

AMROBA[®]inc

ADVOCATE OF THE AVIATION MRO INDUSTRY

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REGULATORY CHANGE AT WHAT COST

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Stop Press

- The Federal Government's decision to protect local jobs by reducing the size of the permanent skilled migration program has been reflected in the management of temporary skilled migration (457 visas)
- All trade occupations (ASCO Group 4) have been removed from the Critical Skills List with the exception of:
 - Aircraft Maintenance Engineer - Avionics
 - Aircraft Maintenance Engineer - Mechanical
- Employers can take some comfort that the Federal Government has recognised the need for a more targeted skilled migration program and acknowledged that there are still skills shortages in some sectors

Australia's aviation manufacturing and maintenance may be equivalent to world's best practice but our international competitive capability is being held back because government has not provided:

- A cost effective regulatory system that is ICAO compliant;
- International agreements that recognise, in our own right, our aviation manufacturing and maintenance capabilities;
- Skills so business can compete in the global manufacturing and maintenance markets;
- A reduction in regulatory imposts to encourage growth in aviation.

At this stage, Australia must accept that our own system is recognised as third world status simply because our CASA approved manufacturing and maintenance organisations do not have recognition in any of the major aviation markets — Europe, North America and even the Asia Pacific market.

This was accepted in the late 80s when the government of the day carried out a review of aviation in this country and decided it was time to 'empower' the industry, reduce regulatory impost on an over-governed industry so it could compete in the world market.

Twenty years later, government has failed to provide a cost effective system and worldwide recognition of Australia's civil aviation regulatory controlled industry.

Goal posts have been changed during the last 20 years and continual re-starts to regulatory change process has added regulatory imposts instead of lowering costs. A good example is the 1992 introduction of outcome based regulations for the maintenance sector that CASA's Director of Safety told industry would reduce costs.

AMROBA MEMBERSHIP UPDATE

AMROBA continues to grow and participate in appropriate aviation committees. We need you.

AMROBA's long term survival depends on MRO industry support. A minimum of 300 AMROBA members are required to make us financially viable but 500 to 1000 members is our aim.

If you are not a member access our website www.amroba.org.au for details of AMROBA and membership application.

We are registered as a non-profit organisation with a Management Team representing each segment of the aviation industry.

Membership growth continues to grow but many still sit on the fence collecting the benefits that AMROBA brings to the MRO industry. It is time for you to join — there is strength in numbers.

Complete an application and join now. www.amroba.org.au

CAR 30 is a very good example of outcome based legislation as it places regulatory responsibilities on organisations that really do not need specific limited CASA approval. If CASA's application of this outcome based regulation is an example of how the future proposed EASA based outcome (questionable) regulations will be applied then the industry must brace itself for increased imposts.

AMROBA accepts the government's requirement to draft regulations to comply with the Criminal Code, however, this means that Australia's aviation Regulations will look quite different to other nations' civil aviation regulations.

Basically, if a regulation has a penalty attached then AMROBA supports the drafting protocols that state the regulations should commence by saying "*It is an offence to etc*". Real Clarity.

Until CASA accepts this approach, identifies the offence and instruct the AG's drafters, then there will be further delays that the industry can no longer afford. Every delay has cost this industry.

Now that CASA's CEO has accepted the use of Manual of Standards why doesn't CASA use those MoS to paraphrase the ICAO Standards. Current CAR 30 organisations would comply with the ICAO maintenance organisation Standards.

The Canadians included regulations and standards when they rewrote their civil aviation regulations and their ICAO audit clearly finds they are the most ICAO compliant country.

Maybe that is why Canada's aviation industry is acceptable in all the major regions — Europe, America and Asia Pacific. We need to follow their methodology so our aviation businesses can be globally accepted.

Regulatory Progress Report — Maintenance

The aviation industry is a little cynical whether regulatory reform will provide them with lower regulatory impost and a freer regulatory environment.

Most industry participants no longer engage with the CASA regulatory change proposals because so much has been promised for so long without the basic rules ever been seen.

Australia was seen on an equal standing with major aviation countries but it is now treated like any other third world aviation market. Reform must happen soon to open world markets. ICAO terminology must be adopted to reduce costs.

A progress report was produced at the SCC meeting last Wednesday that shows that some progress has been made and some losses have occurred.

It seems that CASA has concentrated on peripherals to the core elements of the Regulations.

- Part 91 is the core of the operations rules
- Part 42 is the core of the maintenance rules.

Both of these rules are yet to be seen by industry after 4 years of CASA spin on alignment with EASA rules. It is a fact that CASA staff like EASA rules and industry has always preferred rules based on FARs.

Many of our members do not support change for change sake — change should provide a reduction in regulatory impost and/or improvement in safety.

AMROBA strongly believes that CASA prefers the EASA rules because, in many areas, they are actually more conservative than what is in current regulations and, unfortunately, will increase regulatory impost & costs.

What other aviation regulatory system is based on a Criminal Code. The US has a Criminal Code that includes large fines and outcomes for the use of unapproved parts—a criminal offence.

The proposed CASR Part 42, is programmed to be completed by CASA in the 4th quarter 2009. CASA also hopes to complete the draft by the 4th quarter. No NPRM is being considered as they also want the rule to commence in the last quarter this year. Ambitious!

Part 42 is the core of the maintenance rules and it has never been circulated by CASA at this stage. The only persons involved with its development is CASA and the CASA appointed EASA working group.

AMROBA, without seeing the proposed rules, supports the industry push for a proper NPRM that includes the proposed rule because of the paradigm changes that CASA is proposing.

Engineering/Maintenance Parts proposed (made) are:

Part 21J — Design organisations (ex Part 146)

Part 21M — Designs of mods/repairs (ex part 146)

Part 42F — AMO small aeroplanes (<5700Kg)

Part 90 — Additional Airworthiness Standards

Part 145 — AMO large (pax small) aeroplanes

Part 147 — Maintenance Training Organisations

The new rules introduce a paradigm change in the current harmonisation with ICAO Standards to a European approach.

Operations Rule Development

The old saying, that when the aircraft certification paperwork weighs the same as the aircraft the aircraft will be given a type certificate, can be applied to the volumes of new aviation regulations being developed in Australia.

When compared to the amount of Act, Regulations and Orders that the industry had pre regulatory reform, the proposed Act, Regulations and Manual of Standards will definitely outweigh the volumes of previous legislative requirements.

The danger with voluminous legislative requirements is compliance. We can but hope that regulatory impost will be reduced so aviation can safely grow.

The Operations rule development seems to be progressing with more general support from industry. Like many development teams, there is always a tendency to create regulations instead of less regulations.

Randy Babbitt, FAA Administrator stated: *In the mid-1990s, the FAA revised its regulations on air carrier safety standards to reflect "one level of safety," requiring regional air carriers to operate under the same rules and at the same level of safety as their major airlines counterparts.*

It was once a joke in Australia that it took decades for the FAA to amend their FARs but CASA must now surely take that mantle for managing regulatory change. Regulatory change started in the early 1990s as a result of a Federal government review in the late 1980s.

Canada, NZ have completed their major regulatory rewrite and are now in a position of continual review.

Considering that the core operation regulation, the proposed Part 91, has been developed and promulgated before, the last version is once again being reviewed prior to making it public.

Both the proposed CASR Part 91 and 119 need to be in the public domain so that industry participants can plan their future aviation projects.

The proposed CASR Part 91 is programmed to be completed by CASA in the 1st quarter 2010. CASA

hopes to complete the draft by the last quarter this year. Different approach to maintenance.

This proposed Part is crucial to the future of private and other operations. If it is cost effective and practical, then GA will survive as private owners will be encouraged to utilise VH registered aircraft.

The proposed CASR Part 119 is programmed to be completed by CASA in the 3rd quarter 2010. CASA hopes to complete the draft by the last quarter this year for promulgation.

This proposed Part is crucial to the future of paying pax operations, especially the transition of current pax charter operators. All AOC pax carrying AOC will need to meet the requirements of this Part.

Operational Parts proposed (made) are:

Part 135 — Small aeroplanes (<5700Kg)

Part 121 — Large aeroplanes (>5700Kg)

Part 132A — Air Experience Flights (limited Cat a/c)

Part 132B — Joy Flights

Part 133 — Rotorcraft Pax & Aerialwork

Part 136 — Aerialwork (Others)

Part 137— Aerialwork — made

Part 138 — Aerialwork (Rotorcraft)

Part 141— Flight Training Organisations

Private Owners Maintenance Issues

No matter how one wants to segment aviation, it all ends up being based on the ICAO operations standards of private, aerialwork and air transport.

Why complicate it any further? Keep the gray area open.

Some aircraft are excluded from aerialwork and/or air transport segments as they are restricted to private operations. The same applies to specific aircraft modified for certain aerialwork functions.

Commercial operations are air transport and aerialwork.

Over the last decade many have lobbied CASA regarding implementing unique Australian requirements to administer one segment or another. One must ask why and the only answer is that the application of current outcome based regulations by CASA impose unique bureaucratic requirements NOT included in other regulatory systems.

In a way, CASA applies more stringent requirements on the industry than what is imposed in some countries but in other areas, they are less stringent.

AMROBA chaired a meeting with CASA's last CEO where the Canadian private owners maintenance was discussed and supported by all concerned. It has good and bad aspects but the older aircraft are not as complex as some owner built aircraft registered in Australia.

What is not understood well is maintenance INSPECTION. In most other countries, inspection is the crucial aspect of safe aircraft. It is why the IA has to do the annual inspection and not the A&P mechanic — trained and qualified eyes looking at the structures.

There is also a need to address ways of 'qualifying' owner/pilots to carry out 'limited' maintenance tasks.

In many cases, owner/pilots can safely perform more maintenance tasks than currently is stated in regulations. They have been doing so for years — how many owners have been encouraged to be a "trainee" AME working under a LAME supervision in the past. The more the owner/pilot understands his/her aircraft the safer aviation outcome.

The negative side of this great traditional practice is that some owner/pilots not maintenance approved by CASA, have done maintenance tasks without the supervision of a LAME, during periods when the aircraft was not undergoing LAME controlled maintenance.

CASA is now proposing a limited AME licence for an AME that has completed "servicing" maintenance standards.

For private operations, it may be time for that "limited" LAME also to be open to owner/pilots on completion of formal training. Of course, it is recognised that pilots can do limited tasks listed in legislation but to improve safety, these tasks plus some others should be included in a servicing AME licence.

Everyone knows that many owner/pilots do more than the current list of pilot maintenance tasks so, for non air transport operations, why not accept the fact and licence those that want to do more as long as they do the training.

Over the years we have had many CASA findings against pilots doing maintenance they should not and also relating to supervision, or lack of supervision, of maintenance.

This is an area where a more practical approach could improve safety and reduce the number of findings of improper maintenance.

Before CASA finalises its maintenance suite of regulations, it is recommended that this particular issue be addressed to reduce continuation of this issue.

At least we could say that new regulations at least addressed a known area of past problems where more maintenance is carried out than is ever recorded.

Recognising and implementing corrective actions to address identified problems may be a novel approach to regulatory reform; we wonder!

What will be the future???

IATA President Stated

"Domestic aviation is included in Kyoto. International air transport was excluded but with a commitment to find a solution through ICAO by the 2007 Assembly. Airlines took environmental performance seriously long before Kyoto. Over the last 40 years emissions per passenger kilometre have decreased by 70%.

Emissions trading may be a part of the solution. But it must be a global solution agreed through ICAO."

IATA President Stated

"Air transport is essential. Air transport brings people to business, products to markets, tourists to holiday destinations and unites families and friends around the world. In short, air transport made the global village a reality. 80% of aviation emissions are related to flights over 1,500 km for which there is no alternative mode of transport.

Taxes are not the answer. They do nothing for the environment. And they kill the economic social benefits that air transport brings."

Enforcement Policy

AMROBA has been a supporter of CASA's current enforcement policy but questions whether it improves good airmanship or safe maintenance practices.

Irrespective of how you look at enforcement it has little to do with improving the safety culture whereas it has a lot to do with enforcing compliance with regulatory requirements. This would be ideal if the regulatory requirements were sensible.

Safety is better served by swift administrative actions by industry participants and CASA. Aircraft operations is the centre of safety—both from an operations and maintenance aspect. However, we often see actions on errors one step removed from directly affecting the safety of an aircraft.

Everyone talks about human factors nowadays but there is little done when enforcement action is considered. Why did the offence occur?

- Were there extenuating circumstances?
- Clarity of the requirement (regulatory/technical)?
- Human factors involved?

Once an offence has been identified by CASA what defences are there, or plans to reduce this error?

If these questions were asked there would be fewer offences because proper defences would be built.

New training and education elements addressing the offences identified will improve the safety culture more than adding to the enforcement statistics.

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Airmanship & Good Maintenance Practices

Aircraft flight crews and ground staff are generally proud of the safety culture that has been nurtured over many decades.

Safety is dependent on the safety culture nurtured in aviation and no myriad of legislation will improve aviation safety alone — they are only used to penalise, not to improve safety.

AMROBA is concerned that when evidence of poor airmanship or maintenance practice is found, the first action is to see what rule is broken so the perpetrator can be punished.

The correct action should be to identify the skill deficiency and improve training and education.

For instance, there has been a long debate about radio calls — which ones should or should not be legislated as mandatory.

The question should be asked is, “why are we considering mandating good airmanship — do we really want such prescriptive legislation or just legislate for CASA to provide such advice?”

Training and education is the crux to improving airmanship and creating a culture is a whole of industry (includes CASA) responsibility to reduce errors.

Airmanship has been defined as:

- A sound acquaintance with the principles of flight,
- The ability to operate an airplane with competence and precision both on the ground and in the air, and
- The exercise of sound judgment that results in optimal operational safety and efficiency.

Training & education

There has been great advances in training and education of pilot proficiencies to improve safety in aviation but it is also accepted that human error will never be completely eradicated.

The same applies in relation to good maintenance practices. What has been nurtured in the past can easily be lost if the experience attained to reduce maintenance errors is not passed down from one generation to the next.

According to Boeing figures 12% of major aircraft accidents involve maintenance, and 50% of flight delays in the US are caused by maintenance errors.

To reduce this error rate there has to be a commitment to, based on ATSB findings, at least the following:

- the need for refresher training for aircraft maintenance engineers
- the need to remove barriers which discourage aircraft maintenance engineers from reporting incidents
- the need for fatigue management programs
- human factors training for management and engineers, and
- minimisation of the simultaneous disturbance of multiple or parallel systems, such as both engines on twin-engine aircraft.

The need for refresher training and removal of barriers that discourage reporting of incidents is crucial to get back to a system where Orgs/LAMEs conversed openly with CASA on airworthiness and maintenance issues.

CASA's preoccupation with compliance oversight instead of safety oversight has changed the culture of many maintainers to a compliance culture. A compliance culture does not necessarily result in a safety culture whereas a safety culture will also be a compliant culture.

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.”