

Regulatory and/or Licensing Bodies

- The national regulator overseeing activity in this space is the Civil Aviation Safety Authority (CASA). Together with the Department of Infrastructure, Regional Development and Cities, and Airservices Australia, they constitute a tripartite structure for providing safe aviation in Australia.
- At State level, the Department of Transport (DoT) coordinates, develops and influences government and the aviation industry in providing the best aviation services and infrastructure for Western Australia.

INDUSTRY DEVELOPMENTS AND WORKFORCE CHALLENGES (COVID-19)

- COVID-19 has radically changed the way the aviation industry operates globally.
- Two-thirds of the world's passenger jets have been grounded. This accounts for approximately 16,000 aircraftⁱ. The aviation industry has been severely impacted as airlines grapple with the economic ramifications of being unable to operate. It is also difficult to retain employees and continue to incur upkeep and parking costs for grounded aircraft with no clear indication or pathway to recovery.ⁱⁱ
- As of May 2020, Perth Airport had a total loss of 322,288 international passengers when compared with the same period last year. An estimated loss of 2.3 million passengers were reported to have been lost since the State and Federal border restrictions were implemented.ⁱⁱⁱ Significant falls were also noted in regional and interstate passenger movements impacting flight crew and many other aviation support services where people were either stood down or lost their jobs.^{iv}
- To better contain and limit the spread of COVID-19, there are only a limited number of flights available into WA. Further measures were implemented capping international arrival to WA capped at 525 (mostly catering to repatriation flights)^v resulting in even lower capacity and frequency of flights servicing WA.^{vi}
- The mass grounding of airline fleets across the world highlights the severity of losses incurred by the industry. There is a large number of Pilots that are out of work. Many Australian Pilots with postings overseas have returned to Australia searching for positions flying smaller aircraft and regional postings. In many instances, some have also pursued flight instruction roles.^{vii}
- Flow on effects from lower capacity on aviation and aviation support services include time delays in both inbound and out bound freight, increased airfreight charges (likely to last well into 2021) and possible redundancies.^{viii} There may not be enough work to sustain pre-pandemic employment levels. Air freighters that would normally rely on cargo space in the hull of passenger aircraft are faced with fewer options and increased overheads.^{ix}
- With the high costs associated with flight training, concerns have been raised over the high levels of debt that have been accrued by young pilots and the distressing impact that COVID-19 has had on job prospects.^x As the industry struggles to deal with this, there is likely to be a cohort that will not return to Aviation after transitioning to another sector.^{xi}
- With the downturn in aircraft movements, maintaining currency is another major concern for pilots. They are required to fly at least once every 45 days to be allowed to use their Civil Aviation Safety Authority (CASA) issued licence. Additional time could also be factored in to cater for simulator of aircraft type.^{xii}
- To retain their valued and skilled employees, employers (in fixed wing and rotary) have explored several alternatives to avoid redundancy (e.g. JobKeeper, long service leave and leave entitlements) during the period of very low operational activity.^{xiii} Concerns have been raised over the willingness of seasoned pilots to return to the industry once gainfully employed in a different industry sector.^{xiv}
- Faced with a weak outlook owing to ongoing COVID-19 cases in Australia and abroad, travel restrictions and cost pressures, global airlines are abandoning rapid recovery forecasts. Passenger traffic volumes are not likely to return to pre-COVID-19 levels until 2024.^{xv}

- As of July 2020, in WA, there are currently 220 Operator Certificate Holders registered with CASA for Remote Pilot Operations. Regulatory work and reforms is ongoing relating to the operation of drones (Remotely Piloted Aerial Systems (RPAS)) as the number of registered craft and operators continues to increase.^{xvi}
- The low availability of Flight Examiners/Testing Officers will intensify this issue, whereby operators are faced with a backlog of candidates awaiting to be tested. Similarly, as Grade 2 and 3 Flight Instructors (at the higher level) are difficult to source, it places limitations on the pipeline and capability of Pilots to train and accrue their flight hours.^{xvii}
- An ageing workforce in aviation is placing further pressure on the demand for increased training of new pilots. From the age of 60 years or more rigorous medical testing is required to retain their Air Transport Pilots Licence (ATPL). This six-monthly testing could also have an impact on the retention of older workers, especially Pilots.^{xviii}
- Digital literacy, cyber security, analytics and the incorporation of artificial intelligence are considered to be both challenges and areas of opportunity within the aviation space.^{xix} The skills required for people to be deemed competent in these areas are constantly evolving. The repetitive aspects of routine tasks tend to be minimised to achieve greater efficiencies and thus create new checks and balances to measure process improvement.^{xx}
- The practical requirements for Pilots are so experience-focussed that even a Pilot who believes they are proficient would need to undergo further training for each aircraft they pilot due to the customisation of the planes undertaken by each airline. Thus, it would not be possible for VET or university graduates to walk straight into the specified job roles for pilot shortages^{xxi}.
- Although there is a Pilot shortage across all levels the greatest demand is at the higher endorsement level, e.g. there are more Pilots available to fly propeller aircraft than jets due to the difficulty in attaining flying hours for each additional level of endorsement.^{xxii}
- Pre Covid-19, Industry had identified that the following occupations would have a supply or demand issue in the next four years. However, these estimates are now uncertain.
 - **Aeroplane Pilots** are in short supply (this is inclusive of Captains and First Officers). There have been a number of local instances where aeroplanes had to be parked and flights cancelled because there were no adequately qualified personnel available to operate them.^{xxiii}
 - **Flight Instructors** are being lured back to industry as pilots for airlines leaving a void impacting flight training schools that train and supervise pilots in training.^{xxiv}
 - The demand for **Helicopter Pilots** remains steady, however, industry has indicated that there is an ongoing need to upskill pilots to attain the appropriate endorsement/rating applicable to their job role.^{xxv}
 - Although **Drone Operators** may not be considered as a stand-alone occupation, the skills required to perform this job role require compliance and an understanding of guidelines regarding the manoeuvring of aircraft in controlled air space. It should be noted there are many non-aviation occupations that will need to utilise this skill.^{xxvi}
- Investment in new technologies designed to streamline and automate certain processes will not only improve workplace health and safety but also begin to transform workforce skilling needs with aviation. Such skills will include but are not be limited to digital literacy, analytical skills and security. However, industry noted that some critical skills such as decision making and small plane experience will be affected. Although many of these new technologies will lead to greater automation there will still be a need for all the base skills to ensure that if something goes wrong, the pilot will be able to respond accordingly.^{xxvii}

Regional Concerns

- For some regional centres aviation work comprises of government contracts, tourism and mining (i.e. FIFO). For those that do not have a direct link to servicing mine sites, there has been a significant decline in air traffic as restrictions prohibited travel.^{xxviii}
- Since the easing of restrictions, additional support has been welcomed to encourage local tourism through cheaper fares^{xxix}, however, the time of the year that flights are scheduled to take place would be considered too hot to attract some travellers/tourists to the region.^{xxx}

- Due to a sharp decline in tourist numbers, small operators such as scenic flight operators based in regional centres have lost revenue streams and are struggling to stay afloat. This has resulted in businesses restructuring, accessing JobKeeper and investigate alternative value-added services.^{xxxix}
- As a result of the grounding of aircraft worldwide, some operators with regional operations have been flooded with applications for Piloting roles where they had previously been struggling to fill positions. The applications comprise of a mix of interstate and returning overseas personnel.^{xxxix}
- For those offering charter services to the resources sector, robust change management had to quickly be implemented to factor in social distancing impacting flight loads and frequency. Additional training surrounding health checks and disinfection measures were also undertaken.^{xxxix}
- As at May 2020, regional passenger movements through Perth had fallen by approximately 35 per cent when compared with the same period in 2019.^{xxxix}
- Newly qualified pilots often utilise regional airlines as entry-level pathways to accumulate flying hours and experience that will enable them to transition to piloting opportunities with larger airlines.^{xxxix}
- Given the remote location, some organisations find it cost prohibitive to upskill and maintain type-specific endorsements. To achieve this Pilots often have to travel elsewhere to be tested and to attain ratings.^{xxxix}
- Although simulators aid with the training of up and coming Pilots, they may be limited to a specific type of aircraft and thus restrict the ability to transition to larger and/or other aircraft types.^{xxxix}

Emerging international, national or State training issues impacting your industry

- To continue flight training, especially during higher level restrictions, organisations adjusted schedules and adapted modules that cover theory components to on-line delivery where possible. For the practical aspects (i.e. solo and accompanied flights) postponements were made until deemed safe to do so.^{xxxix}
- In the helicopter space, to retain currency, meet regulatory requirements and to ensure contractual obligations are adhered to, some organisations are faced with additional cost burdens for endorsements and ratings that their pilots must obtain. As an example, the Night Vision Goggles (NVG) authorisation can cost up to approximately \$55,000 per person. Civil Aviation Orders (CAO) 82.6 requires pilots to be NVG qualified. Traditionally it has been the individual who has incurred these costs, however there is a growing expectation that employers should fund these requirements.^{xxxix}
- Drones/RPAS continue to be a hazardous issue for regional aerodromes. More training is being incorporated into existing courses to develop user's awareness of drones as a hazard (i.e. for drone users). Additionally, the Regulators are also covering courses on drone-user awareness to address this issue.^{xl}
- In addition, the Aviation Training Package will be updated to align cargo service and rescue flight operations to the revised civil aviation safety requirements, advances in technology and industry skill requirements.^{xli}
- The Aviation IRC is updating existing and developing new components in the Aviation Training Package in response to the outcome of scheduled reviews of aviation regulation by the CASA including responsiveness to the rapid expansion of commercial Remote Pilot Aircraft Systems activities.^{xlii}
- There are new technical requirements for RPAs, or Drones contained in Part 101 (Unmanned Aircraft and Rockets) Manual of Standards (MOS) 2019. The new rules affect commercial and professional RPAs pilots and operators. CASA is currently developing the guidance material to assist with the transition. The new technical requirements and other rules will commence in 2020 and will include training and competency standards for remote pilot licences (RePL) and standing approvals for certain kinds of operations near aerodromes. Requirements for RePL training instructors will commence towards the end of 2020.^{xliii}

- The onset of Industry 4.0 which encompasses data exchange, automation and the internet of things will transform the skilling needs of the current and future workforce^{xliv}.

INDUSTRY WORKFORCE PRIORITIES:

- Some regional airlines in the Northwest have established a pilot program targeting indigenous engagement. In addition, they are also making efforts to increase awareness of aviation for the younger cohorts by participating in targeted school-based campaigns such as career days.^{xlv}
- In addition to airlines' efforts to attract younger workers, it has been noted that greater awareness campaigns are needed to educate potential entrants about the opportunities available, as well as the high cost and lifelong learning associated with becoming a Pilot.^{xlvi}
- The LDSC has also been working with industry and government departments to facilitate transitional entry pathway programs for Pilots and training. This would make it possible for partial completion of the Diploma of Aviation aligning it to the Western Australian Certificate of Education (WACE) requirements. This would therefore encourage a younger cohort to uptake training.^{xlvii}
- To encourage better diversity and inclusion in its workforce, most Australian airlines have an inclusive hiring policy provided applicants can meet the medical requirements of the role. In particular some airlines have specific targets to ensure diversity is reached within their organisation.^{xlviii}

i <https://time.com/5823395/grounded-planes-coronavirus-storage/> Accessed April 2020

ii Industry Consultation 2020

iii Perth Airport: Aviation Sector Coronavirus losses continue to climb Accessed June 2020

<https://www.perthairport.com.au/Home/corporate/articles/2020/06/26/10/11/coronavirus-losses>

iv Industry Consultation 2020

v WA today: International arrivals to WA to be capped at 525. Accessed July 2020

<https://www.watoday.com.au/national/western-australia/international-arrivals-to-wa-to-be-capped-at-525-passengers-a-week-20200707-p559td.html>

vi Industry Consultation 2020

vii Industry Consultation 2020

viii Industry Consultation 2020

ix Industry Consultation 2020

x Pilots are bracing for a three-year coronavirus shut down and what help to keep them in Aviation Accessed July 2020

<https://www.abc.net.au/news/2020-07-26/pilots-grounded-by-coronavirus-pandemic-want-pilotkeeper-program/12487308>

xi Industry Consultation 2020

xii Industry Consultation 2020

xiii Industry Consultation 2020

xiv Industry Consultation 2020

xv Perth Now: International Air Transport Association warns passenger traffic won't return to pre-COVID levels until 2024

<https://www.perthnow.com.au/news/aviation/international-air-transport-association-warns-passenger-traffic-wont-return-to-pre-covid-levels-until-2024-ng-b881624979z> Accessed July 2020

xvi CASA Source: <https://www.casa.gov.au/rpa-operator-certificate-holders> last accessed: July 2020

xvii Industry Consultation 2020

xviii Industry Consultation 2019

xix Australian Industry Standards, Aviation Industry Skills Forecast 2019

xx Industry Consultation 2020

xxi Industry Consultation 2020

xxii Industry Consultation 2020

xxiii Industry Consultation 2020

xxiv Industry Consultation 2020

xxv Industry Consultation 2020

xxvi Smart Company, Triscara C., Food Delivery drones are taking flight in the ACT: is this the start of a new delivery model?, Source: <https://www.smartcompany.com.au/technology/food-delivery-drones-are-taking-flight-in-the-act-is-this-the-proper-start-of-a-new-delivery-model/> [last accessed 1 August 2018]

xxvii Industry Consultation 2020

xxviii Industry Consultation 2020

xxix Cheaper airfares a big boost to Kimberly tourism in WA's recovery, 21 July 2020

<https://www.mediastatements.wa.gov.au/Pages/McGowan/2020/07/Cheaper-airfares-a-big-boost-to-Kimberley-tourism-in-WAs-recovery.aspx>

xxx Industry Consultation 2020

xxxi Industry Consultation 2020

xxxii Industry Consultation 2020

xxxiii Industry Consultation 2020

xxxiv Perth Airport: Aviation Sector Coronavirus losses continue to climb Accessed June 2020

<https://www.perthairport.com.au/Home/corporate/articles/2020/06/26/10/11/coronavirus-losses>

xxxv Industry Consultation 2020

xxxvi	Industry Consultation 2020
xxxvii	Industry Consultation 2020
xxxviii	Industry Consultation 2020
xxxix	Industry Consultation 2020
xl	Industry Consultation 2020
xli	Australian Industry Skills Committee. Source: https://www.aisc.net.au/content/national-schedule Last accessed 30 August 2019.
xlii	Australian Industry Skills Committee. Source: https://www.aisc.net.au/content/national-schedule Last accessed 30 August 2019.
xliii	Industry Consultation 2020
xliv	Industry Consultation 2020
xlv	Industry Consultation 2020
xlvi	Industry Consultation 2020
xlvii	Industry Consultation 2020; and SPOL 2020
xlviii	Industry Consultation 2020