

3 August 2017

Dr Jane Thomson
Committee Secretary
Senate Standing Committee on Rural and
Regional Affairs and Transport
References Committee

Dear Dr Thomson

**Inquiry into Remotely Piloted Aircraft Systems (RPAS),
Unmanned Aerial Systems (UAS) and Associated Systems**

Thank you for extending to me an opportunity to make a submission to the above Senate Enquiry as it relates to 'RPAS'.

Firstly may I introduce myself. My name is John Reidy-Crofts, I am semi retired and aged 74 years. I am an Australian Born Citizen and reside at the above residential address. I have a passionate hobby in landscape photography and to give me a greater extended ability to take photos in remote areas, I have recently purchased a DJI Phantom 4 Pro and it is in the use of that remotely piloted aircraft system that I hold concerns, hence this submission to your enquiry.

I have obtained a copy of an Advisory Circular AC 101-01 (v2.0) issued by the Civil Aviation Safety Authority (CASA) in December 2016.

Prior to my initial use of the Phantom, I carefully studied the above-mentioned circular and consider that I have a reasonably sufficient operational knowledge of the safety and legal requirements in remotely piloting the Phantom.

My concern is not with the CASA rules that apply to 'Included RPA Operations' but with 'Excluded RPA Operations'.

In a recent email advice issued by Mark Lewis, Recreational RPAS Inspector, RPAS National Operations CASA/Aviation Group and directed to Michael Severn of Perth Drone Shop, he advised the following:

"In G Class airspace, you can fly a recreational RPAS/Model aircraft (subpart G of CASR 101) **as high as you want**, as long as you satisfy the criteria for being able to continuously **see, orient** and **navigate** the aircraft with your own eyes. As **G Class airspace is uncontrolled airspace, you fly to the VFR rules the same as every other airspace user would**. As the primary method of deconfliction in uncontrolled airspace for VFR flights (regardless of manned or unmanned) is see and avoid, this also extends to recreational RPA/model aircraft to ensure appropriate separation is maintained. This system has been in effect since modeling started in Australia, well over 40 years ago."

The above advice is of concern and somewhat misleading. The question in my mind is how many recreational 'excluded' users of an RPA would be aware of 'VFR' and terms such as 'deconfliction' and 'uncontrolled air space'. Until I read the CASA Advisory Circular, and made further enquiries by gaining web site access to how airspace is managed in Australia, I was not aware of what these terms meant.

This is an area that in my opinion requires further investigation leading to regulation for ALL remotely piloted aircraft systems.

I hold serious concern that under the current CASA Licensing and Operational rules for RPAS, a child or person of unsound mind, can operate a small (excluded) RPA without any pre-requisite training or license requirements. I have also concerns over adults who may be of sound mind but have no understanding of VFR or other terms as mentioned above.

My concern can be best explained in a recent incident that I experienced whilst test flying my Phantom on an approved recreational reserve here in Perth uncontrolled air space. I had just landed my aircraft when I heard a high-pitched sound of an approaching Phantom. It was flying very fast at a low altitude only a few feet above head height. It missed me by some 20 meters and crashed into a nearby stand of trees. I investigated the crash site and found that two young teenage girls had operated the aircraft. When I questioned them as to what were they doing, they said they were trying to see how fast the Phantom could fly across country! They did not respond to my question 'did they understand or know the rules for flying a Phantom'. Being young teenage girls, I did not pursue my discussion any further and walked away

On another occasion whilst flying at this same reserve, I observed a middle aged male flying a Mavic Pro RPA. He had the aircraft positioned directly above a small family group who were taking family group photographs. The aircraft would have been well under 30 m in altitude and he was taking photos of the group who were taking photos. I approached this man and enquired was he aware of the rules and that in my opinion he was flying dangerously. He was not impressed with my comments and I thought it a better course of action for me to walk away.

I am sure that these two incidences are only the tip of the iceberg!

I read recently in the West Australian newspaper that Senator Pauline Hanson had been observed flying a 'drone' from her hotel balcony in Queensland. Her remarks as printed were not appropriate for a Senator and highlight the need for regulation.

I have made enquiries with most Perth Metropolitan local councils and Regional councils about that council's policy in respect to the flying of RPA's within its boundaries. The response was very mixed and uncoordinated with most local authorities that I contacted stating that they had no policy for this activity.

There needs to be in my opinion, a standard policy that relates to ALL local government councils that is integrated with CASA Rules and Regulations. Being a past Chief Executive Officer of a several rural/regional local authorities and large metropolitan local authority, I have a few ideas as to how this could be achieved, however that is not the purpose of this submission.

My immediate concern is that in the eye of the public, they may consider that small RPA's of 100g-2kg as being a 'toy', and this is far from the reality. My DJI Phantom 4 Pro weighs in at 1.388 kg and has a Max Flight Speed S 20m/s, a flight distance including altitude of 5000m. The speed whilst in sport mode can reach a speed of 70 kph and that in uncontrolled situations is highly dangerous. Consider for a moment the story I told (above) of the two young teenage girls who flew their Phantom at top speed and were not that far away from myself. If that aircraft had hit me in the head at say 70 kph, I don't hold out much hope of surviving the impact!

Another concern that I wish to raise is relating to emergency helicopters operating on G class airspace at low altitudes and the serious risk a small RPA could do if it impacted with that aircraft. A RPA with a weight under 2kg can be likened to a flying house brick propelled at 70 kph. I hope that this imagery is not overlooked.

Finally a further concern I have is that even a small RPA if used for criminal or terrorist activities, has the potential to be converted for 'evil' purposes.

The big task facing the Senate enquiry is how does it make sense out of all the conflicting factors relating to 'remotely piloted aircraft systems' and how does it formulate and integrate solutions to fit within the CASA framework of rules and regulations that is in the best interests of both included and excluded use of RPA.

My particular interest is in seeing responsible regulation for the recreational use of small RPA under 2kg.

In conclusion I thank you for providing me with this opportunity to make a contribution to the Senate enquiry.

Yours sincerely

JOHN REIDY-CROFTS