

ProUAV Australia Submission



Senate Standing Committee on Rural and Regional Affairs and Transport

Inquiry into current and future regulatory requirements that impact on the safe commercial and recreational use of Remotely Piloted Aircraft Systems (RPAS), Unmanned Aerial Systems (UAS) and associated systems.

Introduction

Darrell Burkey is the founder and owner of ProUAV Australia. As a service providing commercial aerial photographic services to industry ProUAV Australia is fairly typical of businesses operating under the regulations being reviewed by the committee. See <http://prouav.com.au> for reference.

This submission highlights two topics relevant to the terms of reference.

1. Safety implications of consumer UAVs being flown in shared air space.

Consumer UAVs have become quite popular for recreational use by the general consumer. It's quite sensible to compare the recreational use of UAVs to those who fly remotely controlled aircraft as a hobby.

Safety concerns regarding the use of consumer UAVs are now emerging almost daily as UAVs are being flown in areas where they cause risk to the general public and aviation traffic. Reports of consumer drones flying thousands of feet high or in sensitive areas such as bridges, near large numbers of people and even next to airports are becoming quite common.

In comparison, reports regarding incidents with RC models are rare. Why is this? The answers are simple and certainly apply to the use of UAVs as well:

RC models are typically flown in designated areas such as RC model clubs. These clubs require training and strict adherence to safety standards. Typically, clubs have a safety officer on site to ensure all participants are flying safely. Clubs are insured for these activities in acknowledgement of the associated risks involved with their activities.

My recommendation to the committee is to consider the following components in any legislation being considered for the use of consumer UAVs in Australia:

- ✓ **Mandatory training regarding regulations in place for the use of UAVs**
- ✓ **Flying allowed only in appropriate locations**
- ✓ **Registration of equipment to facilitate accountability**
- ✓ **Requiring public liability insurance when operating UAVs**

Further to these recommendations, I suggest that manufacturers be required to technically limit the distance that UAVs can travel from the person operating the UAV. Many UAVs already employ the technique of 'geofencing' to ensure compliant use however these rely on GPS signals and are easy to circumvent or disable.

There simply is no sensible reason for consumer UAVs to be flown further than a fixed distance to prevent dangerous situations from arising. This would ensure that the UAV can not enter shared airspace and that it remains close to the operator. Such a limitation would be quite simple for manufacturer's to implement and could be applied retroactively to existing UAVs via mandatory firmware upgrades.

This single requirement could eliminate the vast majority of incidents that now create hazards to the public. Manufacturer's will certainly resist this change but they should be encouraged to develop systems that are safe and that do not create public hazards.

It is quite clear that the use of UAVs is the use of new technology which requires new and innovative safety solutions. The answer to ensuring UAVs are used safely lies in the application of the technology itself and NOT in the creation of more policy. It is not possible to totally regulate every person flying a UAV in every circumstance. Only technological solutions will ensure the safe use of UAVs by the general public.

2. Regulatory structure of UAVs being used in shared air space for commercial purposes.

The current regulatory governance of the commercial UAV industry in Australia is unsustainable for those who want to innovate and create commercial opportunities. The government department established to ensure manned air safety has been inundated by a new use of shared air space by default. One has to question the appropriateness of regulating the activities of unmanned aircraft with an organisation designed to regulate manned aircraft given the significant differences between the two.

Commercial operators have waited over six months for Operator Certificates to be processed and at times are required to wait weeks for simple flight exemption requests to be processed. Such delays cripple a private business and make it impossible to be commercially successful. Essentially commercial operators have been required to establish an airline simply to fly UAVs commercially. The overhead to maintain this activity is unreasonable. I call on the committee to consider establishing a service specifically to service the UAV industry which is properly resourced to provide services in a timely and professional manner.

The result of the above situation has been significant loss to the Australian economy as UAV operators are strangled with needless procedures, excessive processing delays and additional costs that provide little value or return on investment. There can be no doubt that lost opportunity has been a significant cost to the industry while we wait for this to be addressed. Larger companies such as Flirty and Propellor simply exit the country so that they are free to grow their enterprises in environments that encourage innovation and development of new technology/services.

It is time to recognise the tremendous opportunities that UAV technology can provide to our country and economy. This is an area of innovation that should be encouraged and supported. I strongly encourage the committee to tackle those issues that stifle our industry and develop regulatory structures that are appropriate to the industry.

The number one priority now is most certainly reviewing the current regulatory infrastructure being applied to the commercial UAV industry and creating improvements as required. We either move ahead now, or be left behind by other countries that are endorsing this technology by removing regulatory overhead and supporting innovation by implementing required changes to ensure those involved in UAV technology are free to participate in commercial activities without stifling growth and new development.

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Darrell D. Burkey
Owner, ProUAV Australia