13 February 2020

Committee Secretary Senate Standing Committee on Rural and Regional Affairs and Transport

Dear Secretary

Submission to Inquiry: Australia's general aviation industry

I make this submission in my personal capacity. The views I express are mine and not those of my past or present employers.ⁱ

When a young Australian commits suicide because he has been told that, on the basis of anachronistic standards enforced with a crusader's zeal by CASA, his colour vision deficiency will prevent him from achieving his childhood dream of becoming an international airline captain, there is no negative impact on the safety of air navigation. But there is a cost which should not have been paid. (At least the New Zealand civil aviation safety regulator comprehends this.)

When CASA suspends or revokes or refuses to issue a pilot's medical certificate and unlawfully refuses to consider evidence as to the pilot's compliance with the medical standard, and the pilot is too poor or scared to force CASA to comply with the law, there is no negative impact on the safety of air navigation. But there is a cost which should not have been paid.

When CASA suspends or revokes or refuses to issue a pilot's medical certificate on the basis of pseudoscience and non-specialist opinion, contrary to the weight of specialist opinion and objective evidence, and the pilot is too poor or scared to challenge CASA's decision, there is no negative impact on the safety of air navigation. But there is a cost which should not have been paid.

When a pilot spends thousands of unrecoverable dollars to force CASA to comply with the law and make a decision on the basis of all of the relevant objective evidence and expert opinion, there is no negative impact on the safety of air navigation. But there is a cost – not just in dollars - which should not have been paid.

When someone chooses to leave or is practically forced to leave the Australian aviation industry in despair at the complex and convoluted mess and uncertainty produced by the regulatory reform program and the costs of contending with it, and having no faith in CASA's corporate integrity and competence to administer the system efficiently and consistently, there is no negative impact on the safety of air navigation. But there is a cost which should not have been paid.

When CASA makes up some new rule in response to incidents and there is no causal connection between the requirements of the new rule and the causes of the incidents, there is – at best - no negative impact on the safety of air navigation. At best, the cost is just wasted resources. But even that cost should not have been paid. At worst, the new rule has the effect of increasing risk to the safety of air navigation.

Each of the above scenarios starts with "when", not "if". That is because each has happened and continues to happen.

Civil aviation activities in Australia, and particularly general aviation because its participants usually do not have the resources and resilience to effectively resist, are now being regulated substantially on the basis of intuition tainted by cognitive bias, rather than objective analyses of absolute and comparative risks and probabilities (or at least rational estimates of them) while taking into account costs and benefits beyond just aviation safety. That results in the exaggeration of the probabilities of perceived risks and harmful regulatory overreactions to them.

The aviation regulatory reform program is the single biggest and most expensive hoax ever committed on the Australian aviation sector. The complex, convoluted mess that is the package of aviation safety regulatory legislation in 2020 achieves few if any of the stated aims of the program which commenced decades ago and has cost hundreds of millions of dollars to run so far. When the *Civil Aviation Regulations 1988* were originally made, they were 155 pages long. As at the date of this submission, those Regulations are 409 pages long. And along the way the program has also produced the *Civil Aviation Safety Regulations 1998* which are, as at the date of this submission, 1,874 pages long.

In short, 155 pages have grown to 2,283 so far. And that's just Regulations. Then there are thousands of pages of Civil Aviation Orders, Manuals of Standards, exemptions, directions, permissions, approvals and other instruments. My 'Part 61' licence has double the number of pages compared with the licence I was issued in 1986.

I gave up trying to keep up with the ever-growing pile of regulatory paper 20 years ago, when it became clear to me that there was little-to-no operational difference required by the content compared with when I obtained my pilot licence in 1986. Even if I wanted to keep up, I do not have enough shelf space to bear the output of what has been called, among other Orwellian descriptions: 'simplification' and 'streamlining'. In those 20 years I have successfully completed 10 flight reviews by Approved Testing Officers (or whatever they happen to be called these days). That means either that my judgment as to the operational safety relevance of much of the output of the regulatory reform program is correct, or each of the people who conducted the reviews was incompetent. Fortunately, my livelihood and pilot's licence have not depended on surviving the vagaries and costs of contending with the output of the regulatory reform program. Many, many others have not been so fortunate.

Individuals and Australia as a society continue to pay a very high price for aviation regulatory activities that have little-to-no causally beneficial effect on aviation safety, or entail costs that far outweigh any safety benefit. Those activities destroy lives, destroy livelihoods, destroy careers and career aspirations and destroy life's passions.

When I learnt to fly in 1986, there were no fewer than five general aviation flying training organisations based at Canberra airport. Now there are none. And that is at the airport of the capital city of a country which claims first world aviation nation status. (I believe there is now a specialist helicopter training organisation based at Canberra and one general aviation flying training organisation based elsewhere but which utilises facilities at Canberra to do some flying training.) Now Australia has to bring in foreign pilots on visas to meet the demand for commercial pilots.

Many of the aerodromes to which I fly are now ghost towns compared to what they were back in the 80s and 90s.

A way forward, or at least a first step

If the ongoing deterioration in general aviation activity in Australia is to be reversed, the Parliament and governments have to first come to the realisation and accept that:

1. The aviation safety regulatory paradigm is driving general aviation into the ground.

Leaving a safety regulator to manage the ongoing development of the regulatory regime and standards which the regulator itself administers (and charges fees to administer), and in which regime the costs to *society* of the decisions of the regulator are irrelevant externalities or not measured or measurable by the regulator anyway, does not work. The recent amendment to section 9A of the *Civil Aviation Act 1988* is practically meaningless: CASA cannot take into consideration costs that CASA cannot practicably measure and value.

The weight of evidence demonstrates that continuing to 'leave it to the professionals in CASA' will result in ever-increasing complexity with corresponding ever-increasing costs, as each incident and each exaggerated risk results in harmful regulatory overreactions, as each year and decade of the regulatory reform program rolls past and yet more pages of rules are imposed on the practically powerless. The setting of safety standards is essentially a political process, to which process technical opinion is but one input. The decision as to the level of risks to which *society* should be exposed, and what costs should be paid by *society* to mitigate those risks, are political decisions that a regulator is not competent to make.

(I should stress that, in my first-hand experience and observation, there are many highly intelligent, professional and competent people in CASA, some of whom – at least for my part – are personal friends. The problem is not the individuals – aside from those who impose their personal opinions on the aviation industry with a crusader's zeal, in the mistaken belief that being in a position of power turns their opinion into an objective truth. The problem is structural. The aviation safety regulatory framework is analogous to making the police responsible for the road toll, and at the same time giving the police practically unfeterred power and unquestioning political support to make whatever road rules they like, set the speed limits wherever they like and decide who can have a driver's licence and on what conditions.)

2. The health of Australia's general aviation industry has many impacts on many facets of the Australian economy and its status as a nation.

Any country of Australia's geographical size, topography, climate, natural resources and population distribution that cannot or does not actively foster individuals and businesses to design, construct, maintain and operate aircraft, and to train sufficient local pilots to meet local demand, is not a first world aviation nation. The bushfires coincidentally exposed the vulnerability of key national infrastructure like highways, railways, power grids and communications systems, and Australia's systemic impotence to deal with that vulnerability, in the face of long and loud warnings from people whose advice should have been heeded. The Parliament and governments need to listen better to people who know what is happening to general aviation in Australia, and who know why it is happening.

There is an existential reason for civil aviation being part of the 'cultural DNA' of the USA. Experimental and general aviation in the USA are part of a fundamental foundation of the USA's ongoing capability to design, construct, maintain and crew some of the best if not the best transport category civil aircraft and airborne defence systems on the planet. (For similar reasons the US passed the 'Jones Act' in the 1920s, requiring that cargo carried on ships between US ports must be carried only on ships owned, crewed and built by US citizens/companies.) Australia is lucky that it can currently rely on highly powerful allies to help deter and defeat armed attacks on it and supply it with materiel to establish key defence capabilities. (Just as Australia is lucky that there is currently capacity on foreign ships to replenish Australia's limited fuel storage.) The USA does not have that luxury. The lucky country's luck could run out, and it would be irresponsible to assume it never will.

There is a reason for the US Federal Aviation Administration being an integral part of US Department of Transportation, along with the Federal Railroad Administration, the Federal Highway Administration, the National Highway Traffic Safety Administration, the Federal Transit Administration and the Maritime Administration. The US government recognises, in § 101 of the 49 US Code which establishes the Department of Transportation, that:

- (a) The national objectives of general welfare, economic growth and stability, and security of the United States require the development of transportation policies and programs that contribute to providing fast, safe, efficient, and convenient transportation at the lowest cost consistent with those and other national objectives, including the efficient use and conservation of the resources of the United States.
- (b) A Department of Transportation is necessary in the public interest and to—
 - (1) ensure the coordinated and effective administration of the transportation programs of the United States Government;
 - (2) make easier the development and improvement of coordinated transportation service to be provided by private enterprise to the greatest extent feasible;
 - (3) encourage cooperation of Federal, State, and local governments, carriers, labor, and other interested persons to achieve transportation objectives;
 - (4) stimulate technological advances in transportation, through research and development or otherwise;
 - (5) provide general leadership in identifying and solving transportation problems; and
 - (6) develop and recommend to the President and Congress transportation policies and programs to achieve transportation objectives considering the needs of the public, users, carriers, industry, labor, and national defense.

As can been seen, the US Federal Aviation Administration has a role to play and a responsibility in the development of policies and programs that contribute to transportation systems with the stated characteristics and the achievement of the stated national objectives other than 'safety'. Note that the word "safe" appears only once in § 101 and is only one of the characteristics of the transportation system that, in the US government's view, will achieve the stated national objectives. No transport system is risk-free, and risks must be taken and opportunity costs paid if outweighing benefits are to be gained.

So far as I am aware, there is no one in the Australian government doing any analysis to determine, for example, whether 100 road fatalities could be avoided each year by increasing air travel to and from regional and remote areas and, if yes, in return for what costs – even in aviation fatalities - and, finally, deciding whether or not to pay those costs in return for the benefit of avoiding 100 road fatalities. As another and topical example, so far as I am aware there is no one in the Australian government doing analysis to determine how many 'Community Service Flights' could have been carried out, but are no longer going to be carried out, as a consequence of CASA's recent imposition of conditions on pilot licences; nor, more importantly, is anyone doing any analysis to determine what that change will cost individuals and Australian society. Those kinds of analyses would be done in a coherent and integrated transport policy and regulatory development process. However, at the moment, matters like the costs of the road toll and the costs to individuals and Australian society of the recent 'Community Service Flight' changes are irrelevant externalities to or unmeasurable by CASA.

- 3. Granting long term leases over monopoly public airports to private interests has not been in the interests of general aviation. Nor has allowing what were once Commonwealthowned aerodromes to be turned into housing estates or warehouse complexes.
- 4. More inquiries are not needed unless they lead to action. Many, many participants in general aviation and their representative bodies have spent enormous amounts of time and energy to make detailed submissions to the various inquiries relating to the regulation of aviation safety and aspects of it. That effort is futile if there is an unwillingness or inability for action to be taken accordingly, even if the action is to positively decide and actively communicate a decision to reject the substance of the submissions.

Yours sincerely

ⁱ I am currently General Counsel in a Commonwealth transport safety regulatory agency. I have been employed by that agency for nine years. Before joining that agency I was in private practice in the government law team of a large law firm for ten years, five of those as a partner. Before moving to private practice I was employed by CASA for three years, one of those as General Manager General Aviation Operations and the others as legal counsel in the Office of Legal Counsel. Before moving to CASA I served as a ground engineer in the Royal Australian Air Force for 20 years, during which I was posted to 77 Squadron, 75 Squadron, 34 Squadron, 2 Aircraft Depot, the Australian Defence Force Academy and Logistics Command. I obtained my private pilot licence in 1986 and continue actively to exercise the privileges of that licence. I am an aircraft owner and perform my own maintenance to the extent permitted by the regulatory regime.