircraft and aircraft component maintenance staff. This is not unusual as many other employment pathways cater for allied trades joining their ranks.

EASR Part 66 also clearly addresses this by applying experience and practical training reduction periods for those from associated trade training qualifications.

In the past many motor mechanics, fitters and turners, and other tradespersons changed to aircraft maintenance. After completing an SOE they would have to pass CASA Basic Examinations to obtain a licence.

Experience outside a civil aviation environment 66.A.30(e) Aircraft maintenance experience gained outside a civil aircraft maintenance environment will only be accepted if it is equivalent to the experience required for a Part-66 Aircraft Maintenance Licence. The experience must be added with at least 12 months of relevant basic experience in a civil aircraft maintenance environment.

This has become a very onerous system since the introduction of the Part 66 modular training system when compared to the two-trade training system that once existed under the Civil Aviation Order system. A two-trade system with a 5 category (*airframe, engine, electrical, instruments & radio*) licence system that was being changed to a 2 category (*avionic & mechanical*) licence system to support the 2-trade training system.

Industrially, in the airlines they changed to a 3-trade training system that doesn't match the EASR Part 66 2-trade supporting system.

Allied trades could then apply to CASA's predecessors at local Authority offices, be assessed and receive credits for some of the experience that was required to obtain a licence.

Self-study, pass examinations and licences were issued.

However, EASA's latest Part 66 full group ratings are more compatible and should replace the current licence ratings as previously applied by CASA's predecessors ASAP to support non-major cities aviation maintenance industry. Group ratings have a proven safe history.

EASA Part 66 Group Classification	Type Rating	Type Rating Manuf. Group	Full Group Rating
Group 1 – Complex aeroplanes and multi-engine helicopters	X	–	–
	X	–	–
Subgroup 2a – Single turbine engine aeroplanes	X	X	X
Subgroup 2b – Single turbine helicopters	X	X	X
Subgroup 2c – Single piston engine helicopter	X	X	X
Group 3 – Piston engine aeroplanes	X	–	X
Group 3 – Piston engine aeroplanes for category B3.	“Piston-engine non-pressurised aeroplanes of 2000 MTOW and below”		

It is becoming obvious that EASA, as it matures, is coming to the same conclusions that Australia's mature Departmental aviation regulatory Authority had come to pre 1988. Once again, adoption without taking into account of our previous successful safe workable history.

Cross category training

Under Australia's previous LAME system with a 2-trade training system, it was much easier and less costly to cross train from avionic to mechanical to avionic. There were 5 category licence ratings holders, especially in GA.

The current NVET training system is still based on a 2-trade training system – avionic and mechanical. Look at the EASA chart to train from one category licence to another. It would turn most AMEs/LAMEs away from broadening their skills.

We once had a mature trade & licencing system working very efficiently – no more.

Holder of Category	Category Applied For	Supplementary modules or delta training
B1.1	B1.2	16
	B1.3	12
	B1.4	12, 16
B1.2	B1.1	5, 11a, 15
	B1.3	5, 12, 15
	B1.4	12
B1.3	B1.1	5, 11A, 15, 17
	B1.2	11B, 17
	B1.3	5, 15
B1.4	B1.1	5, 11A, 15, 17
	B1.2	11B, 17
	B1.3	5, 15
B1.1	B2	4, 5, 13
B1.2		4, 5, 13, 14
B1.3		4, 5, 13
B1.4		4, 5, 13, 14
B2	B1.1	2, 6, 7, 11A, 15, 17
	B1.2	2, 6, 7, 11B, 16, 17
	B1.3	2, 6, 7, 12, 15
	B1.4	2, 6, 7, 12, 16
A	B1.1	1-8, 11A, 15 17
	B1.2	1-8, 11B, 16 17
	B1.3	1-8, 13, 14
	B1.4	1-8,12, 16
	B2	1-8, 13 14

The complexity of this system compared to what we had demonstrates that every effort should be made to simplify the system. Even Europeans support the simplification of EASR Part 66. Adoption of any other regulatory system will always bring these problems.

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