

# Submission to the Aviation Safety Regulation Review

By  
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## INTRODUCTION

The Aviation Safety Regulation Review in Australia presents a unique opportunity to address a growing crisis in a national industry that is underrepresented, over-regulated and often taken for granted by the both the government and the Australian public.

Aviation remains a vital piece of the national infrastructure set and deserves to be overseen by a modern, industry-centric regulator who is adaptive and sympathetic to the varying needs of different aviation sectors.

This submission will attempt to identify, for the panel, some key areas of concern for industry with regards to regulation. Whilst the author of this submission is conscious of the 'terms of reference', it has been found necessary to expand on certain points of aviation safety concern in order to provide the panel with the proper context with which to frame any criticisms given within.

The topics covered by this submission are not exhaustive but are included because they are seen as representing clear and present challenges to the provision of air safety regulation in Australia. They are:

- How the current Civil Aviation Regulatory system is failing General Aviation and in particular, the Flying Training Sector and the effects this may have on future air safety.
- RPT Safety at Non-Towered Aerodromes due to CASA's acceptance of poor infrastructure and inadequate airspace design.
- Pilot Fatigue and CASA's role in regulating Flight and Duty Limitations.
- CASA's disengagement from and complete lack of rapport with industry.
- The on-going crisis of mismanaged regulatory reform in Australia.

This submission will then provide suggestions for further research by the panel as well as ideas to help address the issues raised. It is hoped that the contents will be useful to the panel and the author remains available to provide further detail and advice should it be so desired.

## GENERAL AVIATION

The contact point for most Australians when it comes to their aviation industry is the domestic or international airport and high capacity air transport services.

Whilst highly visible, the major airlines are but one sector in a diverse and wide ranging industry. Technologically, there is a vast difference between modern airliners and many of the aircraft found at the other end of the spectrum in General Aviation. Vastly different too, is the level of operational infrastructure and support necessary to safely operate a General Aviation Business. Despite this, CASA applies what amounts to a 'one size fits all' approach. GA Operators are faced with almost the same regulatory burden as the bigger airlines, but without the resources necessary to sustain it. Consider for example the requisite infrastructure required for the average, small GA charter company, often with only a handful of staff (or even a single individual) who also has to operate the aircraft and take care of the business side of the operation:

### Approvals

- Air Operator's Certificate
- Approved Operation's manual covering all intended operations
- Approved Flight Check System
- Approved System of Maintenance

### Personnel

- Approved Chief Pilot
- Approved CEO
- Approved Head Of Airworthiness and Aircraft Maintenance
- Safety Manager (some operations)

### Administration

- Rostering system
- Flight and Duty Times system
- Pilot record keeping system
- Drug and Alcohol Management Plan
- Approved Facilities
- Document library
- Safety Management System (some operators)
- Dangerous Goods Administration
- Safety and Emergency Procedures Training Administration

These are not token approvals. In the aviation industry, each of the above invokes a complex administrative process and is subject to compliance auditing and potential prosecution by the regulator if not managed correctly.

GA understands the importance of maintaining suitable infrastructure and personnel to safely operate aircraft, yet to expect them to be able to maintain an 'airline level' of administration is un-reasonable and often un-achievable in a sector with high operating costs and extremely small operating margins.

The complexity, expense and open-ended nature of the Air Operator's Certification process sees many potential GA operations flounder and fail

even before they gain their operating approval. For those that persevere, the constant specter of CASA disciplinary action for minor administrative breaches and the burden of compliance to complex impractical, and ever changing and rules, stifles growth, reduces the ability to be flexible and reactive to the market and discourages innovation.

CASA's approach to regulatory compliance for General Aviation, displays an almost pathological interest in the 'minutiae' of rule and recording. It does little to encourage or foster better practices and ironically, it sets up ideal conditions for operators to revert to a cycle of disguised non-compliance and un-safe practice.

The regulatory burden and expense for certification and operation of General Aviation businesses needs to be modernized and simplified if GA is to have a future in Australia. This could be done by:

- Producing simple, easy to read and understand rules.
- Standardization of operating documents and systems for small operators.
- Abandoning cost recovery for general aviation.
- Applying a helpful and constructive approach to surveillance and oversight.

#### Where have all The Australian Pilots Gone?

To underscore the critical malaise of GA flying training in Australia it is helpful to examine the following:

In the most recently reported General Aviation Activity Statement (2010) Flying Training hours in Australia fell by 12.2% in a year when total GA and regional airline hours increased by 3.2%. (Bureau of Infrastructure, Transport and Regional Economics). *There is no published data yet for 2011, 2012 or 2013.*

Anecdotal evidence suggests that this trend has continued, as can be appreciated by a visit to one of Australia's once thriving training aerodromes like Archerfield in Queensland or Bankstown in Sydney where the observer will notice a fraction of the aircraft in the circuit compared to a decade ago.

To be clearer, whilst the specific statistics on flying training rates are not yet available, a casual examination of aircraft movements for aircraft below 7 tonnes at the training aerodromes since 2009 may give an indication of what we may expect to see in the GAAS:

Percentage Change in actual aircraft movements between 2009 and 2013.  
(Airservices Australia)

Archerfield	34% DOWN
Bankstown	44% DOWN

Jandakot	36% DOWN
Moorabin	28% DOWN
Parafield	24% DOWN

Many long established flying schools have closed down in the last 5 years and those that remain are often surviving on contracts to train overseas students having seen their proportion of Australian Pilot Licence candidates evaporate.

The reasons for the decline in flying training rates generally and in the levels of Australian students specifically are likely to be many and varied and yet one causal factor that cannot be neglected is the failure of Australian Flying Schools to Thrive due to restrictive and burdensome regulation.

Australia can rightfully claim to have historically produced some of the world's best-trained and experienced commercial pilot candidates for airline employment. General Aviation flying schools are the nursery for the skilled and competent pilots the Australian public has come to expect will be in the cockpit when they board an airliner.

If we become incapable of maintaining an adequate supply of Australian pilots for airline employment, the standards and quality of air safety in this country will almost certainly become eroded. When the lead-in time to produce a Commercial Pilot with the requisite experience for airline employment, and the years, throughout which, this decline has been taking place is taken into account, we may already have let this situation deteriorate to a barely retrievable position.

Most Australians would be unaware that major regional airlines in this country have recently employed significant numbers of foreign trained pilots to fill positions that would have traditionally been filled by Australian pilots. This is a new and very different paradigm for air travel in Australia, the like of which, we have not seen since the 1989 Pilot's Strike (*and that situation was temporary*).

Unless GA flying schools are released from regulatory burden, so that they can prosper encouraging more young Australians to learn to fly, the Aviation landscape in this country will soon be vastly different from that to which we have become accustomed.

## REGULAR PUBLIC TRANSPORT

### RPT SAFETY IN NON-CONTROLLED AIRSPACE

Most members of the Australian public would be unaware that many airline services in Australia operate into aerodromes with no Air Traffic Control service. At Non-Controlled Aerodromes, aircraft operate on a 'Common Traffic Advisory Frequency' – self-separating themselves by two-way radio transmissions, and visual lookout. This procedure is adequate for light aircraft, but is extremely difficult and stressful for crews of high capacity RPT jets.

Compounding the problem is the recent introduction of revised procedures at Non-Controlled Aerodromes, which have done away with the previous designated 'fixed distance and altitude' airspace boundaries for CTAFs. Instead the new procedures provide only a vague reference to when a pilot should monitor the CTAF.

The chance of aircraft being in the same area but on different frequencies is very great. This design flaw along with the ambiguity that these new procedures have created is simply un-acceptable and dangerous.

It would also come as a surprise to the public to learn that in Australia, many high capacity RPT services operate into aerodromes with no Aviation Fire and Rescue Service.

At ports like Balina NSW, Boeing 737 and Airbus A320 aircraft carrying around 180 passengers have no on-field fire service and rely on a call out being made to the municipal fire brigade located some distance away in the town. Given that response time to a major aviation accident is critical, this is a tremendous risk. Additionally, these aerodromes are often short and narrow, which makes them difficult to land on, the arriving aircraft is often carrying a heavy fuel load due to the requirement to carry fuel for the return flight (*tankering*), and the aerodrome has no control tower.

It is hard to see how such operations can pass a serious risk analysis and yet CASA seems ambivalent to the risk, and has exacerbated the problem with its approval of the poorly thought through circuit and radio procedures for non-towered aerodromes.

The recent provision of control towers in the busy Western Australian ports of Broome and Karratha is welcomed but the need is also great at many other ports like Port Macquarie, Balina, Proserpine and Hervey Bay.

The provision of additional controlled airspace should not be taken to mean the exclusion of general or recreational aviation from those airports. Rather, every effort should be made to foster, encourage and facilitate the operation of such aircraft at secondary controlled airports. Where this would involve regulatory change, it should be done.

CASA must re-align its regulatory focus in the regular public transport arena to bolster the requirements for safe and appropriate aerodrome and airways facilities for scheduled jet and turboprop transport operations. If this means lobbying government to fund necessary infrastructure, then CASA should be doing this too.

## PILOT FATIGUE

Perhaps the single biggest risk factor in Australian Aviation today is Airline Pilot Fatigue. Quite a bit of research has been done into the fatiguing nature of 'Long Haul' flying, but scarce little exists to quantify the extremely fatiguing nature of modern 'Short Haul' operations.

Domestic pilots in Australia are regularly flying rostered duty periods in excess of 12 hrs without a break. They are often rostered early and late duties indiscriminately, which disrupt the circadian sleep cycle, creating fatigue, and are regularly requested to 'extend' their already long duty days to meet the schedule following disruptions. Additionally, pilots of the newer 'low cost' carriers are inadequately fed, receive poorer quality resting accommodation at overnight stops and enjoy a poor work / life balance.

The recent trend by CASA to devolve responsibility for fatigue management to the airlines should be viewed with great concern. Fatigue management regulation should necessarily be the responsibility of the regulator because the power to build their own fatigue management model is just too tempting a prize for airlines chasing efficiency and pilot groups chasing money. CASAs move toward industry based fatigue management has also created a nightmare of standardization issues. For example, the regulator has failed to develop a protocol for pilots working for more than one operator who may have different fatigue management systems!

CASA should immediately set basic minimum standards in relation to Duty and Flight Time limitations that are enforceable and required to be maintained by all operators. Operator's then choosing to follow a Fatigue Management Plan, would then be free to do so providing the CASA minimum requirements are not breached.

### CASA's CORPORATE SUCCESS AND INDUSTRY FAILURE

A visit to a CASA regional office reveals a slick corporate machine. Offices for Flight Operation's and Airworthiness Management along with the myriad of ancillary departments are located within a glass and stainless steel fortress behind a deep layer of security. Visitors lucky enough to get an appointment must obtain security clearance from the front desk and be issued with a visitor pass and may then only access certain areas of the building while under direct physical escort. Whilst this is nothing unusual for a government department, the physical inaccessibility of CASA and its personnel has become a metaphor for the attitude of its servants and agents to the industry it supports.

Most industry participants loathe CASA but feel as though they can do nothing about it. Pilots and Air Operators see CASA as detached and out of touch with industry. CASA surveillance is seen to have an '*out to get you*' approach and industry is fearful of receiving 'extra surveillance attention' if they speak up or criticize the regulator in any way. Whether real or perceived, this *is* the nature of the CASA – Industry relationship and therefore ought to be recognized and addressed. Common complaints are:

- CASA officers can be officious and intimidating while displaying a reluctance to make decisions or to offer advice or guidance. They have failed to maintain a rapport with industry.

- CASAs safety publications department misses the mark and neglects the information industry really needs.
- CASA can be reactive and heavy handed when it comes to disciplinary action and the suspension and cancellation of AOCs. They are often perceived to be acting arbitrarily rather than on evidence based rationale.

CASA officers are rarely seen in the field but their presence usually conjures feelings of fear and loathing. Many operational CASA staff lack broad industry experience in Civil Aviation. Without broad experience, it is very difficult for CASA officers to contextualize the differing requirements and standards appropriate for various levels of industry. Again, this leads to a 'one size fits all approach' which is heavily weighted towards the airlines, at the expense of smaller operators. CASA auditing of operators usually produces a list of 'Non-Compliance Notices for technical and administrative breaches many of which can be petty in the extreme. This micro-managing of regulatory compliance through NCNs causes stress and anxiety to industry over trivialities and can distract both CASA and the operator from seeing the 'big picture' air safety issues.

CASA Officers are renowned in the industry for being unapproachable and officious. They are perceived to engage in modern management speak and the 'jingoism' of bureaucracy but un-able to 'talk straight' to industry when clarification or action is required on an administrative point. This of course could not be true of every CASA officer and we can be confident that there are some very fine people working for the regulator. However, this is industry's perception, it is probably not without foundation and therefore must be addressed. Training CASA officers to be more respectful and approachable in their relations with industry is critical if this situation is to be rectified.

The prevailing culture among CASA staff seems to be one of avoiding individual decision-making while hiding behind the veil of bureaucratic process. Even effective and respected CASA officers seem to suffer from this affliction. It is particularly galling for example for the Chief Pilot of a company to be lectured to about his decision-making responsibilities when the FOI giving the lecture takes none themselves.

This attitude may allude to a systemic crisis of confidence between the organization and its individual staff and is a particularly frustrating situation for an industry that is, by its nature used to decisiveness, clear thinking and action. Sometimes, a quick and practical decision by CASA in relation to an operating approval etc can save a company thousands of dollars.

It must be frustrating for the conscientious CASA officer trying to do their job. CASA must examine the trust and support it has in its staff to see how this situation can be addressed.

Contrasting this lack of confidence CASA officers seem to have in rule based decision making, can be an often fervent forcing of 'personal opinion' by the

same people on an operator. This is unacceptable at any time, but is particularly appalling when the CASA officer lacks the experience or wisdom to formulate such advice.

Situations like this arise frequently in the airlines when a CASA officer who has been trained at the airlines expense on a particular aircraft type, but has no operational experience subsequently insists on a particular operating policy because of a personal preference. In GA it can occur when a military trained CASA officer dictates procedure to a company when they have never themselves operated in the aviation business environment. Careful selection and training of CASA staff may help to alleviate this problem in time, but a cultural shift in CASA to be more respectful and '*industry centric*' is what is really needed.

CASA officers should clearly differentiate between the application of law, for which they should rightly be regarded as experts, and the offering of advice on policy and procedure. This is not to say that CASA should not give advice, industry would like nothing better! but advice, should be just that and always given with an appropriate level of deference to the industry professional with whom the officer is dealing.

CASAs Publication's Centre produces fancy banners, glossy flyers and an assortment of pads, pens and trinkets related to air safety, which whilst impressive, seem to be more concerned with the presentation than the message. Most of these publications and items go un-read, or un-used by industry, though they may be measured very highly internally by CASA against its obligation to 'safety education'. Unfortunately, the two really useful publications that CASA once produced, the Air Safety magazine and the Visual Flight Guide have been withdrawn from publication and are now only available on line (*in the case of the VFG – without a functioning amendment status record*). CASA should look first to practical publications that make it easier for industry to do its job and that are relevant and interesting to the industry participant before printing beer coasters and pens.

While it can take years to gain an Air Operator's Certification, CASA has extraordinary power when it comes to suspending, varying or cancelling a certificate. The power to ground an Air Operator is a necessary and appropriate function for the regulator in circumstances where there is a clear an imminent risk to air safety.

Too often, however, the power to suspend an AOC seems to have been dispensed arbitrarily with little due process or regard for the destructive economic effect that grounding aircraft has on a small flying business. Even in cases where the operator is found to be without fault, the suspension action can cause the business to fail anyway.

The nature of Air Operations and the overburden of procedure, and regulation means that CASA could find grounds to suspend just about any Air Operator if they look hard enough. It seems to be a disappointing coincidence therefore



that groundings often occur arbitrarily following incidents or un-substantiated reporting regardless of evidence. This 'reactive' rather than pro-active approach makes Air Operator's fearful and does little to genuinely protect the travelling public. General Aviation Operators particularly tend to feel the weight of CASA's hand for simple breaches whilst there is a perception that serious incidents at the airlines often to go un-noticed.

The extremely poor opinion of the regulator held by just about everyone in the 'operational' areas of aviation in this country should be a matter of great concern. The fact that CASA does not seem to be aware of industry sentiment, or is dismissive of it, is an even greater worry. There is no doubt that with good leadership and effective government oversight, the relationship between CASA and the industry could be recovered but recognition and acknowledgement of the problem first will be the key.

## REGULATORY REFORM INC.

Australia's Air Safety Legislation is a complete mess. Pilots, Air Operator's and Aviation personnel have to wade through a minefield of contradictory and ambiguous law across at least six volumes of rules and procedures including:

- Civil Aviation Regulations (1988)
- Civil Aviation Safety Regulations
- Civil Aviation Orders
- Civil Aviation Advisory Publications
- Aeronautical Information Publication
- Civil Aviation Circulars and Advisories

Behind these publications, CASA operates a vast network of procedures manuals (Manual's of Standards), guidance material and forms. Whilst these are primarily designed to assist CASA officers in the decision making process, there is an increasing expectation that industry be familiar with, and in compliance of Manual's of Standards. In doing this, CASA has created a system of quasi-law that is un-sanctioned and un-ratified by Parliament and further increased the regulatory burden on industry.

Regulatory reform was originally charged with streamlining and simplifying Australian Aviation Regulation while bringing it into line with international standards – chiefly that of the US Federal Aviation Regulations (FARs).

The process of replacing the CARs and CAOs with the CASRs has been on-going for over twenty (20) years and is still a long way from completion! By any measure, this is an extraordinary and unacceptable delay. It is thought that because this task has been on-going for so long, that much of the corporate knowledge as to why the process was started in the first place has been lost. Rather than a practical project with a delivery timeline, regulatory reform in CASA has itself become a 'self sustaining industry' – they even have a fancy logo for it! Meanwhile, industry is crying out for clear and consistent rules in a simple and understandable format.

Unbelievably, after a seemingly endless delay in progressing to the CASRs, the recently delayed CASR Part 61 (Flight Crew Licencing), was rushed out!

Industry was astonished at its illegibility, poorly thought out processes and unworkable rules. Lip service only seemed to be given to industry consultation and subsequent amendments didn't seem to make the piece much better. Whilst there were some innovative rule changes, the very writing of the proposed Part 61 was so riddled with officious language, like (*'an operator commits an offence if...'*) and complicated 'Legalese' that it was virtually 'unreadable' to the average industry participant.

The promised 'Manual of Standards' supposed to interpret the rules was never issued.

CASA did the only sensible thing possible and postponed the introduction of Part 61 (along with Part 141, 142 etc), but then in an extraordinary show of arrogance, had the temerity to blame industry for 'not being ready'.

The failed introduction of Part 61 should be seen as a clear demonstration of CASA's in-ability to manage regulatory reform in Australia. CASA has completely lost its way with the intent and process of regulatory change and it is difficult to see how it could be considered competent to continue to engage in this activity.

By contrast, New Zealand – our near neighbor and aviation minded state, has one set of rules – appropriately named the 'Civil Aviation Rules'. They are in FAR format, very easy to read and simple and are complete. The New Zealand CARs make appropriate distinction between the Airline and General Aviation sectors (*as well as recreational, sport and adventure aviation*) and are obviously focused toward industry need whilst maintaining a robust regulatory framework.

General Aviation thrives in New Zealand (*and they have airlines too!*), where the general economic conditions are not as favorable as they are in Australia. We would be well advised to look to New Zealand as an example of how simple and effective Aviation Regulation should be delivered and administered. In fact, with little alteration the New Zealand CARs could be adopted in their entirety here in Australia.

#### SUGGESTED FURTHER RESEARCH

It is suggested that to support this Inquiry, the following areas should be researched in detail:

- The numbers of Australian Citizens obtaining Commercial Pilot Licences since 1994.
- Flying training rates in Australia since 1994.

- General Aviation Air Operator Certificate holders since 1994 (Statistics on 1. numbers issued vs numbers cancelled. 2.number of holders by year. 3. Number of suspensions by year.)
- Survey of industry attitudes to the regulator.
- Survey levels of Fatigue felt by professional pilots in Australia.
- Survey public opinion of RPT flights into non-towered aerodromes
- Study the New Zealand CAA's approach to Air Safety Regulation and the potential for adopting in toto the New Zealand CARs.

## VISION FOR THE FUTURE

The author of this submission believes that the corner stone of Aviation Safety in Australia is the quality of our pilots. To enable industry to produce sufficient quantities of well-trained and experienced pilots to fly the fare paying public, we must have:

1. A ready source of pilot candidates who are attracted to, rather than discouraged from joining the industry.
2. A robust and vibrant General Aviation sector that is unencumbered by the over-use of obsolete and confusing regulation and that is supported by a pro-active and engaged regulator.

Some ideas for change are:

### Regulatory Reform

- Abandon the Australian Civil Aviation regulatory model
- Adopt the New Zealand CAA model of 'Civil Aviation Rules' as a one-piece conduit for regulatory interaction with the aviation industry that is simple and useable.
- Appoint an industry panel to approve any future rule changes by CASA. Panel approval would be required for any rule change and this would only occur after an 'industry needs analyses and a 'usability test' had been satisfied.

### Stimulating GA.

- CASA to produce a generic 'Operation's Manual' for all operators of aircraft below 5700KG engaged in Charter and Airwork Operations (Including Flying Training). The manual would be easy to read, practical, compliant and standardized while allowing for modest tailoring to suit the individual operator. Adoption of the CASA Op's Manual would guarantee compliance and slash the administrative cost and time required for CASA and industry to complete Air Operator Certification.
- Remove the requirement for Charter and Airwork Operators to administer a Drug and Alcohol Management Plan (including micro DAMP). CASA to continue random drug and alcohol testing throughout industry.

- Allow Joy Flights (Local scenic flights) as Airwork operations rather than Charter.
- Remove cost recovery measures for trainee pilots currently (ASIC \$200.50, SPL \$50, GFPT \$25, PPL \$60, CPL \$80, Cyber exams \$65 each).
- Abandon the cost recovery model for GA (currently \$190/hr). Provide services and support material at cost rate or free of charge.
- Publish the VFG (in controlled format hard copy) and deliver to industry at cost rate.
- Publish the Flight Safety Magazine in hard copy and deliver to industry free of charge.
- Establish an independent panel of industry experts to preside over decisions on AOC suspension and cancellation. Initial suspension by CASA would be allowed for imminent risk (and prior to panel approval) but for no more than 7 days.
- CASA to train and appoint a quota of appropriately trained and experienced, industry based testing officers to ensure that the most competent and skilled personnel are charged with this most important role.
- CASA to provide it's FOIs and AWIs with training on industry engagement and to empower them with the responsibility and protection necessary for them to confidently give advice and guidance in the field.

#### *About the Author*

*I am a pilot with 20 years + experience. I am a serving Captain with an Australian domestic airline and also the owner and Chief pilot of a Recreational and General Aviation Flying School. I am intimately connected with all levels of the industry from Ultralights to Airliners and having recently completed a successful AOC application from scratch, I am well qualified to express an opinion on the regulator.*

*I commend my submission to you.*

