



International Aerospace Law & Policy Group
Australia's Air & Space Lawyers

4 October 2018

Ms Deborah Jeffrey
Committee Secretary
Transport and Public Works Committee
Parliament House
George Street
Brisbane Qld 4000

BY EMAIL: tpwc@parliament.qld.gov.au

Dear Ms Jeffrey

INQUIRY INTO TRANSPORT TECHNOLOGY

Thank you for the opportunity and invitation to contribute to the Transport and Public Works Committee's Inquiry into Transport Technology.

International Aerospace Law & Policy Group (IALPG) is a specialist law practice focussed on aviation and space law but also advising on maritime, defence and associated practice areas. It was founded in 2015 by Joseph Wheeler. For further background information please see **Annexure 1**.

IALPG welcomes the opportunity to comment on the challenges and opportunities which technology will bring to the transport sector in coming years.

Our submission will focus on the opportunities that autonomous aircraft can bring to the transport sector through the realisation of urban air mobility.

It will highlight the progress in the planning phases that other governments around the world are making on urban air mobility and identify where the Queensland Government can similarly take and lead with effective action.



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Advances in autonomous aircraft technology will in the coming years reduce the pressure on traditional road transport systems, reduce passenger commutes, and increase delivery efficiencies which will all have the effect of making our cities more liveable. Even though the technology is not yet ready for implementation of a fully integrated urban air mobility network, it will not take long. The Queensland Government together with the Commonwealth and other state governments need to start working together in a whole of government approach.

In September 2018, Remotely Piloted Aircraft Systems (RPAS) was added to the Work Program of the ICAO Legal Committee. In addition, a Working Group is being set up presently to discuss international legal issues relating to unmanned (pilotless) aircraft operations and integration into civil aviation and, in coordination with the Air Navigation Bureau and Legal Affairs and External Relations Bureau, identify items for consideration by the Legal Committee and/or possible solutions for legal issues within the framework of the Organisation's on-going work.

While the wording of the Working Group's Terms of Reference is still being finalised, it will involve the study and positing of solutions to international legal issues arising as a result of newly emerging unmanned (pilotless) aircraft technologies, systems, and applications (explicitly including unmanned aerial taxis, carriage of cargo, and related liability concerns).

This clearly demonstrates the realisation at international level of the growth of RPAS technology and the requirement to incorporate it into existing aviation and transport structures within nations that can admit it.

We caution that it would be a mistake to think of RPAS as a purely aviation technology. RPAS and other autonomous aircraft systems will be integrated into the existing infrastructure of our cities and transport networks far greater than traditional aviation has been. Hence, the need for a complete rethink about transport and a move away from a reliance on roads. Governments should be wary not to invest too heavily in road networks to meet the supposed needs of the coming decades. Companies including Uber¹, and Airbus² have outlined how the technology will be used for urban air mobility. Uber particularly, have estimated that new technology can create options for transportation infrastructure at a far lower cost than a high speed rail project for example.³ Uber presented its costing model at the United States Congressional Committee on Urban Air Mobility in July this year, where it plans to provide transportation via air taxis at a cost to passengers comparable to current UberX prices.⁴

¹ <https://www.uber.com/elevate.pdf>

² <https://www.utmblueprint.com/>

³ <https://www.uber.com/elevate.pdf>, p 2.

⁴ <https://science.house.gov/legislation/hearings/full-committee-hearing-urban-air-mobility-are-flying-cars-ready-to-take>

In our view there is a need for a complete policy rethink about transport in the realm of driving, necessitated by practical and technologically driven visions like the Airbus and Uber Elevate roadmaps.

Further, in our opinion there must be cross pollination between regular road transport regulators and air safety regulators going forward so emerging technologies can take their rightful place in the evolution of transport in Australia rather than a continued conceptual segregation. Australia, and Queensland particularly, should embrace the challenges and freedoms a clean slate with transport might permit.

As cited by the recent Commonwealth's Senate Rural and Regional Affairs and Transport References Committee's Report into the "Current and future regulatory requirements that impact on the safe commercial and recreational use of Remotely Pilots Aircraft Systems (RPAS), Unmanned Aerial Systems (UAS) and associated systems" we argued for (and the Committee recognised a need for) a clear whole of government approach to creating a vision and policy framework for RPAS.⁵ This must allow each relevant portfolio at Commonwealth, state and territory levels input to ensure their drivers for such change form part of the motivation and plans for such a mindset change.

The entire traffic system as a whole in Australia should start now looking above the ground just as UAE and Singapore are doing, as a realistic option for the future as an economical and cleaner future way of bringing the country closer to the urban and the people of Australia closer to each other as never before.

Recommendations

We respectfully recommend the Department should consider the comments made herein and let us know if any further information would assist with its deliberations.

We hope our submission has been of assistance and would welcome the opportunity to discuss further with you should you require.

Yours faithfully



JOSEPH WHEELER
Principal, IALPG

[Redacted contact information]

⁵ Report available at https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Rural_and_Regional_Affairs_and_Transport/Drones/Report, p 91-99.

Annexure 1 - Summary Biography of IALPG Founder

Joseph Wheeler , MRAeS, LLB, BA(Psy) (UWA), GDLP (Qld), GCert Air & Space Law (McGill)

Joseph is one of the few post graduate alumni of the McGill University Institute of Air and Space Law in Montreal, Canada, who practices in the field of law predominantly for industry, pilots, remote pilots and passengers. He is an elected Member of the Royal Aeronautical Society, and:

- Consults as Aviation Legal Counsel to the Australian Federation of Air Pilots providing individual, association and government affairs advice (AFAP is Australia's largest pilot professional association by member numbers);
- Consults to other law firms, providing advice and representation on air disaster and injury cases to Australian and overseas clients;
- Is Aviation Spokesperson for the Australian Lawyers Alliance, the leading social justice legal professional association in Australia;
- Is a Vice Chair to the Legal Committee of the International Federation of Airline Pilots' Associations (IFALPA) in Montreal, and Member of the Professional & Government Affairs Committee of IFALPA representing AusALPA (Australia's member association to IFALPA, made up of AFAP and the Australian and International Pilots Association, AIPA). Joseph represents IFALPA at certain ICAO forums including the ICAO Legal Committee;
- 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 or other initiatives, including Australian Certified UAV Operators Inc (ACUO) and HIMS Australia Advisory Group Inc (both of which are Queensland incorporated not for profit associations, and the latter is a recipient of CASA financial sponsorship); and
- A regular commentator on aero legal and aero political affairs for a variety of media channels.

Joseph has worked in the Australian Government and was responsible for airport economic regulation policy oversight, and planning and development, as an Assistant Director in the

Airports Branch, Canberra, from 2011 – 2013. He has published more than 100 articles in total in peer reviewed journals, newspapers, magazines, legal websites, and on topics as broad as air safety policy, international law, aviation conventions, RPAS regulation, and topical policy development in Australia and at ICAO. He also speaks regularly at international conferences on aviation legal and policy topics, most recently on the notable mass air disasters this decade (MH17 and MH370), RPAS regulation and policy, and the legal approaches to future Australian technical capabilities like urban air mobility.