From: Sent: To: Subject: Ian Willis Saturday, 11 February 2023 1:59 PM Aviation White Paper aviationwhitepaper

Categories:

ToR consultation responses

Hi All,

Thank you for providing the opportunity to contribute

Significant policy and economic reforms are required to ensure that the aviation industry thrives and benefits the Australian population over the coming decades. These changes and reforms will be driven by a desire to reduce the impact and mitigate the risks of fossil fuels on climate changes and the impacts of the technologies which have allowed "Telecommuting". Barring some catastrophe the Australian population will continue to leverage air transport and it's use, given appropriate support will facilitate the ongoing well being of people in regional areas. Climate change will impact communities around Australia as bushfire seasons increase in duration and fire intensity increases (Garnaut Climate Change Review), thus areas which were previously low or medium risk will become higher risk. It is possible to mitigate these risks with appropriate resourcing and technologies however investing in the correct underlying infrastructure is required to enable these capabilities to flourish. Fire, unlike flood or other impacts of climate change spreads from point ignition sources commonly after storms, or human activity. For example the Gospers Mountain fire in 2019 was started by lightning, the to the southwest of Canberra in 2020 were started inadvertently by Defence force helicopters. Fires started from these point sources cause enormous economic damage and their impact is ongoing and it is likely that the impact of future fire events will be similar. However there is hope, in the period after the ignition event, the amount of water or retardant required to extinguish the fire increases exponentially over time, quickly escalating to thousands of litres in the period 30 minutes after the event. In addition to this fires are energetic events visible in a variety of parts of the electromagnetic spectrum from visible, through the infrared into the microwave allow for remote detection through cloud and smoke cover. Both fixed wing and helicopters can respond to these event to extinguish the fires however fixed wing aircraft, either manned of unmanned have significant cost, range, speed and capacity advantages over helicopters allowing them to deliver a larger suppression event, earlier and in a more cost effective manner. To provide a timely and low cost response it is likely that, in future unmanned autonomous vehicles will provide this capability. A fully laden Air Tractor AT-802 requires about 800m to take off and nearly twice this length to abort a fully laden take off. It should be noted that these airstrips do not require pavement however they do require basic preparation, maintenance and facilities to support the workload.

An examination of the locations of airfields in the areas of higher risk demonstrates a significant lack of infrastructure to enable this capability, for example in the Canberra region where the city has a demonstrable risk from the southwest it is over 100 km between Canberra and Cooma airfields and any vehicle departing from the Canberra area in controlled airspace would require the standard clearance process further delaying a response. Similarly the fire prone areas surrounding Sydney lack facilities to support these types of operations and this lack of infrastructure is evident across the majority areas impacted by fires. Given this lack of infrastructure it would be prudent for the Federal Government to invest in infrastructure such as airfields which supports a flexible and fluid response to this these type.

Floods are also impacting Aviation, with many regional airstrips becoming inundated during extreme weather events. Aviation can and does have the capability to provide the necessary supplies and resources to cater to these events however the underlying requirement is to have airstrips enable emergency fixed wing responses to these areas. Flood modelling and low cost airstrip designs and associated funding are required to faciliate the creation of low cost infrastructure. Prudent planning would also ensure that these locations could dovetail into the requirements of the fire suppression airstrip.

The impact of teleworking will have an impact upon society in a manner similar to the the commuter train and car. Suburbia was created by the readily available of transport allowing people to live and work further than a few miles

from their place of work, similarly telecommuting will create a similar devolution of the density cities as people realise that they can live and work further afield than the traditional commuting boundaries. This will have a profound impact upon society which needs to be anticipated and captured in the Aviation Whitepaper. There will still be a requirement to attend periodic meeting "in the flesh" which will be facilitated in some measure by both aviation RPT and private transport which includes General Aviation. This will have flow on effects to other public infrastructure such as healthcare and hospitals which are currently poorly situated to address this need. The infrastructure is missing and poor planning is evident is the balance of existing technologies especially in relation to hospitals which treat chronic disease. For example regional Australians currently requiring specialist treatments are often forced to travel to capital cities and the distances involved make air travel the only relevant choice. However hospitals aren't co-located with these transport hubs to the detriment of regional Australians. Similarly services such as Angel flight which provide a free service for it's clients to travel to and from these areas of treatment suffer from a lack of airstrips in the community and also at the other end of the journey in the city. For example Oncology services in Metropolitian areas are clustered in areas poorly serviced by aviation requiring significant travel from Airports serviced by RPT or General Aviation. This needs to be addressed to ensure that the lifespan gap apparent in regional Australians is reduced. RPT has declined in many regional areas and once regularly serviced communities not longer have this facility. In future either this form of transport will be reinstated or services such as Angel Flight using General Aviation capabilities will need to step up to fill this gap. Either way a demand above and beyond the existing capabilities will occur in the near future. It is possible that at some point autonomous vehicles will fill this void driven by these new requirements and those countries with suitable infrastructure will be in the vanguard of this change and the associated industry.

The provision of more airstrips both in regional Australia and in regional areas is a public good which has seen limited investment for many decades. Following WW2 there was a significant investment in this Aviation infrastructure by the Federal Government as an obvious public good, however over time this was seen as an economic burden which was outsourced to local councils and private interests. This has led to a culture of neglect or on potential revenue streams rather than the delivery of public goods. It is time to reinvest in this area in a precise manner which caters to the future environment driven by climate change and changing cultural drivers. Is should be noted that Australians have for a significant period of time enjoyed a high standard of living, a key part of this is the profligate use of energy. This will not change, however every effort should be made to enable creative use of technologies which will decouple lifestyle choices which incorporate international travel, private transport large free-standing dwellings and on-line shopping, from the environment impacts of fossil fuel use. The aviation industry has for a significant period undergone consolidation and decline with regional airports no longer receiving RPT flights. The underlying availability of airfields is the key driver for great Aviation uptake and the associated industry and benefits.

Areas of focus for the Federal Government in Aviation should be

- A significant increase in the number of low cost airstrips suitable for operations such as aerial fire suppression and disaster relief.
- A significant increase in the number of airstrips around capital cities where fire risk exists.
- Development of Airstrips in National Parks in a similar manner to fire trails to mitigate increasing fire risks.
- Associated guidance, standards and funding for local Governments in relation to this infrastructure.
- Correlation between airstrip locations and points of presence of Federal Government service points in regional Australia such as Centrelink, NDIA etc. Currently there is little correlation.
- Ensuring that these new facilities are available for private or relevant commercial use to ensure a vibrant bottom up culture in the Aviation industry instead of the top down model which has failed the Australian population time and again.

Kind Regards

Ian Willis