AMROBA®inc

AVIATION MAINTENANCE REPAIR & OVERHAUL BUSINESS ASSOCIATION, INC

ADVOCATE OF THE AVIATION MRO INDUSTRY

Date Published 21/08/2015	NEWSLETTER	Volume 12 Issue 8 August – 2015

The format of the newsletter has been changed to be more compatible to read on line. In this edition, we look at ways to resurrect general aviation by looking at a modified USA FBO system to remove red tape. In addition we look at aircraft maintenance engineer training to (ICAO) international training standards and the role of the LAME.

Table of Contents

1. Resurrecting General Aviation — Deregulating GA
2. Is a Modified USA FBO system the Answer?
3. AME Training
4. The Role of the LAME

ICAO Regulatory Oversight Manual, Part A.

2.2.3. Article 37 of the Chicago Convention specifies that States [Australia] must collaborate in securing the highest practical degrees of uniformity in regulations, standards, procedures and organisation in relation to aircraft, personnel, airways and auxiliary services in all matters in which such uniformity will facilitate and improve air navigation. To this end, ICAO has adopted Standards and Recommended Practices (SARPs) dealing with practically all activities concerning the operation of an aircraft. However, it is the integration of such SARPs into the national regulations and practices of Contracting States [Australia] and their timely implementation that will ultimately achieve safety and regularity of aircraft operations worldwide.

Become a Member

The adage "there is strength in numbers" is absolutely true when it comes to influencing government regulations and policy. No one company, no matter how big or successful, can keep up on all the regulatory issues directly impacting businesses.

AMROBA is dedicated to serving the businesses that are responsible for the in-service continuing airworthiness of aircraft and aeronautical products, including the manufacture of replacement parts for in-service aircraft. This segment of the industry has never had a dedicated advocate until now.

AMROBA membership form is available from the AMROBA website: amroba.org.au/become a member , or print the membership form amroba.org.au/print a form

Fees are stated on the application form — BSB preferred method of payment..

Postal Address:

PO Box CP 443
Condell Park
NSW 2200

Phone: 61 (0)2 9759 2715
Fax: 61 (0)2 9759 2025
Emails: amroba@amroba.org.au
inquiries@amroba.org.au
Website: www.amroba.org.au

Safety All Around

(Continued from page 1)

1. Resurrecting General Aviation — Deregulating GA

GA is at the crossroads under the new regime regulating aviation. Most staff of CASA were not employed and did not experience the days when GA had growth. Many are also under the impression that their role is to 'regulate' aviation for safety and totally ignore **sustainability**.

Every government over the last 3 decades have provided guidelines to its department and agencies stating that regulation is the last option. CASA, over the last decade has taken regulation as the first option. In addition, no change has been made to benefit Australia, its geographic distribution of population, and to support the **sustainability** of aviation. Aviation is simply over-regulated and the reasons goes back to 1988.

"Regulation can have benefits, but businesses, community organisations and families pay the price of poor regulation. Regulation can't eliminate every risk, nor should it. We therefore seek better regulation, not more regulation."

GA will probably never return to the glory days of pre CAA/CASA but it could have a lot more private pilots flying VH registered aircraft. This can be done by deregulating without lessening safety standards. In addition, GA actually expands based on the number of AOCs operating in Australia.

The number of personnel and organisations involved in engineering and maintenance is also dependent on the number of operators and private pilots actively participating, especially in GA. Those sectors are diminishing. The Charter, Aerialwork and Flying schools have also further declined since 1994.

In 1994, the Morris Report listed the number of participants in Aerial work, Charter and Flying Schools and the numbers were significantly higher than the numbers in CASA's Annual Reports. The 1994 list provided to the Morris Report per State & Total compared to 2015 numbers we could find.

	NSW	VIC	QLD	SA	WA	TAS	ACT	NT	TOTAL 1994	TOTAL 2015
Aerial work	268	155	232	67	126	17	11	49	**925**	**NA***
Charter	243	150	237	69	100	15	13	49	**876**	**593**
Flying Schools	93	63	57	22	22	7	6	7	**277**	**188**
TOTAL	**604**	**368**	**526**	**158**	**248**	**39**	**30**	**105**	**2078**	**781 + AW?**

* Asked CASA for aerial work figures but no reply – guess 150-200 by some industry participants?

Of course, CASA/Infrastructure will continue to find all kinds of reasons why we have this decline but they will not accept, as aviation participants have, that the prime reason is over-regulation that has not improved safety.

Dick Smith recently told the Senate that BKN was a shadow of itself and so are many other aerodromes in Australia. The above chart shows the real crisis of aviation. How many will exist post new 'operations' regulations?

Ever since regulatory change has been managed by other than the 'old' Department, every regulatory change continues to apply an airline approach to what once were viable sectors of aviation providing sustainable career paths from GA to supplement growth in the air transport operations sectors. See "*Who Cares*" article on our website. www.amroba.org.au

Visit any rural airstrip/aerodrome and you will find, in so many locations, closed hangar doors as a memento of a successful past era. Rural Australia once used aeroplanes regularly because the VFR rules were clearly understood and aerodromes were not locally owned. In addition, airport security was not a major issue at these rural, mainly GA, aerodromes. Many hangars are now used for non aviation storage/businesses.

The sad realisation is that many still like to fly and maintain aircraft but they can't afford the increasing costs

(Continued on page 3)

(Continued from page 2)

unless they operate in other than a VH registered aircraft.

Those that do operate, find the regulatory system becoming confusing and restrictive and operating costs, not directly associated with flying or maintaining are becoming unaffordable.

To get GA back to a growth model, a new sustainable system needs to be developed and that means, moving from prescriptive requirements to outcome based requirements. No more micro-management by CASA.

2. Is a Modified USA FBO system the Answer?

The following is one approach based on the USA FBO system, modified to operate in Australia and is necessary if we are to build a sustainable VH GA system that will support growth. Firstly, we need independent flight instructors, without AOCs or approved training organisations, available to students wherever they live. The FAR based independent flight instructor could be located at a fixed base (FBO) or be mobile. This would open the door for flying training being provided more popularly, especially in rural Australia. The approved training organisations would also experience growth.

The FARs based requirements would need to be very compatible with NZ to align with other NAAs in the Pacific region. The NZ system is based on the FARs for the non-airline sectors without the FBO system.

e.g. It would mean adopting FAR Parts 61, 91, 43 as "standards" (MoS) for the non-airline sectors.

Implementing an Australian variety of the USA Fixed Based Operators (FBO) using a whole of government legislative approach is feasible. The US FBO system is controlled by their Department of Transport through their airport funding model that does not exist in Australia.

Refer FAA **AC 150/5190-7, *Minimum Standards for Commercial Aeronautical Activities*.**

> *USA FBO specialized aviation service operations include aircraft flying clubs, flight training, aircraft airframe and powerplant repair/maintenance, aircraft charter, air taxi or air ambulance, aircraft sales, avionics, instrument or propeller services, or other specialized commercial flight support businesses.*

Adopting a modified FBO system where some organisations would not need CASA approval as long as they employ appropriately CASA licenced personnel, can be done. Would CASA allow it?

Instead of the 'airports' setting minimum standards for aviation businesses they permit to operate on their airport, industry sector representative associations could assist with creating minimum standards acceptable to CASA to be applied nationally.

Based on the US FBO system, independent CASA licence holders could work in an FBO not approved by CASA such as:

1. How many FBO flying training organisation would exist if CASA did not approve them?
   a. Must be an Australian registered business – WHS etc. then apply to businesses.
   b. Can employ an independent flight instructor (same as FAR 61)
   c. The same FBOs may employ a LAME to maintain their aircraft.
2. How many FBO * maintenance organisations would exist if CASA did not approve them?
   a. Must be an Australian registered business – WHS etc. apply to businesses.
   b. Must employ a LAME or LAMEs to maintain aircraft.
   c. Aircraft operating for passenger carrying AOCs excluded.
3. How many FBO aero clubs would there be if CASA did not approve them?
   a. Can employ independent flight instructor for training.
   b. Can employ a LAME for maintenance.

(Continued on page 4)

(Continued from page 3)

4. How many FBO** aerial work operators would exist if CASA did not approve them?
   a. Must be an Australian registered business – WHS requirements etc. apply to all businesses.
   b. Aircraft must be certificated for the purpose.
   c. Pilots must be rated to fly such aircraft.
   d. May employ LAME to maintain their aircraft.
5. When could an independent flight instructor or LAME work outside an FBO or CASA approved operator/organisation?
   a. Privately provide flight instruction.
   b. Work directly for a private owner who provides the data, equipment, tooling, etc.
   c. Work directly for a business aircraft owner who provides the data, equipment, tooling, etc.
   d. All work on non-retractable aircraft?
      i. Excluded from major repairs and modifications.

CASA will not support the move to a FBO system because it reduces CASA's involvement and some jobs. To obtain overall benefits it has to happen—maybe Australian FBOs should be entered on a CASA record so safety concerns can be distributed. . Instead of airports setting the standards, sector Associations would develop these in conjunction with CASA. One industry wide sector minimum standard.

All such FBOs would need to be Australian registered businesses to meet WHS (safety) requirements are applied in the industry. Compliance with a new CASR Part 43 encapsulating outcome based FAR 43, FAR 91, Subpart E etc., and FAR 61, independent flight instructor provisions, would need to be implemented.

However, to achieve such a major change, industry needs to be involved to ensure the impacts on industry would be sustainable and encourage a growth participation. Will it be considered? Most unlikely.

3. AME Training

The numbers of aviation apprentices & trainees has decreased from **779** in 2009 to **398** in 2013. **This is more than a 50% reduction in aviation apprentices/trainees over a 4 year period** and the trend downwards has continued in 2014/2015. This clearly means that a new approach is needed to provide the practical skills and theoretical knowledge for future aircraft maintenance engineers (AME) and technicians (AMT).

Just about every trade based industry has the same complaint—the lack of practical skills.

In fact, all industries are complaining about the academic capability of the workforce and how it lags the rest of the world. Scoping ICAO, EASA, FAA formal training standards shows how AME standards are not world's best practice.

The four (4) year apprenticeship is no longer attractive to school leavers.

Our position is that government needs to provide practical skill training, meeting ICAO international standards, pre-employment by secondary and/or tertiary providers.

- Working aircraft are not where practical skills should be honed. Many other industries support this approach — we are not unique.

Post employment, the AME/AMT should be able to complete the knowledge training by correspondence and/or on-line by one or two centres of training excellence. Real cost savings for government, employee and employer. An alternative is a 2 year full time training at an aviation centre of training excellence.

AMROBA has made a detailed submission to the government project reviewing skill training.

Refer Association News—Training Future.

(Continued on page 5)

(Continued from page 4)

4. The Role of the LAME

A fully qualified AME/AMT is a tradesperson under the Australian NVET system, a trade qualification rated at the AQF level 4 enables such a person to perform, sign for, and to supervise other similarly qualified persons/apprentices.

In order to ensure an aircraft's certificate of airworthiness remains valid, Australia implemented a continuing conformity inspection system that is performed by the AME holding a licence. Refer *LAME Role and Responsibilities* on the website.

CAR Schedule 6 partially explains the ICAO Annex 1 privilege to ensure the aircraft continues to comply with its design standards by ensuring the LAME supervises maintenance and certifies "stage" inspections.

What are "stage" inspections? Annex 1, Chapter 4 identifies stage inspections with more detail: " privileges of the holder of an aircraft maintenance licence shall be to certify the aircraft or parts of the aircraft as airworthy after an authorized repair, modification or installation of an engine, accessory, instrument, and/or item of equipment.."

- 'Certify as airworthy'. Keeping the aircraft in compliance with its design standards.
- Not an AME role, it is a LAME role — stage inspections.
- LAME specific training should cover conformity inspections & design standards.
  - Conformity of repairs & modifications.
  - Installation of engines, accessory, instruments, and/or items of equipment. In other words, component installation.

Though ICAO specifies that the LAME will sign a maintenance release, there are matters relating to coordination that needs to happen so all maintenance tasks are correctly carried out and signed by AMEs. Past problems with the coordination of maintenance, especially where multiple AMOs are used, is why Schedule 6 has so much detailed based the ICAO LAME privilege: "privileges of the holder of an aircraft maintenance licence …… and to sign a maintenance release following inspection, maintenance operations and/or routine servicing."

The role of the LAME can be stated as a supervising and quality function when an AME workforce is used in hangar maintenance. When there is no AME workforce, the LAME performs, signs and releases the aircraft from maintenance. In this role, the only time additional signatory is required is when flight control work is performed and certified.

The international role of the LAME is quite clear, but it is becoming confusing with the expansion of CASRs and CARs. When conflict exists, the CASRs prevail. AMROBA has made submissions to CASA to clarify and simplify the role of the LAME.

The Aircraft Maintenance Engineers/Technician Creed

Worth Remembering

"UPON MY *HONOR* *I swear that I shall hold in sacred trust the rights and privileges conferred upon me as a qualified aircraft maintenance engineer/technician. Knowing full well that the safety and lives of others are dependent upon my skill and judgment, I shall never knowingly subject others to risks which I would not be willing to assume for myself, or for those dear to me.*

IN DISCHARGING *this trust, I pledge myself never to undertake work or approve work which I feel to be beyond the limits of my knowledge nor shall I allow any non qualified superior to persuade me to approve aircraft or equipment as airworthy against my better judgment, nor shall I permit my judgment to be influenced by money or other personal gain, nor shall I pass as airworthy aircraft or equipment about which I am in doubt either as a result of direct inspection or uncertainty regarding the ability of others who have worked on it to accomplish their work satisfactorily.*

I REALIZE *the grave responsibility which is mine as a qualified aircraft maintenance engineer/technician, to exercise my judgment on the airworthiness of aircraft and equipment. I, therefore, pledge unyielding adherence to these precepts for the advancement of aviation and for the dignity of my vocation."*

Safety All Around