

recent Amendments to the Civil Aviation Safety Regulation Part 101

As you may be aware the AFAP and AIPA (as AusALPA) have been lobbying Canberra against the relaxation of remote piloted aircraft (RPA) legislation. These exemptions allow commercial operators to fly drones weighing less than 2kg with much reduced regulatory requirements.

In conjunction with air traffic controllers (Civil Air) and certified drone operators (ACUAV), AusALPA have successfully highlighted the safety concerns with Senator Xenaphon's team who have forced a parliamentary review of "drone" regulation.

There have been approximately 151 drone Air proximity events reported in the last 12 months. These reports are not readily visible on the ATSBs website. The AFAP believes that these events should be analysed and transparently reported by the ATSB. It is not clear that the growing number of unauthorised drone incursions was assessed by CASA when CASR 101 was relaxed recently. We believe that the ATSB needs to be actively monitoring and publicising the drone threat.

AFAP president David Booth was quoted during a press event and said "flying operations at Sydney Airport had been restricted twice in the past month when drones were spotted nearby.

"It is not a nice feeling knowing that this drone is in your airspace. You don't know where it's being controlled from, you don't know where it's going," A drone was seen at 12,000ft north of Sydney, leading to a hazard alert by Air Traffic Control and to aircraft moving away from their planned flight path.

"Another pilot I know had a near miss with a drone at 1000ft at the Gold Coast airport. How many other events have occurred that we don't know about?"

A 2kg drone colliding with a plane travelling at up to 400km/h or hitting a helicopter's tail rotor could cause catastrophic damage."

Australian Certified UAV operators' president Joe Urli said the changed rules allowed people of any age to fly drones up to 2kg without any training, insurance, registration or certification.

"These changes will open Pandora's box in terms of new dangers for airlines and the general public.."

The risk of a collision between an airliner and an unmanned aircraft is increased significantly, since the new regulations came into effect. CASA estimated that the 700 certified drone operators, all who were licensed and trained, would grow to a figure of 2000 commercial operators by the end of the year, in reality we now have almost 12000 untrained, unregistered commercial drone operators plus hobbyists in the national airspace. The

12 Air Pilot



AFAP President David Booth addressing the media in Canberra.

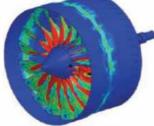
previously certified and responsible commercial operators can no longer compete, having cumbersome CASA overheads and additional AAUS standards to comply with. These professionals are starting to throw in the towel. By introducing these relaxations to commercial use of sub 2kg drones, CASA may very well wipe out the experienced, responsible and safe operators whilst encouraging a proliferation of new unlicensed, untrained and unaware drone operators.

Researchers at Virginia Tech have modelled the predicted results of collisions between small drones and

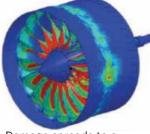
airliners. This graphical sequence shows the catastrophic effects on an engine with a titanium alloy casing. (Below)

Like our international associates at IFALPA the AFAP argue that drone operations must be safely integrated into our Airspace. AusALPA, the air traffic controllers and certified drone operators are collaborating on a submission for the governments Drone safety review. Our submission will outline more stringent regulations being enacted under USA, Canadian and European regimes.

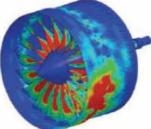




The remaining half of the quadcopter is ingested and is struck by a second blade: stress increases as parts of the blade hit the casing; loss of blade mass exacerbates the imbalance and stress.



Damage spreads to a third blade; the imbalance worsens; pieces of the drone are now impacting the casing.



The quadcopter is obliterated; three fan blades are catastrophically damaged; the remaining blades contact the casing: stress grows, shown in red, but the casing holds.



The titanium-alloy casing is significantly deformed.

NO. 2 | 2016 13