

Questions for Consideration - 1

Are there barriers to the take-up of innovative technologies in the aviation sector? The Australian Government released a comprehensive Issues Paper on Emerging Aviation Technologies, such as drones and eVTOL vehicles, on 3 September 2020. A link to the paper can be found at www.infrastructure.gov.au/aviation/drones. All stakeholders are encouraged to participate in this consultation process.

Yes, there are barriers –

1. CASA charges for reviewing developmental projects. When we developed the Whitney Boomerang light aircraft, CASA's charges were a very major on cost to the developmental costs in achieving type certification (TC). In the USA, the FAA do not charge at all for aircraft certification nor do they charge for approval of Supplemental Type Certification (STC). I have had Australian STCs accepted into the USA, these were very thoroughly assessed by the FAA and accepted by the FAA – **NO CHARGE**.
2. On the world stage, CASA charges place developmental projects in Australia at a competitive disadvantage.
3. CASA's paperwork developmental requirements are lengthy and confusing. For example CASA's "Type Certification Procedures Manual" is at 99 pages, in my view, unduly long. At section 2.9 in this manual it does not properly set out how a compliance checklist should be constructed nor does it differentiate between TCs and STCs, the point being that for most STCs only part of the overall design standard needs to be addressed.
4. Get Canberra out of the loop or at least significantly change management practices. CASA engineers assessing project need to get out from behind their desks and into industry, see with their own eyes how a project is unfolding and deal face to face with the innovators. This has the spin off effect of increasing the skill levels of CASA personnel and making their work more exciting and interesting.

Questions for Consideration – 2

The Government understands the key challenges facing the GA industry. Given the impact of COVID-19, are there other areas where governments could be focusing to support GA?

It is important to recognise that GA and RAA are the primary centres of innovation within the aircraft industry. I helped develop bush firefighting modifications on Air Tractor AT-802 aircraft and Bell helicopters that were extensively used during the recent bush fire emergency. Where innovation is concerned, 2 things must be understood –

1. There is always risk, and

2. There is always a learning curve.

Project management must be flexible. Draft compliance statements must be produced at an early stage but be able to be changed throughout the project.

CASA needs to fund skills maintenance projects. For example, one of the more complex areas of certification is ground resonance testing and flight flutter testing. There are a few individuals and companies in Australia that can do this, they should be given sufficient work so that skill levels are maintain, this could include retesting current types.

From a purely safety point of view, there are projects that need to be examined, here are a few –

1. Develop crash resistant seating for older helicopters.
2. Develop a single axis autopilot (a wing leveller) for light and ultralight aircraft so that if they get caught in cloud they don't lose it.
3. Improve the emergency entry/exit facilities for older types.
4. Encourage the fitment of GPS equipment to ALL aircraft.