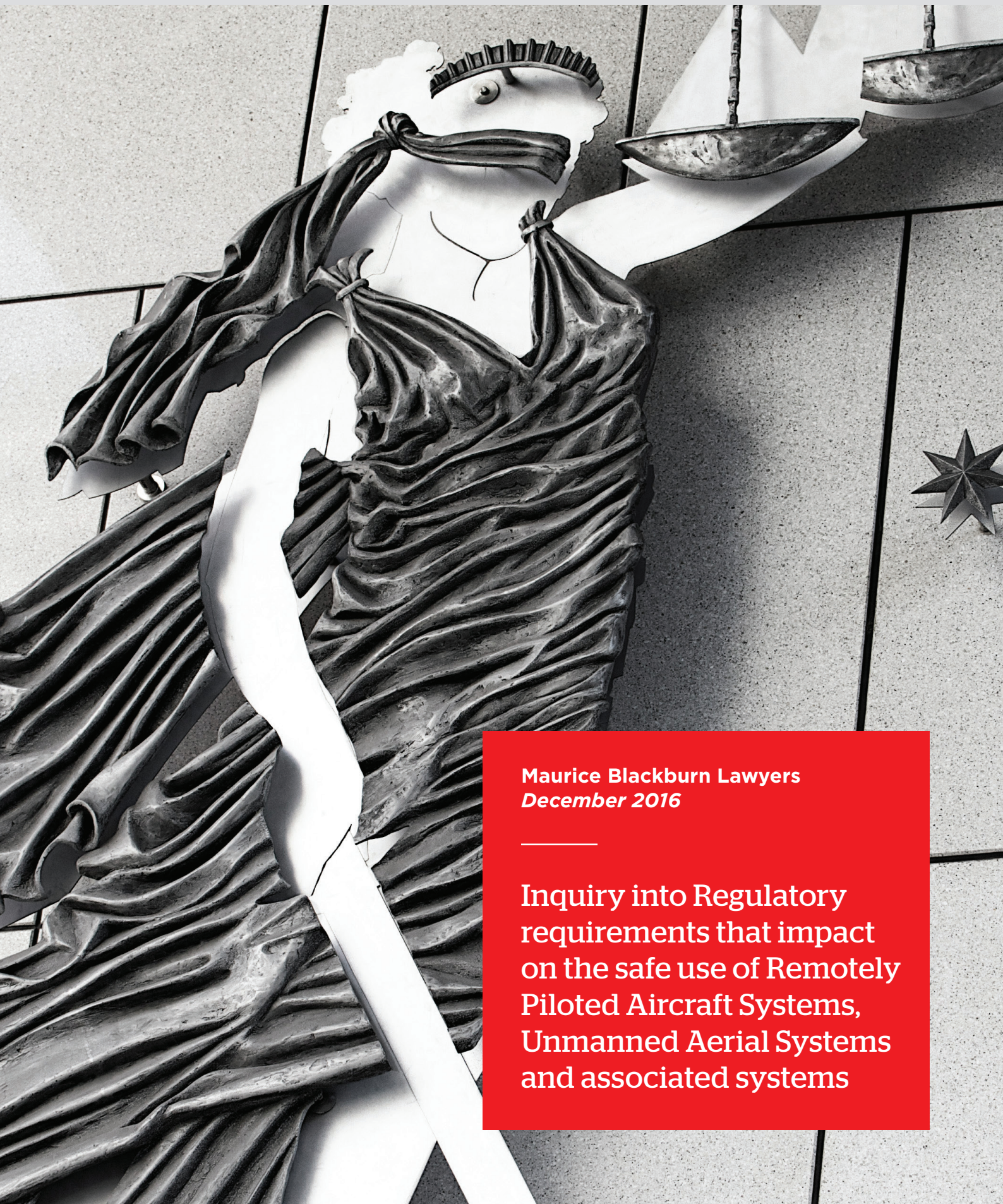


SUBMISSION TO THE SENATE RURAL AND  
REGIONAL AFFAIRS AND TRANSPORT  
REFERENCES COMMITTEE



**Maurice Blackburn Lawyers**  
*December 2016*

---

**Inquiry into Regulatory  
requirements that impact  
on the safe use of Remotely  
Piloted Aircraft Systems,  
Unmanned Aerial Systems  
and associated systems**

## **Table of Contents**

|   |   |
|---|---|
| WHO WE ARE .....  | 1 |
| INTRODUCTION.....   | 1 |
| THE URGENT NEED FOR REFORM.....   | 2 |
| CASA MUST REGARD AS ITS PRIMARY OBJECTIVE THE SAFETY OF AIR<br>NAVIGATION ..... | 4 |
| RECOMMENDATION .....  | 5 |

## Who We Are

Maurice Blackburn Pty Ltd is a plaintiff law firm with 32 permanent offices and 29 visiting offices throughout all mainland States and Territories. The firm specialises in personal injuries, medical negligence, employment and industrial law, dust diseases, superannuation (particularly total and permanent disability claims), negligent financial and other advice, and consumer and commercial class actions.

Maurice Blackburn employs over 1000 staff, including approximately 330 lawyers who provide advice and assistance to thousands of clients each year. The advice services are often provided free of charge as it is firm policy in many areas to give the first consultation for free. The firm also has a substantial social justice practice.

The Maurice Blackburn Aviation Law practice commenced in 2015 and advises and represents victims and victims' families from air disasters and other accidents from around the world. The variety of actions range from recreational and general aviation accidents in Australia to foreign airline disasters.

As a firm with a specific Aviation Law practice area it is important that we contribute to public discussion about the utility and fitness for purpose of legislation aimed at safeguarding air passengers and members of the community from aviation incidents, large and small.

It is imperative that there be strong laws protecting consumers of airline services as well as members of the community from remotely piloted aircraft system (RPAS) or unmanned aircraft system (UAS) misuse, and accidental injury or death.

This submission was prepared by Joseph Wheeler, Special Counsel to Maurice Blackburn Lawyers, and National Head of Aviation Law.<sup>1</sup>

## Introduction

Maurice Blackburn Lawyers shares a sense of responsibility for safety through preventative and appropriate regulation, and an interest in ensuring suitable legal mechanisms are available for compensation for losses, in the event laws, technology, or people fail causing injury or death, in the operation of RPAS in Australia.

These are key drivers for Maurice Blackburn's Aviation Law practice, given our practical engagement with the law in this space.

---

<sup>1</sup> Joseph is an elected member of the Royal Aeronautical Society and Aviation Spokesperson of the Australian Lawyers Alliance; Aviation Legal Counsel to the Australian Federation of Air Pilots (AFAP is Australia's largest pilot professional association by member numbers); a member of the Legal Committee of the International Federation of Airline Pilots' Associations (IFALPA) in Montreal, representing AusALPA; appointed to the Management Committees of organisations which advocate for aviation safety through specialist technical, professional, or pilot health and wellbeing programs through member representation and other initiatives, including Australian Certified UAV Operators Inc (ACUO) and HIMS Australia Advisory Group Inc; and, a regular commentator on aero legal and aero political affairs for *The Australian*.

## The urgent need for reform

Liability for drone injuries applies to operators or controllers pursuant to the *Damage by Aircraft Act 1999* (Cth) which sets up a domestic strict liability regime for compensation for those injured on the ground by aircraft, mirroring international treaty provisions which accomplish the same purpose.

However, the technical and regulatory landscape in Australia is such that the owner of a drone or its operator are notoriously difficult to identify, and thus pursue, after an incident.

There is no Federal requirement on the owner or operator to be insured for liability for damages. No legislation presently requires registration of non-commercial operators and their equipment. This is problematic because drones themselves are fairly unreliable. There are no international or local airworthiness standards in place for hobbyist operators, nor any import controls on the more powerful machines which are brought into the country daily in droves.

Research released by RMIT in Victoria on 24 August 2016<sup>2</sup> confirms that technical problems are the primary cause for accidents with drones – usually a breakdown in communication between the drone and its controller. They accounted for 64 per cent of worldwide incidents between 2006 and 2016. The researcher rightly noted that commercial aviation communication systems have regulated redundancy to prevent against such errors – drone laws have not caught up, but must. Dr Graham Wild, one of the researchers, said ‘[i]t’s essential that our safety regulations keep up with this rapidly-growing industry.’

The *Civil Aviation Legislation Amendment (Part 101) Regulation 2016* (CALA) which commenced on 29 September 2016 in Australia makes the situation worse, and is based on two-year-old consultation and research on the likelihood of injury occurrence from drones striking humans from above. While the rest of the world has pursued further research on this area and come up with rules which suggest that only very small (micro-or under-250g drones) pose little risk and can be operated under more relaxed rules, Australia has not only chosen to deregulate this weight class but now permits drones up to 2kg to be used commercially by anyone without training, insurance or certification.

The influx of new operators and operations will lead inevitably to an increase in liability claims.

Not only foreign regulators (eg, the US FAA<sup>3</sup>) but all international organisations representing the professional interests of manned aviation (including airlines, air traffic controllers, airports and pilots) recognise that drones of this weight are exceptionally powerful and, in the wrong hands, can maim and kill. A joint statement was significantly made in September 2016 by all the organisations representing manned aviation in Europe and the world calling for the dangers to be recognised in the implementation of new drone rules in the region.<sup>4</sup> This

---

<sup>2</sup> Dr Graham Wild and Dr Glenn Baxter from RMIT University’s School of Engineering, performed the study together with John Murray from Edith Cowan University.

<sup>3</sup> See [https://www.faa.gov/news/press\\_releases/news\\_story.cfm?newsId=19856](https://www.faa.gov/news/press_releases/news_story.cfm?newsId=19856)

<sup>4</sup> The statement was signed by all of: Airlines for Europe (A4E); Airports Council International Europe (ACI EUROPE); Air Traffic Controllers European Unions Coordination (ATCEUC); Civil Air Navigation Services

danger extends to the ingestion of drones into airliner jet engines, and the impact of such aircraft of helicopter rotors, which type of incident is universally agreed to lead to catastrophic failures and loss of control.

The present Australian deregulation not only allows a new breed of untrained commercial operators loose in an airspace which is quite complex in its organisation and requires aeronautical training to understand, but allows people of any age, and of dubious backgrounds and intentions, into that airspace as well.

It is clear that not only commercial operators but hobbyists and recreational users need better education and tighter regulation. Notwithstanding that we live in an era of red tape reduction – drone technology is developing so swiftly that we must err on the side of caution when it comes to regulating it.

The aviation industry in Australia is the envy of the world in terms of safety – this is threatened by the steps which have been taken to move away from the style of regulation that has ensured a high level of safety for Australian airspace users, passengers and organisations (ie, appropriate training and licensing for commercial operators).

It is worthwhile noting that the rest of the modern world is taking active steps to regulate drones in their airspace. In Europe, the European Aviation Safety Agency (EASA) prototype rules published on 22 August 2016 ensures good protections are put in place like mandatory flight logging, use of geofencing technology, and display of registration marks.

These elements can help regulators and claimants find errant users when liability for injury is in dispute. There is also a move to shift the responsibility onto remote pilots to understand their aircraft fully before operation, and to ensure that it is serviceable for flight.

Thus, the US Federal Aviation Administration (FAA) Part 107 rules on small drones which commenced on 29 August 2016 required operators to have a minimum level of aeronautical knowledge before they take to the sky, and background checks to help ensure that those with malicious intentions think twice, and can be distinguished from genuine operators.

By comparison, the Australian CALA is a regressive step introducing none of these protections, and actually removes existing certification rules for drones weighing under 2kg.

In addition, it allows property owners to use drones of significantly higher weights (up to 25kg) on their own property for certain tasks, without training or certification.

While, arguably, the operation of such large vehicles on one's property carries with it a variety of common law duties and statutory obligations to protect people on the ground and in the airspace, these will not be enough to educate operators, who are not aviators, to appreciate the complexity of the world they choose to enter by launching a drone.

---

Organisation (CANSO); European Business Aviation Association (EBAA); European Cockpit Association (ECA); European Helicopter Association (EHA); European HEMS and Air Ambulance Committee (EHAC); European Regions Airline Association (ERAA); European Transport Workers' Federation (ETF); International Air Carrier Association (IACA); International Council of Aircraft Owner and Pilot Associations (IAOPA); International Air Transport Association (IATA); International Federation of Air Line Pilots' Associations (IFALPA); International Federation of Air Traffic Controllers' Associations (IFATCA) and International Federation of Air Traffic Safety Electronics Associations (IFATSEA); see the statement here:  
[https://www.eurocockpit.be/sites/default/files/joint\\_stakeholder\\_statement\\_rpas\\_safety\\_eu\\_level\\_16\\_0920\\_f.pdf](https://www.eurocockpit.be/sites/default/files/joint_stakeholder_statement_rpas_safety_eu_level_16_0920_f.pdf)

The only conceivable way to preserve the future safety of such operations recreationally and commercially, is to repeal CALA before those taking advantage of its leniency end up causing irreparable losses to people and property. Then the lessons from modern practices evolving overseas and their bases for safeguarding people on the ground and airspace users can be properly examined for incorporation or adaptation into Australian domestic legislation.

Regulation is not the whole story, particularly with the recreational side of drone use: education and fostering the maturity and responsibility of both hobbyists and commercial operators is crucial as is educating the community about the sensible use of, and risks associated with drones. This can only be achieved by sending the right messages through regulation, and ensuring the proper allocation of risk and indemnification for loss through appropriate insurance requirements. This would add to the credibility of the industry and help provide a market based means of “weeding out” unsafe or unreliable operators as opposed to those who mitigate risks to the satisfaction of underwriters.

Furthermore, there must be a development of professional standards of operation for commercial operators by the industry itself, supported by government, and government must work harder to find ways to enforce existing laws against those who misuse drones and put people and property at risk. There are technological means available, and some of these are discussed in the submission by IALPG.

## **CASA must regard as its primary objective the safety of air navigation**

The *Civil Aviation Act 1988* (Cth) at s 9A provides:

- (1) In exercising its powers and performing its functions, CASA must regard the safety of air navigation as the most important consideration.
- (2) Subject to subsection (1), CASA must exercise its powers and perform its functions in a manner that ensures that, as far as is practicable, the environment is protected from:
  - (a) the effects of the operation and use of aircraft; and
  - (b) the effects associated with the operation and use of aircraft.

In addition at s 11 the Act provides:

CASA shall perform its functions in a manner consistent with the obligations of Australia under the Chicago Convention and any other agreement between Australia and any other country or countries relating to the safety of air navigation.

Taken together, these provisions indicate strongly that safety and uniformity of aviation laws across States should (and must) be the prime drivers in performing CASA’s delegated legislative functions. The reduction of “red tape” cannot and should not be equated with CASA functions, particularly where those functions are legislated to be directed towards the preservation of safe skies.

As such there is the potential for argument that the CALA is *ultra vires* and open to judicial challenge, as its operation very likely derogates from the safety of air navigation and runs contrary to the basis for similar laws already made and in the process of development in many other ICAO States.

## Recommendations

1. The CALA should be repealed to allow a return to the safeguards of licensing and training in all commercial RPAS operation, until more comprehensive policy in respect of RPAS operation (both recreational and commercial) is developed, reflective of the experience of the first year of the US FAA Part 107 Rules, and European States' reactions to the publication of EASA's Prototype RPAS rules.
2. CASA should await the outcome of the ICAO survey of states on RPAS local laws, which will be presented to the ICAO Legal Committee in November or December 2017, before appraising if the CALA-form of "deregulation" is appropriate in light of the experience of other States and international regulatory trends, consistent with the general principles of harmonisation and uniformity in international civil aviation.
3. CASA should reaffirm its commitment to educating the community and all RPAS users about the need for basic aeronautical knowledge to develop airmanship in users, and to inspire confidence in the community for the responsible use of both recreational and commercial RPAS.
4. In any new iteration of Part 101 CASR, or modification of the existing suite of RPAS related regulations, CASA should introduce an amendment to the *Civil Aviation (Carriers' Liability) Act 1959 (Cth)* requiring commercial operators to hold appropriate levels of insurance to ensure injured people have access to insurance for loss occasioned by RPAS operation consistent with the aims and objectives of the *Damage by Aircraft Act 1999 (Cth)*.

I would invite the Committee to discuss any aspect of this Submission with me, should it be necessary or beneficial in reaching its outcomes.