CASA – An Anachronism to the Industry it Serves

Submission to the Independent Aviation Safety Review Panel

Contents:

CASA – The Origins:

The aviation industry has its roots in war. The concept of Civil Aviation was born at the end of WW1; which is why the Air Navigation Act 1920 is dated to 1920.
It took from ~1920 to 1944 for the international treaty known as the Chicago Convention (administered by the International Civil Aviation Organisation) to take form.
At the close of WW2, the vast bulk of Australian aviation expertise was either military-trained, or had engaged in the production of military aircraft.

The Australian National Airworthiness Administrator ("NAA") was formed, in order to allow Australian aeroplanes to fly over foreign countries – primarily the aeroplanes of Quantas.

As the national aviation expertise shared an *esprit de corps* from their common military background, a small and highly authoritarian structure was formed, with delegations made – quite freely - to industry members (not members of the NAA). The phrase "unless (the NAA) is satisfied" is endemic to aviation regulations in this country.

This structure contained the seeds of its own functional erosion, as the entire structure depended upon the mutual respect derived from the common backgrounds of the entire industry. Authoritarian declarations were generally understood as authoritative, and the pseudo-militaristic overtones were accepted by the ex-military.

The erosion of trust was inevitable, as military protocols are not designed to function in a civil context, and the initial closeness and *esprit de corps* faded over time.

CASA has been trying to reduce the number and scope of industry delegations ever since, despite the demonstrated success of civil-trained persons in the roles.

CASA's adherence to this anachronistic model may be seen in the appointment of an ex Mirage (military) pilot, ex-Mirage Instructor, ex-airline instructor as the Director (stand up, John McCormack).

CASA – The Unconstitutional:

It is a fundament of Common Law, that a person's livelihood is sacrosanct. The Australian NAA's authority over the industry it serves, is wholly enforced by its ability to cripple or eliminate the livelihoods of industry participants who displease it.

CASA is famous for its determination to eliminate "undesirable" operators from the industry, and indeed generates substantive work for the AAT, via abusing its discretionary authority, in that process. CASA has no truck with "fostering" or encouraging aviation in Australia, or in any other way increasing its liability exposure (under the Civil Aviation Act).

Due to the livelihood threat issue, the majority of CASA's victims are intimidated from ever seeking redress before the AAT. A review of the aviation matters brought before the AAT must consider that it is only a minority of the actionable cases.

Workplace bullying is the sole method by which CASA performs its "police" functions, as no alternative is provided it under the Civil Aviation Act – as far as it is concerned.

Until Australia – reluctantly, it seems – ceases to enshrine workplace bullying in aviation legislation, there is no possibility of CASA being seen as other than a bunch of authoritarian thugs operating in their own unique reality.

CASA – a plethora of roles:

The ICAO Airworthiness Manual sets out an NAA's responsibilities, vis:

a) aircraft type certification;
b) registration of aircraft;
c) issuance of Certificates of Airworthiness;
d) continuing airworthiness;
e) approval of aircraft maintenance organisations
f) certification of operators; and
g) licensing of personnel.

In addition, our NAA has been tasked with writing its own regulations since WW2, firstly in the unconstitutional "third tier" of non-disallowable instruments (Air Navigation Orders), and currently under the Review of Regulations, the CASRs themselves.

Do the Australian Federal Police re-write their Act and Regulations? I'm sure it would make life easier for them….

CASA is the ultimate arbiter of aviation safety*; the creator of regulations; the administrator under said regulations; the enforcer of said regulations; and the enemy of industry under the Act.

This is not idle rhetoric, but simple fact. CASA's primary responsibility under the Act, is the safety of civil aviation in Australia. Now, the only completely safe aeroplane is one that does not fly. CASA is therefore arguably negligent in not grounding all aeroplanes in Australia, except that it has a degree of discretionary authority.

It is perhaps more fair to say that the Australian industry, by existing, is the enemy of CASA in that it exposes CASA to litigation in the performance of its role; CASA is also a body corporate, and may sue and be sued in its own name.

The intent of removing CASA's Crown Immunity might well have been to regulate the abuses of administrative authority within CASA, in lieu of recognising and remedying the fundamental dysfunctionality of Australia's aviation regulation model. But it has been an abject failure and a curse upon our industry as a whole.

**Courts traditionally do not recognise that, in the few years ensuing since WW2, the balance of expertise has shifted out of the NAA and into industry. CASA also refuses to recognise this point.*

Australia is supposed to enjoy a separation of State and Judiciary, and a separation between the function of the various police forces and the judiciary. For how much longer will CASA be <u>required</u> to integrate state, judicial, police, and administrative functions?

<u>CASA – the Administrator:</u>

The FAA has stood up on its hind legs, and made a statement to the effect:

"We do not ensure airworthiness; we ensure that procedures have been followed, that have been shown to deliver airworthiness".

This at once recognises that the FAA does not claim to have the expertise to make the engineering judgments that result in airworthiness, but trusts private industry to achieve the desired result, provided its Procedures Manuals address all contingencies. As seen by the FAA.

This approach clearly works – it was about 2002 when the then-head of CASA ESB showed me the FAA video – but it is anathema to CASA, only (it seems) due to the anachronistic culture, or perhaps due to the strident efforts of CASA's in-house legal team trying to reduce their liability exposure.

Under the current version of the Review of Regulations, an unholy coagulation of E.U. and North American aviation regulation is being rehashed, despite its fundamental unsuitability to the Australian industry environment. The consequence is that CASA does not have the engineering expertise to make airworthiness judgments on technical issues – nor any hope of doing so in an economically credible fashion; and the industry expertise is untapped, due to CASA's psychosis on the subject.

Specific examples: Last year, I attended a meeting between most of the Queensland Approved Maintenance Organisation chief executives, and the Director of CASA at the time – John McCormack. After the meeting, in a private conversation, John said to me "…Certification is Airworthiness. What do these blokes know about Certification? Nothing! Take an example: what do you do if you're the pilot in command, and the aeroplane is missing something on the Operator's MEL (Minimum Equipment List)?".
Now, the subject of the meeting was Maintenance – the MEL is an Operational matter. So the Director of CASA was dismissing the expertise of the Maintenance Industry, on the basis of a non-maintenance issue. In fact, the Maintenance industry has a very good knowledge of the Maintenance documentation and procedures required by Certification.

There were nearly 1,000 years of aviation experience in that room, consisting of the experts that have maintained the world's "oldest' fleet to an exemplary safety record.

2) In February 2012, Joe Rule (Manager, Legal Branch of CASA) wrote (ref. GI11/1683/1685:GI12/37):

"Guidance material is by its very nature non-binding."

Prima facie, this seems self-evident. However, CASA produces Advisory Circulars which detail methods of achieving Compliance (As does the FAA). If those documents are what they purport to be, them they must be binding on CASA – following the instructions to produce an acceptable result MUST produce an acceptable result. *Ipso facto*, the Legal Branch Manager was writing rubbish. However, the underlying topic was CASA's attempt to drive an AMO out of business via abuse of administrative authority, and Joe wished to establish the point that the AMO's following of Approved guidance material did not preclude CASA's rejecting the result after the fact.

In the same document, Joe stated:

"CASA maintains records of the legal advice received from its in-house and external lawyers concerning the proper interpretation and application of the legislation."

This brazenly states that CASA makes its judgments on engineering, piloting, and maintenance matters, based upon the advice of lawyers – not engineers, pilots, or maintainers.

Could this be further evidence that removal of CASA's Crown Immunity has had an adverse affect on CASA?

CASA is under-resourced; the "user pays" principle is a farce, as the entire community benefits from a flourishing aviation industry. The user is the taxpayer, and CASA is upholding an international trade agreement.= - so the user should pay, from consolidated revenue.

CASA has no system of independent checks and balances; so nothing done currently or in future with or by CASA can hope to comply with due diligence obligations (in the broader sense of due diligence).

CASA is culturally incapable of issuing the necessary delegations to the remaining aviation professionals – in private industry; and in doing so, they would be increasing their already unacceptable exposure to liability.

CASA – A Way Forwards:

If CASA is to persist with the – fundamentally untenable – effort to replicate at least the form of the FAA, then it must recognise that private industry professionals require delegations without the farcical degree of restrictions currently placed upon them; and that such delegates are to be regulated, NOT via threatening their livelihood and abuse of discretionary authority, but through due diligence and the structure of the Australian Legal System (including the ADJR Act – there is nothing stopping CASA filing for an interlocutory injunction against an industry delegate's decision, on the head that they had failed to achieve their safety goal through some lack of diligence).

CASA has instituted training in the ADJRA 1988 for CASA officers – which is a step into the 20th century, if not the 21st. Unfortunately, it is a matter of record that after completing the course, CASA officers are grossly and brazenly attempting to abuse their discretionary authority (in the case to which I have most evidence, to eliminate one of those pesky AMOs who only know their responsibilities…).

The issue of instituting the cultural change into the era of natural justice in the public service, is addressed overleaf; suffice it to say here, that the ADJRA 1988 has to be taken seriously.

Secondly, CASA has to be conceptually de-militarised; any substantive justification of authoritarianism – which is to say, being a recognised expert or "authority" on the subject – is long gone; I will quote an ex-acting head of Certification (or possibly airworthiness, the titles were changing very fast then):

"Oh what a joy it is to not have to go through this crap any more…I can see that nothing much has changed in the ability of CASA to comprehend what it is that they exist for and where they fit into the aviation safety equation."

-from email of 2010.

Arguably, the repeated attempts to reform CASA have failed, because CASA has been involved.

The first step towards true reform must be the use of a new stick – in the form of the re-training of CASA staff in the Australian legal system – NOT by the conveyancing lowers in the CASA Legal Branch! – along with the introduction of a system of immediate and automatic penalties for any form of professional misconduct;

And the new carrot of job security, in the form of recognition that the unique expertise gained by CASA officers is rewarded commensurate with their professional competence. CASA's failure to show any sigh of loyalty to its expert employees has lost a great deal of expertise, and continues to do so.

The second, more major matter is the separation of function; a body needs be set up, whose sole task is the amendment of Regulations, and who are held responsible for the outcomes, both economic and safety. It must include a (private) industry group; and the target outcomes must be realistic.

Another body needs to focus on Airworthiness – from Certification through Ongoing Airworthiness to Maintenance. That body also needs be held responsible for both economic and safety outcomes, and needs to include a (private) industry body from each area of expertise.

A third body could well focus on Operational matters, including training and licensing; again industry involvement is essential, and again performance-based regulation of this body is essential.

All of these bodies must use existing legal platforms – currently non-aviation – such as the ADJRA, as the final or urgent resort for interventions. It equally must be explicitly recognised in legislation, that interference with livelihoods is acceptable in no circumstances (other, perhaps, than to those already considered by the High Court for Transport operations).

This all implies the creation of an independent body to monitor the performance of each of the aforementioned, and publish the results annually. Crown Immunity is implicitly necessary.

Each of the aforementioned aviation regulatory bodies could incorporate a small section to interface with Recreational Aviation bodies; such RA bodies could well be subject to performance assessment by the same body that provides feedback to the NAA.

An alternative is to strengthen the trans-tasman treaty, shut CASA down, and move our remaining aviation industries to New Zealand, where the regulator is not so ossified.

Systemic Failures of the ADJRA 1988:

As previously mentioned, CASA officers have recent experience at knowingly flouting the ADJRA; partly because any operator in industry so foolish as to bring an action, would have their CASA authority to operate suspended until the outcome of the action – normally, quite long enough to go run out of capital; and partly because the rest of CASA would line up in court to claim that whatever the questionable behaviour of the officer, it was reasonable in the context of the specialised field of aviation.

Furthermore, there is no public service outcome – even if a court finds against an officer under ADJRA, there is no negative outcome for the officer.

Why is this so? Why are members of the Australian Public Service immune from penalty after having been found to act illegally in their professional role? For that matter, why are they immune from any penalty or corrective action for professional incompetence?

The ADJRA is a laudable effort to retain the concept of fairness, as understood under "natural justice", but until it cannot be breached with impunity by public servants, it is impotent as a corrective force.

Australia is, historically, not the domain of Roman law, but of Common Law and historical jurisprudence under the UK historical form. If the ADJRA is not given the teeth to bite public servants, the country is in effect running under two legal systems. For how long can we sustain this?

RAAus – success or scapegoat?:

Under the tertiary regulatory system, the 95-series Air Navigation Orders were exemptions (as, indeed, the CAOs still are). In effect, they were declarations that "these things ain't aircraft, so they're not our responsibility".

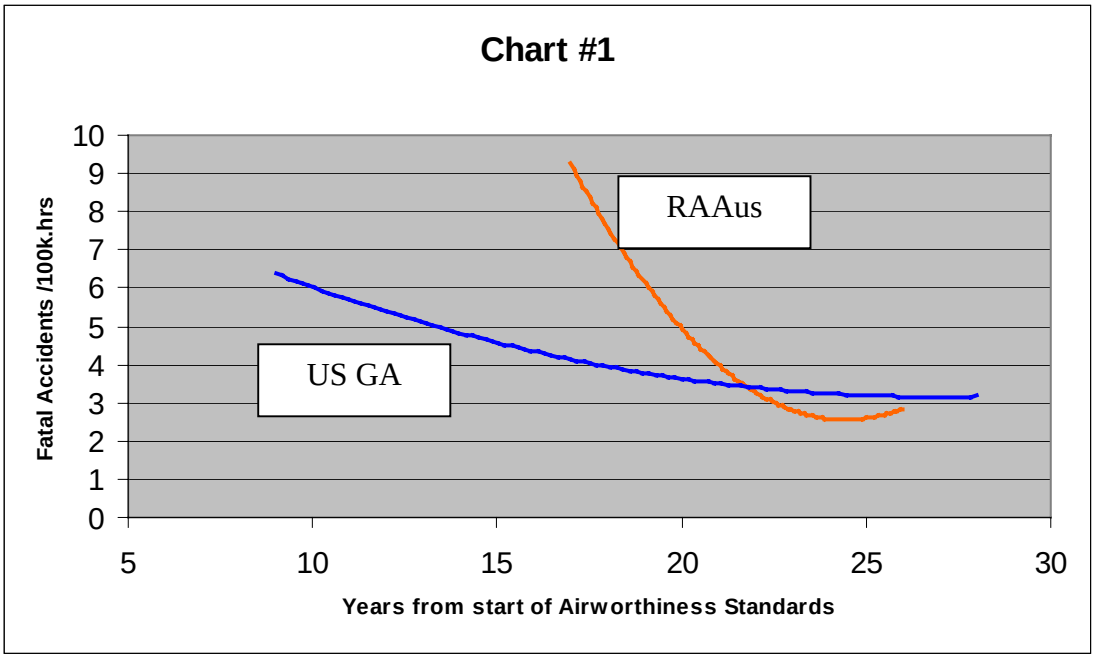
When the House of Representatives Standing Committee on Transport Safety considered ultralights, and other forms of aviation, in 1988, the Regulator was informed that they were in fact responsible for flying machines operating under the 95-series ANOs; and, as such, they were failing their safety responsibilities.

At that time, the Australian Ultralight Federation was a voluntary organisation, representing the interests of ultralight users. The NAA at the time effectively delegated the administration of ultralight operations to the AUF, with a small stipend.

They did not delegate any authority, other than the ability to withdraw Pilot's Certificates; they did not delegate any ability to perform Flying Operations Inspections, or resources; they did not delegate any authority to Approve anything aviation related, other than to accept the declaration of foreign Authorities with regards to ultralights.

Recent events have shown that, thus under-supported and under-equipped by CASA, the AUF (which is now RAAus) has not been expending non-existent resources on areas over which it has no explicit mandate or authority; and that this has resulted in a degree of lowering of safety.

In context, it is worth comparing the accident rate of the AUF/RAAus and General Aviation*, at the same point in their regulatory history:
**US data is used, as it is in the public domain, and is more representative, as the USA had the first Design Standard (pre-dating the Chicago Convention 1944)*



The RAAus data terminates 2012/2013.

It is of note that the operational focus of the RAAus – it administers an Operational standard, in the form of CAO 95:55 – has resulted in bringing accident rates BELOW those of GA in the US in the 1950s (bear in mind that current Cessnas and Beechcraft date from the 1940s).
22 years after HORSCOTS forced ANO 95:25 (the precursor of CAO 95:55) into existence, ultralights became safer than GA at the same stage; almost exclusively due to the actions of the AUF / RAAus.

Now, CASA – having failed to fulfil its responsibilities outside of Operational matters under 95:55 – is trying to turn RAAus into a miniature version of its own dysfunctional self. How this is "pro-safety" is not clear, particularly as 95:55 is uniquely Australian, and has nothing to do with our obligations under the Chicago Convention.

RAAus can be best served by keeping CASA away from it, except perhaps provision of the fiscal resources to develop and regulate a higher standard of maintenance.

There are already moves afoot amongst several industry professionals, to enhance the standard of maintenance for RAAus aeroplanes without stifling the recreational area.

The Delegation Dilemma:

To recap: In the beginning, our NAA delegated authority to its fellow ex-members of the RAAF in private industry, and associated areas (GAF etc.). By the 1970s, persons who had gained delegations whilst NAA officers, were moving into private industry and retaining the delegations. This generation of private industry delegates are responsible for Certification of every Australian aircraft since 1970. They are mostly retired now.

The basis for qualifying for an Instrument of Appointment (the delegation) in ongoing airworthiness (Maintenance Design) was, for many years, eight years of relevant experience in the field; of which up to four years may be at university. Competency was held to be the ultimate desideratum.

The current basis is: Graduate Membership of the Institute of Engineers Australia, AND CASA considering you a fit and proper person.

There are very few private industry Delegates remaining; and CASA, having gutted its Certification section and lost Engineering Services Branch, is not creating new delegates with relevant experience.

My own experience has been that, in spite of having prepared over 300 repair schemes that have gained Approval (via a delegate), and received a Supplemental Type Certificate, the section of the ALAP referred to by David Rees – which is NOT the section referring to industry experience – is the only one to be applied in my case.

The fact that, should my competence be called into question subsequent to being granted an I of A, CASA would become a co-defendant, may have something to do with it.

Currently, RAAus airworthiness matters have been – at CASA's insistence – outsourced to an "acceptable" private consultant. The consultant in question is an ex CASA Head of Airworthiness.
This fourty-year incestuous circle of delegations has resulted in the current situation, wherein the only organisations providing deign services for ongoing airworthiness are either out of the financial reach of the bulk of Australian aviation, or vastly overworked, or vastly under-authorised.

The government need not act; Australian aviation manufacturing and maintenance will die a natural death within another decade.

If this appalling situation is to be reversed, the model of the "Light Sports Aircraft" concept – self-certification against an industrial safety standard – must be considered with care. Despite the prognostications of parts of the FAA, and CASA, the safety record has so far been very comparable with current-day GA.

Consider also the AUF/RAAus accident rates, as compared with (US) GA at a similar state of regulatory maturity. Not only has RAAus outstripped historic GA, but at the minimum, it reached the same level as current (US) GA, and perhaps better than Australian GA. Without CASA. Whilst exempted from most of the CARs/CASRs.

The conclusion I offer is that Recreational Aviation – in all its forms – can be well served by holders of Airworthiness Authorisations, issued under the guidance of an

Industry standard which explicitly defines the ranges of experience, demonstrated competence, and qualification required. This Industry Standard would be, in effect, a Safety Standard. A similar standard would define the procedural requirements, and so forth. CASA in its current form would have nothing to do with any of it, be exempted from liability, etc.

These persons would achieve personal liability protection by adherence to Safety Standards – Airworthiness Design Standards are such.

In the present environment, CASA may feel obligated to bring actions under the ADJRA from time to time, against individual decisions of these Recreational Airworthiness Authority holders; which is an appropriate and functional use of the judicial system we have. The defendants must be able to rely on adherence to the Industry Standards as a primary defence.

There still remain a number of – elderly – ex-delegation holders, most with CASA experience as well as private, who could well be employed in the drafting of such industry standards. Whilst CASA has in the past relied on the unpaid efforts of private individuals, it is consonant with Government recognition of the source of expertise, that these individuals should be payed for their efforts.

Conclusion:

1) CASA is a dysfunctional disaster, due to excessive responsibilities, liability exposure, under-resourcing, mis-management, and a fundamental anachronistic culture of personality cults;

2) Recreational Aviation is delivering greater safety than media – or many industry members realise;

3) Most of the substantial airworthiness experience in Australia is in retired members of private industry, and they won't be around to consult for much longer;

4) Without a functional system of real delegation of airworthiness authorities, the Australian Aviation (Manufacturing and Maintenance) Industry cannot recover;

5) Industry self-regulation – as in the LSA model – works.

Once CASA's Crown Immunity is restored; its responsibilities are subdivided, amongst newly created organisations; and a more widespread application of industry self-regulation is in place; Australia's local Aviation industries will begin to recover.

The process of creating a new Aviation regulatory environment has to be largely outsourced to the private sector experts, and soon.

The Trans-Tasman Trade Agreement provides a basis for outsourcing our complete aviation industry, if the alternative is too hard.