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SUBMISSION

Submission to the Independent Aviation Safety Review - 2014

Working to provide a safe economical, sustainable aviation environment leading to greater trade, especially in the Asia Pacific Region.

Executive Summary

Aviation has been in a state of change ever since government created, in 1988, a separate aviation safety regulator to operate on economic principles and the creation of an independent air accident bureau. This followed a 1987 Parliamentary Report on aviation safety regulation and sport aviation safety. Twenty five years on and there is still no final legislative system meeting global standards?

The international and national allocation of responsibilities for safety of the safety regulator, air accident bureau and industry, are obviously still not clarified in the legislative system that is being imposed.

The **'objectives'** of multiple aviation reviews, post 1988, that the aviation industry has been subject to, have never achieved clarity of purpose, and never will, until the Civil Aviation Act is part of what must be reviewed. Bench-marking the legislative structure against other mature aviation countries, then amending accordingly to implement an effective aviation system applicable to the complexities of Australia's aviation activities and also compliant with the applicable Articles of the Convention on International Civil Aviation, must be done.

The Act must enable governments to make Parliamentary Regulations directing the Civil Aviation Safety Authority (CASA) to promulgate [civil] aviation safety standards (CASS); standards developed by **adapting** and/or creating global [civil] aviation safety standards.

The promulgation of CASSs must be the responsibility of CASA but the Act must also require those CASSs to be **adapted from** the Annexes to the Convention on International Civil Aviation, comparable with North America and European Aviation Regulators' promulgated safety standards (Regulations/Standards) with minimal differences with our closest trading countries, New Zealand and Papua New Guinea.

Until the Civil Aviation Act has an objective that will see the development of aviation safety requirements to support a ***safe and sustainable*** aviation industry, there will not be overall growth in a ***safe and sustainable air transport system for all***. The current 'Main Object' of the Act works against safe growth in some sectors.

Aviation safety is based on continual review of past decisions, recognising which decisions have had positive effects and which decisions have had negative effects. The regulatory reform has been continual since 1989 and industry has had to continually change their business model. The problem is today, the change process itself introduces risk elements to safety. Many participants in this industry have only known an industry undergoing regulatory change and this continual change imposes confusion, a regulatory imposed risk that has to be managed.

Rewriting the Civil Aviation Act and a three-tier system will enable the regulatory reform process to be completed within 3 years.

Ken Cannane *Dated:* *1st January 2014*

Executive Director
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Safety All Around.

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1 Aviation Safety Review Objectives & Outcomes

The government has commissioned a review of the aviation system due to industry raising concerns for reasons detailed in the Government's Aviation Policy Paper. To address these concerns the Minister has set the following as the principal objectives of the review and they do not exclude any other safety related matter. This submission will address these objectives.

Objectives

The principal objectives of the review are to investigate:

- *the structures, effectiveness and processes of all agencies involved in aviation safety;*
- *the relationship and interaction of those agencies with each other, as well as with the Department of Infrastructure and Regional Development (Infrastructure);*
- *the outcomes and direction of the regulatory reform process being undertaken by the Civil Aviation Safety Authority (CASA);*
- *the suitability of Australia's aviation safety related regulations when benchmarked against comparable overseas jurisdictions; and*
- *any other safety related matters.*

The government is also quite clear in what the Report of the Review will address. In other words, they are looking forward to recommendations that can be implemented.

Outcomes

The report of this review will:

- *examine and make recommendations as required on the aviation safety roles of CASA and the Australian Transport Safety Bureau (ATSB) and other agencies as appropriate;*
- *outline and identify any areas for improvement in the current interaction and relationships between CASA and the ATSB, as well as other agencies and Infrastructure;*
- *examine and make recommendations as required on the appointment process and criteria applied for key aviation safety roles within CASA and the ATSB;*
- *examine the current processes by which CASA develops, consults on and finalises changes to aviation safety regulations and other legislative instruments (such as civil aviation orders) and make any proposals for improving these processes such that new regulations are best practice in safe operations for each relevant sector of the aviation industry;*
- *review the implementation of the current aviation safety regulatory reform programme and assess the effectiveness of the planning and implementation of regulatory changes, including cost impacts on industry;*
- *examine and make recommendations on options for improving future aviation safety regulatory reform having regard to international experience and stakeholder views, and the Government's objective of reducing the cost of regulation to business;*
- *provide advice to Government on priorities for future regulatory development and implementation strategies; and*
- *provide advice to Government on options for improving oversight and enforcement of aviation regulations, including rights of review.*

The Coalition's Policy for Aviation, August 2013 also states:

- The Coalition will strengthen our aviation industry and allow it to be more competitive.
- We will ensure our aviation sector is safe, reliable, efficient, competitive and proud to be Australian.

To support the growth of our aviation industry, the **Coalition will**:

- abolish the carbon tax and its insidious impact on aviation fuels and aviation businesses;
- establish a formal Aviation Industry Consultative Council to meet regularly with the Minister;
- establish a high level external review of aviation safety and regulation in Australia;
- ensure that the Australian Transport Safety Bureau is adequately resourced;
- reform the structure of the Civil Aviation Safety Authority;
- focus on the better utilisation of Australian airspace;
- support regional aviation by introducing a new and better targeted En Route Rebate Scheme;
- recognise the importance of Australian airports to the economy;
- revitalise the General Aviation Action Agenda;
- continue to promote aviation liberalisation;
- enhance aviation skills, training and development; and
- ensure that aviation security measures are risk based.

The Coalition will ensure Australia has a safer and more competitive aviation sector.

Council of Australian Governments (COAG) has sought to reduce the costs to business and the community that arise from compliance burdens, particularly those attributable to differences in regulation across jurisdictions in Australia. The Seamless National Economy (SNE) initiative seeks to improve the national coherence of regulation and reduce its costs, while maintaining or enhancing its effectiveness.

AMROBA supports the principles of all of the above.

2 Fundamental Impasse Never Addressed

AMROBA is of the opinion that past civil aviation reviews, carried out over the last 25 years, have all failed to identify the fundamental problem with the aviation legislative system and the structures of government agencies created in 1988.

Past governments, reviews and inquiries have failed to totally review the legislative system that created the independent government agencies of *Australian Transport Safety Board* (ATSB) and the *Civil Aviation Safety Authority* (CASA). All of the reviews have been band aid fixes to the legislative system, mostly regulatory changes.

Since the creation of ATSB, CAA/CASA, Airservices and other agencies, the legislative system has never been reviewed and clarified the responsibilities and structures, especially of CASA. Responsibilities for safety and structures must be prescribed in legislation so these government agencies have a clear understanding of their State obligations for appropriate Articles of the Convention on International Civil Aviation. This is in addition to any other regulatory requirements imposed on aviation related businesses in Australia by Federal or State governments.

The Civil Aviation Act in particular, when compared with foreign Acts of Parliament enabling the creation of their aviation safety regulator, does not clearly clarify the responsibility of CASA nor directs CASA and its CEO to be responsible for specified Articles of the Convention compliant with the requirements of the International Civil Aviation Organisation (ICAO).

The Civil Aviation Act does not, when compared to other foreign aviation 'enabling' Acts, clearly empower CASA to promulgate ***Civil Aviation Safety Standards*** (**CASS**) **based on** Standards and Recommended Practices promulgated in Annexes to the Convention in the same manner as North America and European regulators.

The Act needs to better define both the duties and the authority granted CASA and its CEO. It should also address the structure of CASA, its administration, general powers, and duties, especially the procedures that are to be followed by the Authority in enforcement action.

The reasons for this review relate to devolvement of functions to industry by the Department and/or agencies that have badly implemented.

This review must, at least, recommend corrections to the fundamental failing of the aviation legislative system in Australia. Defining what should be in Acts, Regulations & CASA promulgated [Civil] Aviation Safety Standards will return a three tier system.

Adopting global aviation safety standards

Globally, most countries outside of North America and Europe are **adapting** their aviation regulatory systems based on either North America or Europe or a combination of both. These regulatory systems enable the SAFETY Regulator (e.g. EASA, FAA, TCCA) to promulgate global aviation "standards and practices" as the Regulators' promulgated "regulations" or "standards".

Adapting our system could provide a legislative system similar to Canada who has technical agreements with both the United States and Europe. The Australian Civil Aviation Act & Regulations must refer to CASA promulgated CASSs.

A two-tier regulatory system is, has, and will continue to be, a complete failure.

A three-tier regulatory system is the option that will succeed.

3 The structures, effectiveness and processes of agencies

Since 1988, industry has had to deal with a safety regulator that is constantly changing as each new Director of Aviation Safety/CEO changes the management structure of CASA. The Head Office was 'moved from Melbourne to Canberra and a secondary "Head Office" has now been created in Brisbane. In addition, CASA local offices have been moved from CBDs to airports and are now being moved from airports back to CBD. Obviously, this must stop – legislation must reduce costs.

AMROBA is firmly of the opinion that, until the government identifies the basic management structures and responsibilities for their government aviation agencies in legislation (Act), then stabilisation and standardisation will not be achieved.

Continual change has also meant continual changes to processes associated with matters that involve industry dealing with CASA and these constant changes have created confusion for industry participants. Policy and processes change as CASA CEOs change and management structures change.

The confusion and mistrust will continue to exist until there is a well-balanced allocation of responsibility between ATSB, CASA and the industry.

A consequent of changing management structures created by each new CASA CEO means that many local CASA offices also have had continual administrative changes in management. This has led to decisions being made at the local office and, in many cases, industry has no way of having those decisions reviewed. The management structure does not duplicate the industry that CASA deals with as many senior managers can be from different industry segments.

To overcome this continual restructuring of CASA to meet the whims of each new CEO of CASA, AMROBA strongly recommends that the Civil Aviation Act require CASA to have technical divisions based on industry segments appropriate to Australia's civil aviation, not Europe or North America industry segments.

Each CASA technical division would be responsible, within their segment, for [industry] personnel, operators and organisational standards, licensing, and certification of such personnel, operators and organisations, including regulatory oversight.

The five major segments of civil aviation in Australia are:

- Aircraft and product design and certification;
- Production organisations, manufacture and maintenance;
- Airspace and Aerodromes;
- Airline operations, excluding small aircraft; and
- Non-airline operations, including sport aviation.

It is recommended that each of these industry segments of aviation have a dedicated technical division within CASA with a Technical Manager responsible for all four functions of the division.

The four basic functions of each division are:

- Provisions of civil aviation safety standards;
- Entry control (personnel, operator & organisations);
- Provision of regulatory services, including advice; and
- Regulatory oversight, including enforcement actions.

An example of such a management structure is on page 9.

Standardisation

Industry businesses witnessing the continual management structure changes see them as public service largesse. The continual changing management structure has seen the effectiveness of the Regulator to address safety decreasing.

One of the biggest complaints about CASA, is the lack of standardisation by officers of CASA and the inability for industry to have any "peer review" of field staff decisions by more senior technical managers. This situation exists because the continual management and structural changes has lost highly skilled regulators.

A consequent of changing management structures created by each new CASA CEO means that many local CASA offices also have had continual administrative changes in management. This has led to decisions being made at the local office and, in many cases, industry has no way of having local decisions reviewed. The current management structure does not duplicate industry segments that CASA deals with as many senior managers can be from different industry segments.

AMROBA recommends that the Civil Aviation Act be amended to include industry segments:

> ***Recommendation 3: Amend Act to include:***
>
> *8A The establishment of CASA will include divisions to administer the functions of CASA associated with the following segments of industry:*
> - *Aircraft and product design and certification;*
> - *Production organisations, manufacture and maintenance;*
> - *Airspace and Aerodromes;*
> - *Airline operations, excluding small aircraft; and*
> - *Non-airline operations, including sport aviation.*

CASA is responsible for promulgating standards, licencing and certificating personnel and organisations/operators but it is industry that is ultimately responsible for safety.

ICAO States in their Safety Oversight Manual:

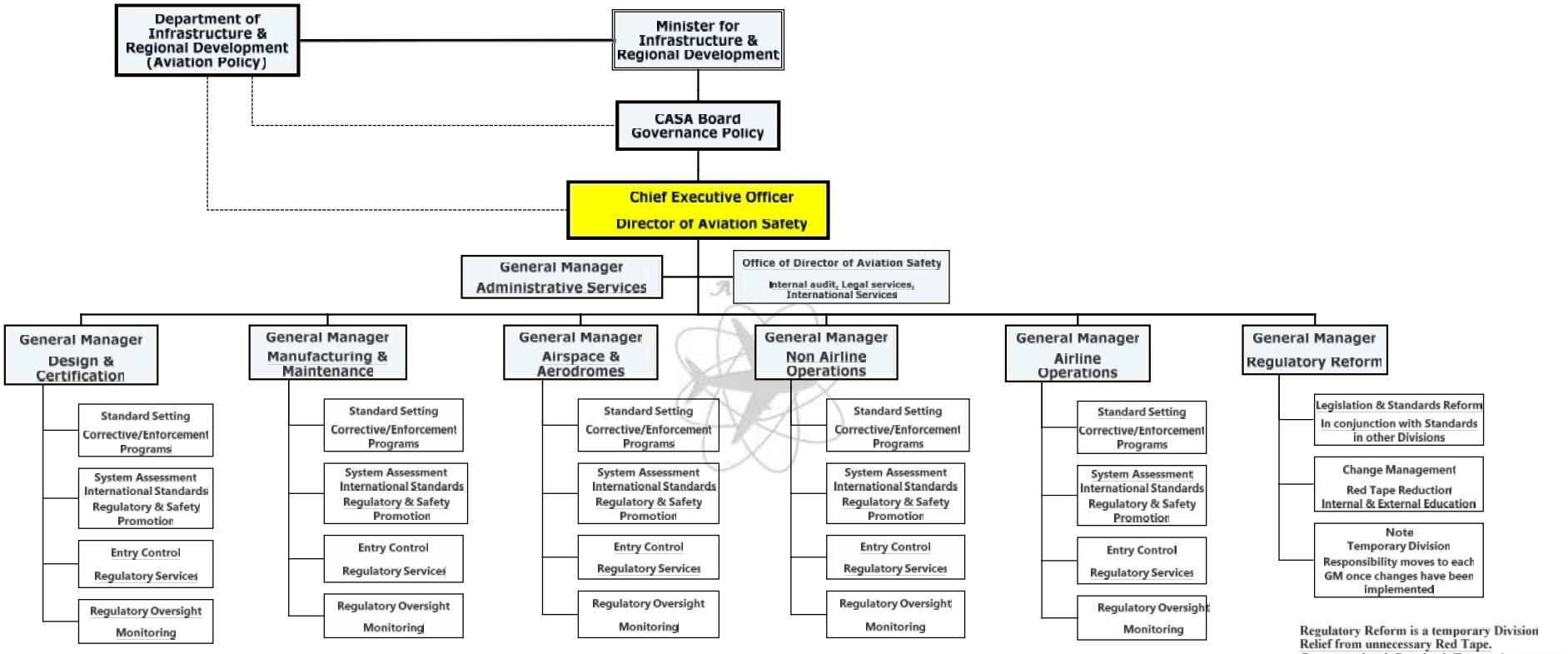
> *"2.4.8. The aviation industry has **the overall responsibility for** maintenance of safe, regular and efficient operations, for aviation personnel training and for the manufacture and maintenance of aircraft and aviation equipment. Some States may share some of the responsibility for monitoring internal safety standards with other organisations (air traffic and aerodrome service providers, operators, approved maintenance organisations, manufacturers, etc.) that have found to be reliable and to act responsibly."*

It should be noted that ICAO also recognises that industry can share the State's responsibility for monitoring. This same provision goes on to state that a safe and orderly system cannot be attained unless those involved accept responsibility.

> *"2.4.8. (cont) The objective of a safe and orderly civil aviation system cannot be attained unless each designated member is prepared to readily accept the implications of this policy, including the committing the necessary resources to its implementation. Crucial to the confidence that the CASA may place in civil aviation certificate holders to the associated freedom and flexibility it can give is the establishment by the certificate holders of an adequate quality system which must be reviewed and approved by CASA."*

Identify CASA's responsibilities and basic structure in the Civil Aviation Act.

This structure will enable “peer” review by specialist management within each industry specialist sector.
Each General Manager will be held accountable for all aspects of the industry sector. Standardisation can be achieved.



Standard Setting/System Assessment/Promotion Central Office functions
- Each Division's Standards groups responsible for Serious Corrective Action Plans/Enforcement
- Include in-depth audits where field staff identify serious safety concerns.

Entry Control/Regulatory Oversight Field Office functions
- Regulatory services includes providing regulatory assistance
- Regulatory Oversight includes corrective safety actions.

Regulatory Reform is a temporary Division
Relief from unnecessary Red Tape.
Once completed, Standards/System Assessment responsible to maintain harmonisation and compatibility within the Pacific Region.

Proposed Structure for the Civil Aviation Safety Authority
GM's are fully accountable for Standards, Services, Entry Control & Oversight

4 Relationship and interaction of Department & agencies

Though this issue will be identified in detail by the Federal Government Senate Inquiry into the Pelair accident, there are many concerns with how the Department and its agencies, ATSB and CASA actually interact.

Industry is still of the belief that the Minister's Department sets domestic and international aviation policy, including Australia's compliance with international treaties. The Department's agency, CASA, is responsible for (1) setting aviation standards, (2) controlling entry into aviation, (3) providing regulatory services in a timely manner and, most importantly, (4) regulatory oversight.

AMROBA submits that CASA is not meeting industry's expectations in these four functions and government must make necessary changes so that the relationship of the safety regulator meets the needs of both government and industry.

- Setting standards has been a failure. Since 1988, the controlling legislation and government direction has not achieved a satisfactory outcome for the whole of the aviation industry. Previous comments on changes needed to the legislative system is the reason why industry has not been able to safely prosper. The foundations must be fixed so CASA can issue global civil aviation safety standards – not unique Australian standards.
- Controlling entry can be a costly and expensive process. There is much that can be done to reduce the costs to obtain licences, certificates and other authorisations – setting clear and concise standards is the first step. Enabling industry to control their own growth by self-authorisation and monitoring is what is needed as the next step. Enabling a certificate holder to manage their own certificate's "Applicability List" in accordance with specified standards is one way of reducing the red tape that currently exists.
- Provision of regulatory services must include the provision of regulatory advice. This is of great importance in improving safety by implementing an industry/regulatory partnership approach to improving safety. Australia excelled in this approach prior to this continual concept of regulatory reform. This approach is needed to overcome the distrust of the regulator.
- Regulatory oversight by CASA is seen by industry as purely an enforcement of legislation irrespective to the circumstances. CASA has procedures for enforcement that suggests that there is a graduated approach but many in industry that have been subject to enforcement will attest that there is no graduated approach. CASA is seen as an "Enforcement Agency" whereas ATSB is still seen as a "Major Accident Investigation Agency".

Enforcement Policy or Safety Enforcement Policy

ICAO's Safety Oversight Manual states:

> *"3.9.1: The resolution of identified deficiencies and safety concerns is a critical element at the core of all safety oversight activities. A good safety oversight system will provide for the identification of deficiencies and safety concerns and the appropriate action required for resolution."*

There is a big difference between a good safety regulator and an enforcement regulator. The safety regulator will identify the appropriate action required to resolve the deficiencies and/or safety concerns. The enforcement regulator is about compliance with requirements not about resolving the safety concern/deficiency. CASA is seen as an enforcement regulator.

ICAO's safety oversight manual also states:

> *"3.9.2. Should the surveillance and inspection programme and related inspection reports reveal that the licence/rating/certificate/approval holder has failed or is unable to meet or maintain the required standards, the CAA technical expert primarily responsible for the surveillance of the operation must promptly advise the licence/rating/certificate/approval holder of the deficiency observed. **Once the cause of the deficiency is determined**, the CAA should provide deadlines for corrective action to be taken and initiate appropriate follow-up to determine the effectiveness of the corrective action. Additional inspections should be conducted whenever problems in particular areas repeatedly occur."*

Since the creation of CAA/CASA in 1988, this "**fair and just"** approach, once applied by the Department, has been continually eroded as each new CEO is appointed. In many cases, current and past licence/rating/certificate/approval holders attest that they were not afforded this system from CASA. It seems that the system now is based on the following ICAO process as the primary action. Industry are treated as though they will not correct any deficiency identified.

> *"3.9.3. **If the** licence/rating/certificate/approval holder **does not correct the deficiency within the established deadlines**, the CAA technical expert should immediately inform the Director General of Civil Aviation (DGCA) [CASA CEO] with a recommendation that the licence/rating/certificate/approval holder's privileges be temporarily or permanently withdrawn or restricted. **If,** after careful review of all circumstances involved and following necessary coordination and consultation within the CAA, there is agreement on the need to suspend or revoke the licence/rating/certificate/approval holder's privileges, the CAA **should officially inform** the licence/rating/certificate/approval holder in writing summarising both the proposed action and the reasons for it. When a certificate is cancelled or revoked for any reason, the licence/rating/certificate/approval holder must promptly return it to the issuing official."*

This is the last resort and should only be exercised when the licence/rating/ certificate/approval holder **cannot or will not** correct the deficiency.

> *"3.9.8. An effective resolution of safety issues is highly dependent on the authority vested in the CAA. This critical element can only be successful in situations clearly supported by and linked to the primary aviation legislation and regulations. There should be technical guidance and procedures for both the technical inspectors and the assigned CAA legal personnel. This guidance should be provided early in the programme of safety oversight improvement **to avoid extremes of actions** by CAA personnel."*

AMROBA recommends that CASA bench mark their safety enforcement processes with those of the FAA. The FAA excellent safety outcomes have been attributed to the FAA's education and safety advice given to industry participants.

Though CASA will refer to their procedures that are full of motherhood statements, there is not the detail included in the FAA enforcement procedures. The FAA utilises many options including educational and remedial training efforts, administrative action in the form of either a warning notice or letter of correction, certificate suspensions for a fixed period of time, civil penalties, and indefinite certificate suspensions pending compliance or demonstration of qualifications, certificate revocations, injunctions, and referrals for criminal prosecution. When violations occur, whether they involve operating an airport; producing aircraft, products, or parts; performing aircraft maintenance; operating aircraft; or shipping hazardous materials, FAA enforcement personnel must take that action most appropriate to promote safety and compliance with the regulations.

5 Outcomes and direction of the regulatory reform process

Why has the reforms carried out by the Civil Aviation Authority (CAA) New Zealand (NZ) stimulated industry employment, growth, productivity and the improvement of safety standards within the NZ aviation community? Because NZ adopted the regulatory system of the FARs for the non-airline sectors and EASRs for the airlines.

Since the creation of CASA, regulatory reform has been at the discretion of the Minister. This means, as Ministers change, continual changes in direction can also be at the direction of the Minister.

Whereas the United States and Canada have "red tape reduction" legislation, CASA has no such legislative requirement in the Civil Aviation Act. This has to be corrected so that regulatory reform and future changes reduce red tape.

Regulatory reform has spent a decade of trying to 2 tier the aviation requirements based on the FARs and a decade of trying to 2 tier the requirements based on the EASRs. Two decades of failure.

There are two ways of writing legislation, outcome based or prescriptive. Irrespective, written incorrectly, the onus of complying with the law can be replaced with complying with the regulator. Another failing is micro-management by government/CASA instead of promulgation of clear, concise safety standards.

Australia's aviation industry, like all other industries in Australia, is seen as 'over-regulated' and stifled by red tape. Regulatory development over the last couple of decades has not adopted the principles contained in the government's Best Practice Regulation Handbook and now part of Government policy – regulatory reduction and reduction in red tape. This reform has failed on both accounts.

Removing "over-regulation" does not mean lowering aviation safety requirements, it is about where 'aviation safety requirements' are specified in the aviation legislative framework (Act, regulations or CASA promulgated standards). Outlining what should be in Acts, Regulations (primary legislation) or secondary legislation is the foundation of this submission to implement a mature aviation regulatory framework.

> *'Almost all regulations can have an impact on productivity, either through the incentives that they provide to businesses to change operating and investment decisions, or more directly through their impacts on compliance costs. Regulation is the lifeblood of a modern, well-functioning economy, and is a necessary means by which governments can achieve important economic, social and environmental objectives. The downside is that poor regulation can cause frustration and unintended consequences, or simply add red tape that contributes nothing useful to the economy.'* Productivity Commission

Considering that the far majority of industry participants are frustrated and complaining about the negative benefits of increasing red tape that contributes nothing useful to the economy or 'safety', the only conclusion is that we have poor 'regulations' for business growth.

Past "political" and/or "bureaucratic" predisposed policies have created an aviation regulatory framework that is unlike similar mature regulatory frameworks used in North America and now developing in Europe, Asia and the rest of the world.

Many aviation requirements in our Act and/or Regulations are "secondary legislation" promulgated as Federal Aviation Regulations (FAR) and European Aviation Safety Regulations (EASR) in the USA and Europe.

Australia needs to parallel the structure of the FARs.

"Standards" printed in the Civil Aviation Act and Regulations should, if we use North America's mature aviation system as an example, be in "secondary legislation". Secondary legislation is what the Australian Parliament enables, authorises or delegates to somebody else (CASA in this case) to make additional 'laws on matters of detail'. Where an Act of Parliament is involved, the additional laws it enables may be referred to as secondary, delegated or subordinate legislation and such legislation is classified as a legislative instrument, meaning it is routinely published on ComLaw in authoritative form. e.g. the Civil Aviation Orders under the CAR system and Manual of Standards under the CASR system are secondary legislation.

This enables a three tier regulatory framework, as government made provision for in paragraph 9(1)(c) of the Civil Aviation Act, that requires CASA to promulgated "aviation safety standards". However, those "aviation safety standards" should be global standards based on ICAO Standards and Recommended Practices (SARPs) specified in Annexes to the Convention on International Civil Aviation. These SARPs are the same as "[civil] aviation safety standards" promulgated by the FAA and EASA and the Civil Aviation Safety Authority should be adopting and promulgating.

A three tier regulatory system founded on the three levels of Australia's legislative framework would align Australia's aviation framework with that of the mature system of the United States and provide the aviation industry with a level playing field with improved safety standards.

Restructure The Regulatory Framework

Most countries have adopted the standards and recommended practices in the Convention Annexes as "rules" promulgated by the Civil Aviation Authority – they are not part of a country's criminal code.

Back in the late 1980s when the government became aware of the need to rewrite the aviation requirements as promulgated by the Authority in the form of Civil Aviation Orders, the aviation industry was not competing as much in the global aviation market because of the many unique Australian requirements that, in some cases, duplicated requirements from the exporting/importing country.

This regulatory change started with the 1991 amendments to the Civil Aviation Regulations and has been continuing to change under changing government departments and/or agencies that are continually changing management and political party's creation of an independent agency CAA/CASA with/without a Board.

Many of the differences between the FAA and EASA are based more on trade than on safety, so Australia must look to which system will cost effectively implement the best safety and trade options to the Australia's aviation industry. Most countries world-wide have realised that, to access the largest aviation market (USA), then adoption of the FAR requirements is paramount. Those countries that see large aircraft trade capabilities in Europe have adopted the EASR requirements. The vast majority of non-airline aircraft hold FAA Type Certificates accepted under CASR Part 21 that also need other provisions of the FARs to keep the airworthiness and serviceability at the same safe level as if the aircraft was FAA registered.

What has become clear is the governments of these countries are more aware of trade implications of not adopting the requirements of EASA or FAA without change than Australia's government departments/agencies. New Zealand adopted the same as what we recommend– EASRs for airline operations, FARs for non-airline operations, including aircraft and product certification/production and manufacturing.

ICAO's Regulatory Oversight Manual, Part A, makes it clear that we should be "**adopting**" the international standards and practices. The critical elements of safety oversights requires both primary legislation and secondary legislation. The Convention's Articles are precise.

> *"2.2.3 Article 37 of the Chicago Convention specifies that States must collaborate in securing the highest practical degree 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 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 and their timely implementation that will ultimately achieve safety and regularity of aircraft operations worldwide."*
>
> *ICAO States: the term "**regulations**" is used in a generic sense to include but is not limited to instructions, rules, edicts, directives, sets of laws, requirements, policies, and orders.*

Both EASA and FAA are empowered in primary legislation to promulgate these "regulations" as secondary legislation.

Recommended Outcome

A three tier regulatory system would enable the placement of aviation requirements in the appropriate level of legislation instead of the mishmash of the current legislative system. The Act, Regulations and Civil Aviation Safety Standards need to be completely reviewed.

Civil Aviation Act: Primary legislation to give effect to the Convention and establish CASA.

Civil Aviation Regulations: Prescriptive regulations related to segments/activities of aviation, based on FAR structure, and directing which ICAO standards and recommended practices CASA should promulgate in that Regulation. (e.g. FAR Applicability provisions)

Civil Aviation Safety Standards: Promulgated by CASA, adopted from ICAO Annexes "Standards and Recommended Practices", consistent with FARs/EASRs with minimal differences to New Zealand aviation requirements.

International Reasons for Restructure

Australian governments of all political doctrines have been champions of Free Trade Agreements with little study on the long term effects to Australian businesses. Globally, aviation has had the opposite effect with increasing need for aviation specific trade agreements associated with the recognition of operators, manufacture maintenance and training functions.

This trend started when Europe created the JAA and was fully implemented with the creation of EASA. Once Europe and the United States involved trade agreement as well as Regulator to Regulator technical agreements, other countries have had to obtain agreements with both the EASA and FAA. Australia has a Bilateral Aviation Safety Agreement with the US that requires a technical agreement between the FAA and CASA. This took almost a decade to complete and it does not cover maintenance.

This has meant that any country that has such an agreement with either or both EASA and FAA also demand similar agreements with Australia/CASA.

This global trend has meant that Australia has been isolated from what was once a free trading area in the Asia/Pacific Region due to lack of commitment to implement agreements with our trading countries.

What would be an achievement is a similar trading region in the Asia Pacific Region in the same manner as the EU has done in Europe. Without such agreement, the Federal Government and CASA has to obtain individual agreements with our closest trading countries in the Asia Pacific Region.

There is no policy of government, nor does the Civil Aviation Act place a prime responsibility on CASA, to obtain and maintain international agreements so our aviation manufacturing, maintenance and training businesses have a free trade agreement with trading countries.

The ultimate aim of any government is to have an Asian/Pacific Region, as specified by ICAO, agreement to enable Australian aviation businesses to trade freely within this region.

Less than thirty (30) years ago, Asia/Pacific countries accepted Australian aviation businesses and licensed personnel (pilots/maintenance/air traffic control). Today, most of these countries have, like New Zealand, changed their regulatory framework system based on FAA, EASA or, in the Pacific Rim, New Zealand. Those countries are being recognised by Europe and North America Aviation Authorities. This has enabled them to grow their aviation businesses.

The days of unique regulatory frameworks and requirements are in the past. It is time to "adopt" international standards and harmonise with our nearest neighbour, New Zealand. Harmonising with New Zealand will also harmonise our aviation regulatory system with most Pacific countries, including Papua New Guinea.

Over the last couple of decades many countries have had to re-write their aviation system and it is extremely disappointing for Australian aviation businesses that government and its agency has spent more than two decades and still haven't completed the regulatory re-write.

Adopting a three tier system can be completed in 3 years as proposed in this paper. This will only happen if the relevant Acts are re-written so that CASA is clearly empowered to function like any other mature ICAO compliant regulator. Parliamentary Regulations should not include ICAO SARPs – they should provide the legal "head of power" and directions to CASA to adopt global aviation standards and practices.

Currently there is no priority for government or CASA to obtain bilateral aviation safety agreements and technical agreements with trading countries, especially within the Asia/Pacific Region. There is also no reason why previous governments aim to have an "open aviation market" with New Zealand, our closest trading neighbour should not be pursued.

Effects on Small Business

The following is based on papers and publications from the Productivity Commission.

The aviation industry supports the need for clear and concise aviation safety standards, learnt from years of experience, analytical review of technical and human factors, and the need to educate to the highest level necessary so on-going safety is maintained. Regulatory reform over the last two decades has seen a massive growth in Regulations and red tape that have added administrative overheads with little benefit to the sustainability of a safe and improving productivity of this industry.

What the aviation industry does not support is how these 'aviation safety standards' are currently promulgated and how the enforcement process has given priority to the development of the regulatory framework. The experiment in Australia of promulgating a two tier aviation regulatory system eventually had to adopt the use of manual of standards called up in the Regulations. This has confirmed a need for a proper third tier and clearly demonstrated the failure of a two tier regulatory framework.

Over 95 per cent of Australia's businesses are 'small', (less than 10 persons) with the majority of these functioning with the owner as the sole operator. Small business (those with fewer than 20 employees) is the dominant form of business in all industries and regulation is an inescapable part of doing business.

However, the impacts of such regulation can be more invasive for some businesses than for others. For some small businesses, compliance necessitates substantial diversion of productive business time and modifications to their production or service delivery processes in ways that are uncertain to deliver improvements in regulatory outcomes.

The way regulations are implemented is as important to small business and to compliance outcomes as the content of the regulations themselves. Regulators, by their conduct in interpreting, administering and enforcing regulatory requirements, can take considered, well designed regulation and produce regimes which discourage compliance, squander government resources or add to business costs and delays.

- Small businesses feel the burden of regulation more strongly than other businesses. Almost universally, their lack of staff, time and resources present challenges in understanding and fulfilling compliance obligations.
- Small businesses primarily 'experience' regulation and much of its associated compliance burden through engagement with regulators in their delivery of regulation. While regulators are generally committed to effective engagement and to minimising unnecessary burdens, it is apparent that many do not have robust frameworks to ensure high level ideals consistently translate to good practices on the ground.
- Regulator culture is crucial. Those regulators noted by industry and government as having effective engagement practices have adjusted their culture by focusing on senior management priorities, training and skills of enforcement staff, performance monitoring, stakeholders feedback, and rewarding behaviour consistent with the desired practices.
- Regulators can be more responsive to small business needs and capacities in their communications. In particular: greater use of industry associations to disseminate information; tailoring information requirements around data already collected by businesses; and proactive sharing of compliance information between regulators would generally improve small business experiences with regulators.
- There is scope for increased targeting of those businesses and activities which present a higher risk to communities, and for adoption of lesser compliance cost approaches for lower risk businesses, such as less frequent inspections or less onerous reporting requirements.

- When done well, such targeting is likely to achieve outcomes at a lower cost than an engagement approach derived from strict application of a small business definition.
- Governments can improve engagement outcomes by ensuring the institutional and governance frameworks within which regulators operate, do not inhibit adoption of leading engagement practices. This includes ensuring regulators have access to an appropriate range of compliance and enforcement tools, and resourcing, to effectively deliver the policy objectives behind their regulatory responsibilities.
- Where regulators are inadequately resourced, either some risks to communities go unmitigated or the costs of mitigation are pushed onto those regulated (including small businesses). Governments should provide regulators with explicit guidance on regulatory priorities, given limited resources.
- Regulator discretion in compliance monitoring and enforcement must be accompanied by appropriate transparency and accountability measures, with regulator guidance provided on use of discretion and, where feasible, a separation of education and enforcement roles.
- More widespread use could be made of formal cooperation arrangements between regulators to minimise the overall interaction burden on business. Lead agency models to facilitate joint compliance checks and inspections and regulator forums to exchange views on good practice and build professional capacity are an effective means of improving engagement.
- Ongoing monitoring by regulators of the effectiveness of delivery approaches and costs imposed on business is essential to improving regulator performance. Governments should require regulators to report against engagement principles and ensure low cost mediation services for the resolution of disputes, particularly with local governments.

6 Suitability of Australia's aviation safety related regulations

> *"Regulation is needed to meet a range of social, environmental and economic goals.*
>
> *However, in practice, much regulation does not do this cost-effectively, and some regulation does not even adequately achieve the ends for which it was designed.*
>
> *There has been increasing recognition of these problems as regulation has continued to grow apace. Governments in Australia and overseas have sought to achieve 'better regulation' through institutions and processes to vet it more rigorously at the outset and to reform costly or ineffective regulation."*
>
> *Gary Banks AO (2011)*
> *Chairman, Productivity Commission*

Where are the 'institutions and processes' to vet CASA's aviation regulatory changes more rigorously at the outset and to reform costly or ineffective regulation?

The government's proposed industry committee reporting to the Minister may fill this gap.

As discussed earlier, trying to implement a two-tier legislative system has been a disaster for the growth of a safe and sustainable aviation system. Under Australia's legislative structure, a return to the three-tier system will enable this regulatory reform to be completed within three years.

A three tier Aviation Legislative System – ICAO Compliant

A three tier regulatory system would enable the placement of aviation requirements in the appropriate level of legislation instead of the mishmash of the current legislative system. The Act, Regulations and Civil Aviation Safety Standards (CASS) need to be completely reviewed.

> ***Civil Aviation Act:*** *Primary legislation to give effect to the Convention and to establish CASA with appropriate functions*
>
> ***Civil Aviation [Safety] Regulations:*** *Regulations related to segments/activities of aviation, based on FAR structure, and directing which ICAO standards and recommended practices CASA should promulgate for each Regulation. (e.g. use FAR 'Applicability' provisions that reference CASA promulgated CASSs)*
>
> ***Civil Aviation Safety Standards****: Promulgated by CASA, adapted from ICAO Annexes "Standards and Recommended Practices", consistent with global standards (EASRs/FARs) with minimal differences to New Zealand aviation requirements.*

The Act and Regulations provide CASA actions, directions, functions, reviews and enforcement processes to ensure conformity with, and promotion of, aviation safety and aviation growth. (refer ICAO *Regulatory Oversight Manual Part A, Critical Elements* ***CE-1, 2 & 3***)

A three tier legislative system would enable CASA to promulgate CASSs to meet Article 37 by issuing ***specific operating rules as aviation safety standards*** based on the Annexes.

> ***"Article 37. Adoption of international standards and procedures.***
>
> *Each contracting State undertakes to collaborate in securing the highest practicable degree of uniformity in* ***regulations, standards, procedures, and organization*** *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 the International Civil Aviation Organization shall adopt and amend from time to time, as may be necessary, international standards and recommended practices and procedures dealing with: (a) to (k) and such other matters concerned with the safety, regularity, and efficiency of air navigation as may from time to time appear appropriate*."

Legislative Level One

A Civil Aviation Act to enable the aviation regulator, the Civil Aviation Safety Authority (CASA), to function as a strong national aviation authority as envisaged by the International Civil Aviation Organisations (ICAO).

[ICAO] "CE-3. State civil aviation system and safety oversight functions. *The establishment of a Civil Aviation Authority and/or other relevant authorities or government agencies, headed by a Chief Executive Officer, supported by appropriate and adequate technical and non-technical staff and provided with adequate financial resources. The State authority must have stated safety regulatory functions, objectives and safety policies."*

An Amended Civil Aviation [Safety] Act would fully enable CASA to function as Australia's national aviation regulator by specifying which of the Articles of the Convention that CASA will be responsible to administer, including entering international agreements, and to promote Australian aviation. Global aviation standards and matters better located in the Regulations and CASA promulgated aviation safety standards to be transferred from the Act to the appropriate regulatory level.

Legislative Level Two

Civil Aviation Safety Regulations that identify people, organisations and functions and direct aspects CASA must promulgate in Civil Aviation Safety Standards.

[ICAO] "CE-1. Primary aviation legislation. *The provision of a comprehensive and effective aviation law consistent with the environment and complexity of the State's aviation activity and compliant with the requirements contained in the Convention on International Civil Aviation. The Regulations will address each function or activity covered by Articles of the Convention and will also specify where there is a need for CASA to adapt and promulgate Civil Aviation Safety Standards. Standards and other matters better located in CASA promulgated standards must be transferred to the third level of the system."*

Legislative Level Three

Civil Aviation Safety Standards adopted and promulgated by CASA, based on the Standards & Recommended Practices in Annexes to the Convention, consistent with the aviation regulations of the United States of America and the European Union and with minimal differences with the aviation requirements of New Zealand.

> ***"CE-2. Specific operating regulations.*** *The provision of adequate regulations (Note) to address, at a minimum, national requirements emanating from the primary aviation legislation and providing for standardised operational procedure, equipment and infrastructures (including safety management and training systems), in conformance with the Standards and Recommended Practices (SARPs) contained in the Annexes to the Convention on International Civil Aviation."*

***[ICAO] Note**. – The term "regulations" is used in a generic sense to include but is not limited to instructions, rules, edicts, directives, sets of laws, requirements, policies, and orders.*

Civil Aviation Safety Standards promulgated by CASA will enable adoption of global safety standards conforming to SARPs contained in the Annexes to the Convention on International Civil Aviation, consistent with "regulations" promulgated in North America and Europe, and with minimum differences to New Zealand aviation requirements.

Recommendation: Amend Section 9(1)(c) of the Civil Aviation Act to clarify the third tier of the legislative system based on global standards.

Why has aviation regulatory reform in New Zealand seen a growth in aviation related industries when regulatory reform in Australia has had the opposite effect?

Businesses and individuals participating in aviation will all state that new regulations are more costly and therefore ineffective in achieving "better regulation". A Regulatory Impact Statement (RIS) is only required to assess the additional burden of regulation, yet it is often the accumulation of regulation that is the problem.

The cumulative costs of Regulations cover, at the least, the following:

- *Fiscal costs to Government*
- *Compliance costs to businesses and consumers*
- *Dynamics costs to economic performance*
- *Administrative paperwork costs*
- *Capital costs*

One of the most significant visions for the reform back in the 1988s was to reduce duplication (both international and domestic), unnecessary costly regulations and the use of exemptions. Sadly, there is no government requirement such as a 'red tape reduction' obligation applied to aviation regulatory development today.

The current aviation regulatory reform was initiated around 1988 and was started in earnest by CAA/CASA around 1990 when a dedicated group was put together in the Authority to remove unnecessary regulatory requirements under the leadership of the Director of Aviation Safety. This group started in the right direction by closely working with the CAA(NZ). However, since the creation of CAA/CASA in 1988, regulatory reform has been through so many CASA Executive changes of direction, the original reasons for change have been forgotten. The original vision for a safe and viable industry has long been forgotten.

- **A 'Safe and Viable Aviation Industry' is no longer the driving force**.
- **This has been replaced by 'Safe Skies for All'**

This simple change has also changed the relationship between many sectors of the aviation industry and the regulator and the outcomes of new regulations. Viability is now questionable.

"Government needs to carefully consider the public interest when reviewing the safety oversight functions to ensure a proper system of checks and balances are maintained. CASA should retain control of important inspection (oversight) functions. Some functions cannot be delegated; otherwise, aviation personnel, maintenance organisations, general aviation, commercial operators, aviation service providers, aerodrome operator etc. will in effect be regulating themselves and will not be effectively monitored by CASA inspectors."

ICAO Regulatory Oversight Manual

Processes Expectation

Too often you hear members of parliament and government bureaucrats quoting statistics that show how many more passengers are being transported, air freight increased and increase in the number of aircraft, especially helicopters on the register that makes the industry sound like it is booming.

How often do you hear those developing the regulations stating that they ONLY have to address safety not viability? Worse still, this "safety only" approach then flourishes in those involved in the regulatory oversight functions of CASA.

Irrespective what regulations are being made, if they apply to any sort of commercial business, then they must be developed as business and trading regulations. A very close look at recent CASA produced regulations exposes them as restrictive trade related regulations with little effect on safety.

When developing regulations, the guidance of the Productivity Commission, and the many papers they have written about minimising the adverse effects of business, especially small business, should be the first principle in developing any new regulation.

There is no provision in the Civil Aviation Act that states the legislation must also be business friendly – it makes safety the only consideration for those drafting the regulations.

Australia does not have legislation like the United States where limitations are placed on unnecessary 'red tape' on those affected by the legislation.

This is where the Minister's written direction to CASA should clearly state that the regulatory reform must reduce red tape and have minimalist regulations so industry can trade safely.

Industry is being forced to change to meet a regulatory system instead of regulations enabling the industry to meet Australia's needs. Instead of writing regulations to make charter meet RPT standards, the developers should be looking at what industry can provide and then developing minimalist safety requirements without creating red tape.

If an operator believes he/she can make a profit operating an air service between two or more locations, what makes it safe? The issue of an AOC? Most unlikely.

Operators know that the only thing that matters is a reputation for safe on-time reliable service whether it is to set times or on-demand. In addition, if the travelling public is involved, then the aircraft visual condition, both externally and internally, is what brings passengers back. From the safety side, you need pilots and maintenance personnel with a safety attitude.

Australia is not North America, Europe or even New Zealand so straight out adoption of their regulations is a total disaster. It is not economically possible for charter and airlines to provide air services to our rural and isolated tourist locations with adopted regulations from these systems.

> 3.3.1.4 A State's laws and regulations must be framed in legal phraseology. They must, however, also be written in such a way that they can be used by the staff of the licensing, certificating, and approving authority in the execution of their day-to-day activities and also by the general public, who need to know how to go about qualifying for a particular licence, certificate or other prescribed approval. In any event, the regulations of a State should, at a minimum, conform to the Standards of the relevant Annexes to the Convention and should at least contain the requirements leading to the issuance or validation of licences, ratings, certificates and approvals, as appropriate.

7 Other safety related matters

Act Change Examples

The following are examples of changes needed to the Civil Aviation Act **but** the whole Act needs to be modernised so that ICAO Annexes "*Standards and Practices*" are removed from the Act and promulgated by CASA as *Civil Aviation Safety Standards* (**CASS**). The same applies to current *Civil Aviation Safety Regulations* (CASR); all ICAO Annexes "Standards and Practices" should be removed from the Regulations and promulgated by CASA as **CASSs**.

Example 1.

A. **Section 9(1)(c) of the Civil Aviation Act:** The Civil Aviation Act provides for the promulgation of '**aviation safety standards**' but does not state what these standards are based on. North America (TCCA & FAA) aviation safety standards are promulgated by the Federal Aviation Administration (FAA) as "Regulations", Transport Canada Civil Aviation (TCCA) as "Standards" and in Europe by the European Aviation Safety Authority (EASA) as Regulations.

Country	ICAO Primary Aviation Legislation		ICAO Specific Operating Regulations
Australia	Civil Aviation Act	Civil Aviation Safety Regulations / Manuals of Standards	*Sec 9(1)(c)* ***Not used*** **CASSs**
Europe	Enabling Regulations		**EASRs issued by EASA**
United States	Federal Aviation Act, Title 49.		**FARs issued by FAA**
Canada	Act	Minister Regulations	**Standards issued by TCCA**
New Zealand	Act	Minister signed Regulations	

It is imperative that this provision of the Act be clarified so that CASA is empowered to promulgate CASSs in the same manner as the Regulators of Canada, Europe and the United States of America.

Section 9(1)(c) of the Civil Aviation Act states one of CASA functions:

> ***"(c) developing and promulgating appropriate, clear and concise aviation safety standards;"***

However, CASA has failed to promulgate "[civil] aviation safety standards" because they are trying to include such "standards" in the Act and CASRs.

The reason for not issuing "***CASSs***" was the decision of a past CAA CEO in 1990, who decided to "**Two-Tier**" the aviation legislative structure. By not utilising this provision of the Act that is designed for a **Three-Tier** legislative structure, regulatory reform has failed and prevented Australia from properly complying with Article 37 of the Convention.

Civil Aviation Act 9(1)(c) *[Civil] Aviation Safety Standards* must be the legal instrument by which CASA promulgates the ICAO Specific Operating Regulations in the same manner as EASA and FAA issue "*Regulations*" and TCCA issue "*Standards*".

Act plus **Regulations** plus **CASA promulgated** Global (ICAO) Aviation Standards.

CASS: Act should use ICAO terminology "***Specific Operating Rules***".

> ***Recommendation 1: Amend 9(1)(c) to read:***
>
> *(c) promulgate appropriate, clear and concise* ***civil*** ~~*aviation safety standards*~~ ***specific operating rules****;*
>
> ***(i) consistent with the standards and practices contained in Annexes to the Convention;***
>
> ***(ii) comparable with North America and Europe aviation requirements; and***
>
> ***(iii) have minimal differences with New Zealand aviation requirements.***

Amending Section 9(1)(c) of the Civil Aviation Act will empower CASA in a similar manner as their counterparts in other mature aviation countries (EASA, FAA, TCCA). Clarifying ***aviation safety standards*** as ***Civil Aviation Operating Rules*** also meets global principles.

> "***Safety standards***" are well defined by ICAO who have promulgated global civil aviation safety '*standards and recommended practices*' in Annexes to the Convention. In North America and Europe those Civil Aviation Safety Standards are promulgated by EASA and FAA as 'regulations'. TCCA promulgate them as "Standards".

In Australia, we currently include those same aviation safety standards in the Civil Aviation Act, CASRs & associated Manual of Standards. Australia is unique compared to EASA, FAA & TCCA in that the Criminal Code is applied to aviation global standards included in the Act and Regulations.

Application of the criminal code means the "language" of 'global aviation technical standards' are changed to meet the legal "language" of the Criminal Code. This is why regulatory change has been a failure.

ICAO Definition:

ICAO defines "***regulations***" in their Safety Oversight Manual, Part A, Chapter 3 under ***Specific Operating Regulations*** that "emanate from primary legislation" [Act and CASRs] as:

> ***"Note –*** [ICAO] *the term "regulations" is used in a generic sense to include but is not limited to instructions, rules, edicts, directives, sets of laws, requirements, policies, and orders."*

CASSs and the older Civil Aviation Orders are these ICAO "regulations".

The best option is to change section 9(1)(c) to read "***specific operating rules***" instead of "***aviation safety standards***" so CASA can promulgate such standards "in accordance with" this provision of ICAO.

Specific Operating Regulations are defined by ICAO as:

> ***"Specific operating regulations.*** *The provision of adequate 'regulations' to address at a minimum, national requirements emanating from the primary aviation legislation [Civil Aviation Act & Civil Aviation Safety Regulations] and providing for standardised operational procedures, equipment and infrastructures (including safety management and training systems) in accordance with the Standards and Recommended Practices (SARPs) contained in the Annexes to the Convention on International Civil Aviation."*

Benefits:

This change would give Australia a three-tier legislative system which it had prior to government's creation of ATSB and CASA. A three-tier system that worked, and is consistent with the regulatory framework of other mature aviation systems.

It enables *aviation safety standards* to be issued in the correct "language" instead of being in the "language" of the Criminal Code that is applied to the Act and Civil Aviation Safety Regulations.

Government Regulatory Reduction: Adopting this approach will enable removal of these "standards' from both the Act and CASRs without any reduction in safety – the Act or Regulations would refer to all aviation safety requirements (CASSs) thus requiring them to be complied with. This is in line with government policy to reduce the amount of regulations and subsequent red tape.

[Civil] Aviation Safety Standards: All such "standards" can be written in a clear and concise "language" as used by EASA, FAA, TCCA and ICAO. This will improve interpretation and safety by the use of "plain English" to write CASSs promulgated by CASA.

Example 2.

B. **Section 3A of the Civil Aviation Act:** The current "Main Object" of the Act directs CASA to develop "regulations" to prevent accidents and incidents. It does not direct CASA to promulgate [civil] aviation safety standards (*refer Example 1*). This is one of many provisions of the **Civil Aviation Act that needs to change**:

1. Change Section 3A of the Civil Aviation Act to provide a new "***Objective***" that will include "**sustainable industry**" so that safety regulations and CASA promulgated [civil] aviation safety standards will support a **safe and sustainable** industry.
2. Too often, those charged with regulatory development openly state that costs are not considered as the Act only requires the regulations to address safety not viability of industry participants. The legislative structure must ensure a safe and sustainable aviation industry.

Clarification

1. Amending Section 3A of the Civil Aviation Act.

a. The current 3A of the Act states the Main Object of the Act is to *establish regulations that prevent accidents and incidents*. It is well known worldwide that accidents and incidents happen despite the amount of regulations.

b. New Zealand has the main objectives listed to achieve an *integrated, safe, responsive, and sustainable transport system* that meets New Zealand's obligations under international civil aviation agreements such as the Chicago Convention.

Compare the difference between Australia & New Zealand Objectives

Australia: 3A Main object of this Act

"The main object of this Act is to establish a regulatory framework for maintaining, enhancing and promoting the safety of civil aviation, with particular emphasis on preventing aviation accidents and incidents."

New Zealand: The objectives of the Minister under this Act are —

"(a) to undertake the Minister's functions in a way that contributes to the aim of achieving an integrated, safe, responsive, and sustainable transport system; and
(b) to ensure that New Zealand's obligations under international civil aviation agreements are implemented."

New Zealand's objective includes "*an integrated, safe, responsive, and sustainable transport system*." Quite a different approach to Australia.

CASA once had a Mission Statement that stated "a ***safe and viable aviation industry***" which kept the focus on making "business-type" aviation requirements instead of the descriptive detail that is in legislation today.

> ***Recommendation 2: Amend 3A to read similar to the NZ Objectives: e.g.***
>
> *a) CASA to undertake the government's functions in a way that contributes to the aim of achieving an integrated, safe, responsive, and sustainable aviation system; and*
> *(b) to ensure that Australia's obligations under international civil aviation agreements are implemented.*

The changes can include many points currently in the Minister's Strategic Direction to the Board and the CASRs can be used to provide regulatory direction to promulgate CASSs.

Subsequent Act Changes

To enable these two provisions to function correctly, Section 98 of the Civil Aviation Act would need to be completely modernised so CASA can be properly empowered – many regulations should direct CASA to promulgate CASSs.

Section 98 of the Civil Aviation Act should include the requirements of Articles of the Convention that CASA has government responsibility to manage compliance and enable the making of regulations that also direct CASA to promulgate CASS (Specific Operating Rules).

If the Government is to realise their aviation policy then there will need to be a change of thinking and attitude of not only industry but CASA personnel as well. Everyone recognises that we are 'over-regulated' but do we understand what we mean by stating "over-regulation is stifling industry".

Nobody will agree to lower 'safety standards' but it is possible to improve safety standards whilst de-regulating the non-airline sectors. The "language" of Acts of Parliament & Parliamentary Regulations are not akin to the 'language' of technical standards as used in EASA and FAA Regulations or the TCCA Standards.

Adoption of ICAO terminology that is used globally would also make the Act and Regulations more readable by those in aviation both in Australia and internationally.

Balanced Approach to Control and Supervision

ICAO Safety Oversight Manual states:

"A balanced safety oversight system is one in which both the 'State' and the aviation share responsibility for the safe, regular and efficient conduct of civil aviation activities. This relationship should be established in the primary legislation, regulations and requirements and put into practice as a matter of policy and methodology of the CAA."

Skilling Issues

Skilling and shortages of both aircraft maintenance personnel and pilots has been a major concern in the aviation industry ever since changes were made to the systems in the mid 1990s when the CAA was created and, to reduce government (CAA) costs, functions performed by CAA/CASA were devolved. In both maintenance and pilot training, the outcome has been a total failure.

Aircraft Maintenance Personnel Skills

Over the last decade in particular many bad comments have been thrown at CASA as maintenance organisations executives have become frustrated with a lack of skills as a result of the Australian Qualification Framework and competency based training.

- CASA promulgates the kinds of AME licences and are setting standards.
- Manufacturing Skills Australia—Industry Skill Council, develops competency units to bring about national training standards.
- RTOs convert the training packages to meet local industry needs restricted by government funding.

The real issue is that training has been manipulated to fit into a federal government funding model that is administered by State Departments not harmonised with aviation global standards.

Basically, the current government policy limits the funding to 1280 hours per student undertaking 'trade' training. The AME licence training is added to trade training and specific aircraft/component training must be added to those costs.

However, what we have now been told, this does not mean that the student gets **1280 classroom hours of training** as competency assessment is included in 1280 hours. Assessment, as put to us, could account for 280 to 380 hours.

Some States have different funding models but this has not met global aviation standards. However, the 1280 – 300 odd hours = **less than 1000 classroom hours**.

This means that an Australian AME will obtain less than half of the classroom hours that our Asian neighbours, European or North American apply to mandatory training their AMEs for the purpose of an ICAO Annex 1 licence.

The Government must take responsibility for this slide from global aviation maintenance training standards.

Australia's aircraft maintenance training is obliged to meet treaty standards.

Convention Obligations

Under the Convention, Article 37 places an obligation on Australia to adopt international standards produced by ICAO. Annex 1 to the Convention, list the training standards to be adopted.

To assist countries, ICAO produces Guidance Manuals that specifies the minimum standards to be adopted.

ICAO Doc 7192 AN/857, Training Manual, Part D-1 applies to Aircraft Maintenance. This document promulgates the international LAME training standards.

This specific ICAO manual includes the training principles and subject matters to meet the requirements of Annex 1, Chapter 4, AME licensing.

The ICAO Training Manual sets out 'Training Specifications' with recommended duration and level of capability for knowledge, skill and experience training. Knowledge and skill relates to class room hours and experience relates to applied practical maintenance operations post obtaining knowledge and skill competencies.

The ICAO manual states it is important for the trainees to develop a high degree of confidence, competence, initiative, team spirit and self-reliance so that they can perform well under varying and sometimes trying circumstances.

The ICAO training manual also specifies classroom training times:

Knowledge training

- General: 545 hours
- Airframes: 800 hours
- Engine & Propellers: 750 hours
- Electrical & Instruments: 1350 hours
- AFCS/Nav/Radio: 785 hours
- Human Factors: 30 hours

- **Avionic knowledge training hours: 2710 hours**
- **Mechanical knowledge training hours: 2125 hours**

Skill Training

- Airframe: 1825 hours
- Engines: 1000 hours
- Avionics: 3075 hours

- **Avionic skill training hours: 3075 hours**
- **Mechanical skill training hours: 2825 hours**

Avionic total training hours: 5785 hours
Mechanical total training hours: 4950 hours

Experience is another 2 years.

EASA mandates the knowledge and skill training elements in their legislation. Most Asian countries that have adopted the EASA system have also adopted this standard.

(EASA) Appendix I
Basic Training Course Duration
Minimum duration of complete basic courses

Basic Course	Duration (in hours)	Theoretical training ratio (in %)
A1	800	30 to 35
A2	650	30 to 35
A3	800	30 to 35
A4	800	30 to 35
B1.1	**2400**	**50 to 60**
B1.2	**2000**	**50 to 60**
B1.3	**2400**	**50 to 60**
B1.4	**2400**	**50 to 60**
B2	**2400**	**50 to 60**

Note: EASA classroom hours do not meet the ICAO standard.

Note: Australia's classroom hours (1280) do not even meet EASA standards.

Government funding does not meet ICAO or EASA training standards.

So why doesn't the government fund training to meet its obligation under Article 37 and adopt these international training standards?

It is becoming obvious that the current training system needs to be totally revamped to provide higher skilled outcomes for the aviation MRO industry, possibly based on the Australian Maritime College in Tasmania.

> **May 2nd, 2013.** The Australian Maritime College and the University of Tasmania today welcomed Prime Minister Julia Gillard's announcement of almost $12 million in additional funding for specialised maritime training.
>
> This significant funding boost will allow AMC to train more seafarers than ever before, for careers aboard Australian and internationally flagged ships.

Maybe it is time Australia had a world class Australian Aviation College linked to a University funded by the Australian Government in much the same way as they fund the AMC, the Institute for Maritime Education, Training and Research.

Is it time to have Australian Aviation College as Australia's Institute for Aviation Education, Training and Research?

Pilot Skills & Shortage

AMROBA contends that this is another case of failed change management when the CAA/CASA decided to not provide Examiner of Airmen by devolving their responsibilities to industry delegates (authorised persons). The only segment that has benefited by this change has been the non-VH aviation sector as pilot training costs escalated and new entrants and others moved to the non-VH sector.

- **The Pilot shortage must be the first priority.**
- **Without more pilots we don't have an industry.**

> ***Proposal:*** *Government must adopt an independent flight instructor system based on the FAA system as soon as possible. Independent flight instructors are a foundation stone required for the revitalisation of the general aviation segment.*

EASA has not provided a stable alternative to the FAA independent flight instructor system having recently pulled back from their original proposal for a PPL instructor.

European aviation is very different to the geographic scenario in Australia. Past adoption of other countries' aviation regulatory systems has proven to have had a negative impact on general aviation viability.

Justification:

Compare the CASA and FAA websites reveals the difference – one is about **licensed training establishments only** whilst the **other includes licensed establishments and individuals**. In the United States more than 60% of pilots are trained by **non-certificated** (14CFR part 61) flying schools and independent flight instructors; i.e. ***unlicensed aero clubs/flying schools and independent flight instructors.***

- **CASA** – *The first step in taking up flying, as a career or just for pleasure, is to undertake a Trial Instructional Flight, or TIF, at **a licensed flying club or training organisation**.*
- **FAA** – *The major sources of flying training in the United States include FAA-approved pilot schools and training centres, **non-certificated (14 CFR Part 61) flying schools, and independent flight instructors**.*

With the FAR Part 61 system, the availability of flight instruction from independent flight instructors provides a much broader training base than what is currently available. Broaden the training choice and increase pilot numbers.

Most pilots in the U.S. undergo flight training as private individuals with a flight instructor, who may be employed by a flight school. Those who have decided on aviation as a career often begin with an undergraduate aviation-based education.

Some pilots are trained in the armed forces, and are issued with civilian certificates based on their military record. Others are trained directly by airlines.

The pilot may choose to be trained under Part 61 or Part 141 of the FARs. Part 141 requires that a certified flight school provide an approved, structured course of training, which includes a specified number of hours of ground training (for example, 35 hours for Private Pilot in an airplane). Part 61 sets out a list of knowledge and experience requirements, and is more suitable for students who cannot commit to a structured plan, or for training from freelance instructors.

How many CASA general aviation training schools have closed since the process was devolved? Too many.

Advantages/disadvantages to general aviation of implementing the FAA independent flight instructors system:

1. Increasing the geographically flying training capability is crucial to attracting potential aviators' access to flight training. The exodus of flight instructors from regional airports two decades ago has been a major reason for the pilot shortage in Australia.
2. Independent flight instructors have the potential, based on United States figures, of adding a 100% increase to the pilot pool. Independents would complement the licensed training organisation sector.
3. Benefits of any substantial increase in pilot training capability addresses pilot shortages as well as major flow-on economic effect throughout Australia. More pilots, more flying, will not only benefit aviation services (maintenance/fuelling, etc) but local regional community economies.
4. Many potential pilots lose interest because local airports do not provide flight training. If the closest training establishment is some distance away, then the potential aviator will find another leisure pastime.
5. Licensed independent flight instructors are more likely to provide flight instruction at regional airports throughout Australia.
6. Many pilots trained by independent flight instructors in the past have gone onto successful careers in commercial aviation.
7. Aero clubs, instead of having to be licensed by CASA, would be able to employ a qualified flight instructor and add to benefits the club can provide. This would regenerate aero clubs – some may even reopen.
8. Independent flight instructors do not compete with licensed flight training facilities, they add to the potential success of licensed training facilities.

Many pilots start with private pilot training by an independent flight instructor and then opt for a structured course provided by a licensed facility to gain access into the commercial industry.

Until there is a government decision to implement the ICAO compliant pilot training system based on the FAA system then this industry will not be able to provide pilot numbers necessary to increase aircraft utilisation.

Is it too late to implement an independent flight instructor system? Are there enough flight instructors available? Can CASA implement the FAA's independent flight instructors system?

e.g. IndependentFlightInstructors.com is one place to find flight instructors in the US. http://www.independentflightinstructors.com/

Summary: Government has indicated a priority to implement commercial aviation regulations for the airline and charter industry but pilot shortage is commercially affecting these sectors now.

We can see no reason why adoption of FAR Part 61 should not be adopted ASAP.

General aviation cannot stand back and let governments make decisions anymore. All industry participants must get behind their industry associations and support their efforts to have new decisions made that will enable a viable and safe general aviation industry to expand to its real potential. The economic benefits to local communities including increased employment must be impressed on government.

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