**AMROBA®inc**
AVIATION MAINTENANCE REPAIR & OVERHAUL BUSINESS ASSOCIATION, INC
ADVOCATE OF THE AVIATION MRO INDUSTRY

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# Positive Signs Ahead

Small businesses should be planning for growth in aviation as political decisions return to ways that worked and will also lead to a return to setting regulatory standards for the whole industry without economic restrictions on certain sectors. FAR Part 43/91 are good examples.

The Federal government prioritising of apprenticeships as an alternative education pathway that starts at Year 10 is what industry has supported for over 2 decades. The Year 12 for everyone experiment decimated the trade training system – back to the past to fix. We now need to support CASA to remove anti-competitive regulations and implement parallel pathways so individuals can self-determine which way they want to participate in private recreational aviation. Standard setting NAAs like Canada and EASA has managed to do this in private aviation, including implementing an owner-maintained CofA. Canada has set standards for the flight crew for all levels of private aviation and EASA has done so for maintenance personnel all levels of private aviation. We need to adopt so Part 149s prosper.

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Ken. R. Cannane
Executive Director
amroba@amroba.org.au

# Technology Changes, Maybe.

*The changing responsibility of keeping aircraft airworthy is happening and in some areas, has happened. Technology in this industry always advances faster than the regulatory system and changes happen irrespective of the regulatory system. You cannot stop those that want to adopt newer safer equipment. Modern aircraft are being introduced with highly reliable instrumentation that are provided at two levels because of duplicity of standards even though the aircraft fly in the same airspace. It is time to rethink operational standards in the interest of improved safety. For private operations, why not use non-TSO equipment being used in Experimental and Light Sport Aircraft?*

Have you ever attended an Airshow around Australia in the last couple of years?

I attended the Airventure Australia 2019 Airshow at Parkes recently and was interested in the comparisons of VH & non-VH registered aircraft and what was attracting attendees, especially secondary school students. The younger generation has grown up with computers, iPads and smart phones that have more computing power than what is in older aircraft with gyro driven instruments. On the other side, glass cockpits to various levels are the norm in modern LSA and Experimental aircraft. Low maintenance items. If you haven't attended an Airshow recently, Ausfly at Narromine is happening 17-20 October 2019.

Attracting our younger generations into flying or maintaining aircraft depends partially on what is in the cockpit. Both aircraft externally look the same but inside is quite different.

Which cockpit do you think attracts our younger generations? Analogue or digital?

The availability of TSO'ed and non-TSO'ed products is growing and the costs of retro fitting has been drastically reduced over the last decade.

New technology is discussed later in this Newsletter but this change in technology and "on condition" maintenance aspects can be misunderstood.

CASA explains in Airworthiness Bulletin 02-1 what is "on condition". Maintaining an aircraft as "airworthy" means meeting the "on-condition" on-going inspection requirements.

There are two conditions that must be met for an aircraft to be considered "Airworthy"

1. The aircraft must conform to its type design (TC). Conformity to type design is considered attained when the aircraft configuration and the components installed are consistent with the drawings, specifications, and other data that are part of the TC, which includes any supplemental type certificate (STC) or **other approved alterations.**
2. The aircraft must be in a condition for safe operation. This refers to the condition of the aircraft relative to wear and deterioration, for example, skin corrosion, window de-lamination or crazing, fluid leaks, tire wear, etc.
3. If either of these two conditions cannot be met, the aircraft is considered to be un-airworthy.

"A few years ago, Dynon Avionics and EAA (Experimental Aircraft Association) started the industry-changing trend of sidestepping the TSO process in favour of a broad ***AML-STC*** with the D10A primary EFIS. Since then, we've seen several major products (including EFIS and autopilots from Garmin, Aspen and TruTrak) approved for certification in type-certified aircraft **despite not having a TSO**. While we think that trend will continue, don't expect the TSO to go away any time soon." Back to the Top

# Attracting a New Workforce

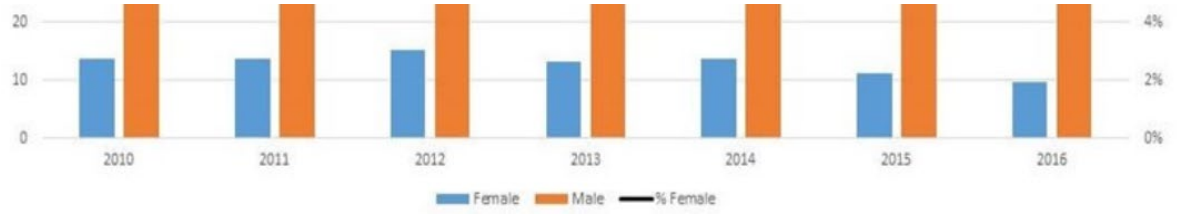
*Maintenance of aircraft has changed over the decades and the type of hand skills required has also changed, but some basic hand skills will be required for years to come. In addition, what was once a male dominated profession is fast changing as both male and female students see aircraft maintenance as an avenue of employment thus establishing the new workforce. Tooling and equipment technology have also advanced well beyond the technology of the past as has the ability to retro-fit older aircraft with new technology. We need to welcome this fast-changing environment that is changing our workforce. The increasing use of computer-based data is also becoming the norm.*

## JOBS DO NOT HAVE A GENDER

The Federal government is now stating that they support secondary school year 10 students should take on apprenticeships where you are paid to study while working thus gaining experience as you learn.

Why aren't we seeing more female apprentices? Is it the employers who thinks it is a male only industry or, aren't we attracting females to apply? Many other trades are finding females make good tradesperson and aircraft maintenance is no different.

Overall, in Australia, female trade participation has decreased from 3%/2012 to 2%/2016.




The latest government decision and policy is intended to reverse this trend.

The US Federal Aviation Administration's 2014 annual airman certificate demographics report revealed that women comprise roughly 23% of the nonpilot certificated airman in the United States; however, only 2.3% of the certified aircraft mechanic workforce are women. That has grown to 2.7% in 2016 and is continuing to increase.

In the USA, a review amongst women in aircraft maintenance found: "Results indicated that neither motherhood nor marriage were factors that impacted a woman's interest in a career as an aircraft maintenance technician. Furthermore, there was a relationship between a woman's perception of physical limitations as a mechanic, career appropriateness, work environment safety, social acceptance, and advancement opportunities. Finally, the qualitative analysis yielded a substantial amount of informative themes and nodes that illuminated a **general lack of women's knowledge regarding the field and a perception of sexual discrimination if one were to start such a career."**

If this is the case, how do we overcome these issues so women will be attracted to aircraft maintenance as a job? Is there something AMROBA can do? Create a flyer to send to schools?

AME/LAME duties typically include:

- Replacing and repairing of aircraft parts.
- Diagnosis and repair of mechanical and avionic problems.
- Testing and supporting performance standards while also keeping records of all your maintenance work.
- AMEs typically work outside, in hangars, in AMOs, on airports.

As we stated: Jobs have no Gender.

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# Manufacturers Restricting ICA Access

*Carrying out maintenance in a foreign country from where the aircraft is manufactured relies on the design Approval Holder (DAH) providing the Instructions for Continuing Airworthiness (ICA) to those performing maintenance. What is now happening is that the DAH withholds some of the data that CASR Part 21.050 requires the DAH to "on request by a person required by these Regulations to comply with any of the terms of the instructions, give them to the person. In addition, changes to the ICAs shall be made available to any person who requests the changes and who is required by these Regulations to comply with any of those instructions".*

The FAA has made many statements that it is a regulatory obligation on the DAH to provide the ICAs to any person required by regulations to comply with any of the instructions.

However, many companies like Honeywell openly refuse to provide the ICAs unless they have approved you as an 'agent' or you are the owner/operator.

The real question is, what power does Australian legislation apply to foreign DAHS?

Back in the Department days, government would have directed the ICAs to be provided to our AMOs or the aircraft that the product was fitted to would not be able to be maintained under he Australian aviation regulations.

### 21.050 Instructions for continued airworthiness and manufacturer's maintenance manuals having airworthiness limitations sections

(1) The holder of a type certificate for an aircraft for which an aircraft Maintenance Manual containing an "Airworthiness Limitations" section has been approved as part of the type design and who obtains approval of changes to any replacement time, inspection interval, or related procedure in that section of the manual **must make particulars of the changes available upon request to any operator of the same type of aircraft**.

(2) The holder of a design approval, including either the type certificate or supplemental type certificate for an aircraft, aircraft engine, or propeller **must furnish at least one set of complete Instructions for Continued Airworthiness**, prepared in accordance with the applicable airworthiness standards mentioned in Parts 22, 23, 25, 27, 26, 29, 31, 32, 33 and 35, and the airworthiness standards prescribed by the Part 21 Manual of Standards, or as specified in the applicable airworthiness criteria for special classes of aircraft mentioned in subregulation 21.017(2), as applicable, to the owner of each type of aircraft, aircraft engine, or propeller upon its delivery, or upon issue of the first standard certificate of airworthiness for the affected aircraft, whichever occurs later, **and thereafter, on request by a person required by these Regulations to comply with any of the terms of the instructions, give them to the person. In addition, changes to the Instructions for Continued Airworthiness shall be made available to any person who requests the changes and who is required by these Regulations to comply with any of those instructions**.

An AMO carrying out maintenance needs that data to certify compliance with the instructions.

Are we heading for a situation where only AMOs, that have been anointed as DAH authorised dealers and service centres, will have access?

This is not new; it has been happening over the last decade and government has not written to the DAHs demanding they supply this data to Australian approved AMOs.

Will government/CASA direct these foreign DAHs to provide the ICAs to CASA approved organisations that require the ICAs to certify compliance.

CASA has the support of the industry to stand up to these DAHs restricting ICA availability.

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