



**Professionals
Australia**

Submission to the inquiry into the current state of
Australia's general aviation industry

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About Professionals Australia

Professionals Australia is a network of thousands of engineers, managerial and technical professionals whose mission is to shape the future of our professions based on the expressed wishes of professionals themselves; and to help our members get the careers they deserve. We believe our members should have a strong voice and more influence over the big issues in their profession and in their workplaces.

We are the union representing professionals in many areas of the aviation industry and the Australian Public Service, including the Civil Aviation Safety Authority and Airservices Australia. As employees of the Civil Aviation Safety Authority (CASA), our members work in regulatory, surveillance and oversight roles. They are airworthiness inspectors, flying operations inspectors and examiners, engineers, professionals in policy development and IT, and a range of associated roles.

As part of a comprehensive range of services, Professionals Australia advocates for members in workforce and employment-related areas with the aim of positively impacting their operating environment and ensuring their interests are represented at the policy and decision-making level. This includes advocating for ways to ensure proper workforce development in industries including aviation.

About this submission

The effective and efficient operation, and the technical capability, of CASA and Airservices Australia does not just support commercial aviation. These agencies perform critical roles which enable the safe, reliable operation of general aviation in Australian cities and across our regions.

Both agencies are impacted by the COVID-19 driven downturn in the aviation industry, in terms of funding input and the type of required output. The situation the general aviation industry is in, and its scope to operate, continues to evolve.

However, long before the challenges of the global pandemic, both agencies faced serious, entrenched cultural problems and workforce challenges. These issues have severely impacted the technical workforce.

This submission aims to provide information to the inquiry on the issues of concern and importance to Professionals Australia members at CASA and Airservices Australia, which impact the safe operation of Australia's general aviation industry.

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The Civil Aviation Safety Authority

CASA's responsiveness, capacity, and its ability to discharge its obligations is fundamentally underpinned by the knowledge, experience and expertise of its workforce.

Professionals Australia members strive every day to make a positive contribution to maintaining and improving aviation safety across Australia. The commercial and general aviation industry, and the wider community rely on their dedication, attention to detail and professionalism to ensure safe skies for all. Civil aviation underpins Australian business and tourism and has an estimated annual revenue of \$43.54 billion; so, it goes without saying that the safe and reliable functioning of this sector is absolutely in the national interest.

Yet, despite their essential role in delivering CASA's mission, the technical workforce is in crisis. Understaffing, workload intensification, and a seemingly endless process of restructuring is stretching the technical workforce to its limits. Retirements, staffing resignations, redundancies and inaction to fill vacant technical positions are putting our reputation for having one of the best safety records of any country in the world at risk. The unprecedented reduction in corporate knowledge, and resultant lack of oversight, increases the very real risk of a catastrophic accident.

On top of it all, a top down management culture which fails to engage and involve the workforce in change and is hostile towards critique has resulted in plummeting confidence in the organisations' leadership. And when CASA fails, the risks are to passenger safety and one of the key underpinnings of our national economy.

The recent Australian Public Service Census as well as surveys conducted by Professionals Australia and fellow unions show that CASA staff have lost faith in their leadership as a result of the culmination of these issues.

Serious action is required to restore that faith and repair the workplace culture. Addressing these issues is paramount, as the workplace issues listed above impact the safe operation of the aviation industry. Recent examples of similar issues resulting in catastrophe overseas include the Lion Air and Fox and Franz Heli Services disasters.

Investigations by the Indonesian National Transportation Safety Board and Ethiopian Aircraft Accident Investigation Bureau have found that inadequate oversight by the US Federal Aviation Administration (FAA) contributed significantly to accidents involving the Boeing 737 MAX aircraft resulting in the deaths of some 346 people and the subsequent grounding of the world-wide Boeing 737 MAX fleet. CASA relies on the FAA for the certification of American products on its behalf for operations in Australia. No independent analysis is conducted by CASA to ensure these overseas products are fit for purpose. Clearly a case for CASA resourcing such certification or at least design validation activities exists in light of these tragic accidents.

Similarly, a report by the New Zealand Transport Accident Investigation Commission said the New Zealand regulator missed its chance to intervene before a fatal tour accident which cost the lives of 7 people, who died when their helicopter crashed into Fox Glacier in 2015. It was found that reduced regulatory oversight due to inadequate numbers of inspectorate staff contributed to conditions leading to the crashⁱ.

Poor management decisions and disregard for the expertise of front line technical aviation professionals means that CASA is positioned to repeat these mistakes. This is not the first time that Professionals Australia have raised the issues discussed in this submission. Many issues related to skills, training, technical capacity and culture were covered in our submission to the Inquiry into the Administration of the Civil Aviation Safety Authority (CASA) and related matters in 2008ⁱⁱ, and discussed in that Inquiry's final reportⁱⁱⁱ. It is highly concerning to realise that so many of these issues have remained unresolved for such a long time.

There must be immediate action taken at CASA to fill technical vacancies and address the gaps in technical capacity. The safety of the flying public is at stake.

The impact of CASA's internal problems on the general aviation industry

The general aviation industry presents a greater regulatory challenge than commercial aviation. General aviation operators lack the scale and resources of commercial aviation and therefore need greater regulatory attention and oversight. While commercial operators have the resources to invest in and sustain robust internal operational safety systems, general aviation operates on smaller scales with more limited resources and presents CASA with different challenges.

Flight crews operating in the general aviation industry usually hold less experience than commercial crews and also tend to be operating much older aircraft. These aircraft require more care and attention as they age, yet the supporting Licenced Aircraft Maintenance Engineering workforce is diminishing at an increasing rate due to widespread retirements and a lack of new entrants.

Compounding this situation is the ageing general aviation aircraft fleet. The average age of the general aviation fleet is over 40 years, with the original design service goals being exceeded by the majority of these aircraft many decades ago. While older aircraft are not inherently unsafe (that depends on how each aircraft has been individually operated, stored and maintained over its life), older aircraft definitely require more attention to remain safe. Evidence of this occurring in industry is not readily apparent, nor is increased CASA oversight to validate appropriate regulatory oversight to manage the ageing issue.

CASA is challenged with balancing the responsibility of administering two sections of aviation with vastly different risk profiles. While commercial aviation is the area where the consequences of critical failures are significant, the likelihood of such failures occurring are lower due to the resources of operators to maintain operational safety and the high level of public scrutiny.

In general aviation, the consequences of critical safety failures are lower than with commercial airliners, however the likelihood and frequency of these failures is high, particularly when payment has been received by the operator for the carriage of passengers; for example the following recent Charter accidents:

- Beechcraft King Air VH-ZCR, Essendon Airport VIC, 21 February 2017 (5 fatalities),
- DHC-2 Beaver VH-NOO, Hawkesbury River NSW, 31 December 2017 (6 fatalities), and
- Cessna 404 Titan VH-OZO, Lockhart River QLD, 11 March 2020 (5 fatalities).

The Charter segment rightly deserves higher levels of CASA oversight and resources to more appropriately align with community safety expectations.

General aviation also has a larger operational “footprint” to be overseen, operating in regional areas not serviced by commercial aviation. This presents another challenge for CASA and the shrinking technical workforce. For example, hot air balloons are flown by small operators throughout Australia but CASA has limited capacity to oversee this area of general aviation due to only employing one hot air balloon Flying Operations Inspector.

Additionally, the self-administration system results in CASA having different levels of oversight responsibility in the general aviation space and adds another level of complexity to regulation. As the responsibility can be subcontracted to non-government organisations operating as Approved Self-administering Aviation Organisations, it's critical that CASA has the skills and resources to oversight these organisations, otherwise blind spots in the regulation of general aviation could emerge.

Staffing and culture

CASA technical teams across Australia are operating with numerous vacant positions. These vacancies are being felt acutely in airworthiness inspector, safety systems inspector and flying operations inspector roles. Given their critical safety role, these are serious staffing shortfalls.

Perhaps most worryingly of all, CASA staff have been told by senior management that they do not intend to fill the current vacancies until the organisations current schedule of operational change and restructuring is complete.

Professionals Australia members have been told that that could take anywhere from 2 months to 2 years, which would embed critical gaps in CASA's regulatory capacity.

Case Study 1 - Southern Region

CASA's Southern Region Office is located in Melbourne and provides regulatory services and industry surveillance across regional New South Wales, Regional Victoria and Tasmania, including major cities like Melbourne and Hobart. Professionals Australia members report significant staffing attrition, failure to replace technical staff and an increase in non-technically qualified staff being tasked with work previously completed by experienced technical professionals.

The office has had six different Regional Managers in seven years. In the same period staffing numbers have dropped from 53 to 24. Since February 2020, Southern Region have had their Certificate Management Teams (CMT) re-organised three times. In the current organisation, one of the CMTs has responsibility for managing 215 certificates, with only 3 Flying Operations Inspectors in the team. The most recent development has seen the resignation of their last Regional Manager, with the Southern Region now being remotely managed from Brisbane. This workforce instability and constant organisational change presents psychosocial risks to staff.

"The loss of output within CASA today due to disharmony, lack in trust and respect between management and staff, the failure of management to communicate and the lack of transparency with change, is huge. While CASA may produce figures to suggest we are achieving the same volume, the loss of inspector time due to the disharmony, stress and inability to cope is a major concern and is definitely having an impact on industry. Staff continue to achieve the results we do in spite of internal challenges, solely because as staff at the grass roots we care, we are professional in our approach and we understanding the needs of industry and we work extremely hard to support industry despite the continual internal battles" – CASA Southern Region staff member.

CASA's decrease in technical employees has a number of impacts:

- Without a plan to transfer knowledge from exiting staff to new staff, CASA is losing corporate knowledge and becoming less informed and capable as a regulator.
- There is a greater reliance on remaining staff to manage the workload with fewer staff resources.
- Workloads are intensified as a shrinking pool of professionals need to become adept at performing a broader range of tasks.

There are also impacts on the aviation industry:

- Inability to complete flying operations, regulatory services, inspection and surveillance tasks in a timely manner. These blow outs in completing tasks impact the operation of industry.
- Inability to conduct regular and meaningful surveillance of the organisations maintaining Australian aircraft in Australia and overseas
- Reduced corporate knowledge leads to reduced quality of work.
- Workload pressures result in less thorough assessments and service delivery standards not being met.

CASA staff have reported to Professionals Australia that high staff turnover and inaction in filling vacancies, overwork, long working hours, lack of recognition of the value of technical roles and the misallocation or lack of resources as stressors in their working lives. Our recent surveys and engagement with members have identified seven distinct psychosocial hazards as being present at CASA:

1. High job demand
2. Low job control – little or inconsistent control over when and how the job is done
3. Poor support – inadequate support, information and training
4. Poor workplace relationships – bullying, harassment, conflict
5. Poor change management
6. Low recognition and reward – imbalance between effort and reward
7. Poor organisational justice – inconsistent management action, policy application etc

Comcare's publication *Working Well: An Organisational Approach to Preventing Psychological Injury* notes that the presence of these psychosocial hazards in the workplace creates a risk of adverse impacts on workplace and work team relations, productivity, quality, employee turnover, accidents and stakeholder complaints. It also notes that the organisational costs of psychological injury is significant as, "if a significant number of employees are experiencing and expressing the effects of stress at work, then the problem assumes organisational proportions."

Numerous other surveys and reports exist linking the expectation to work extreme hours under constant deadline pressure to heightened mental health risks and last year the World Health Organisation recognised "burn-out" as a defined condition.^{iv}

Case Study 2 - Eastern Region

Eastern Region Office is based in Brisbane and provides industry regulatory services and surveillance across most of Qld and northern NSW as well as some coverage in Darwin. Eastern Region Office staff report significant technical staff attrition, deployment of staff onto projects and into long-term acting roles. Of specific concern is the reduction of Safety System Inspectors (SSIs) in Eastern Region. SSIs were introduced to CASA in 2007 as part of the response to 2005 Lockhart River air disaster in which 15 people died. The role of the SSI includes oversight of industry processes such as the management of change, hazard identification, and risk management. Eight years ago, the Eastern Region Office had six full time Safety System Inspectors managed by a Team Leader Safety Systems. Eastern Region now has only 1.4 persons directly and actively assigned to the Safety System Inspector role. One result of this shortfall is that for the past two years, there has been no SSI permanently assigned to the oversight of Virgin Australia.

"Despite the significant changes and potential for risks impacting Virgin Australia, CASA has had no inspector specialising in change and risk management assigned to the team oversighting them. This as they entered into administration, slashed operations and jobs, placed aircraft into storage or sold them off, and then slowly coming back from the brink" – CASA Eastern region staff member.

The responsibility of protecting the Australian flying public weighs heavy on staff at the best of times. Right now, this underlying source of stress is compounding as workloads are intensified and COVID-19 impacts life at work and at home. We note that in recent weeks CASA have commenced a Psychosocial Safety Climate survey, explained in an internal memorandum to "better understand our needs and to develop the PSC Program". We support this project, however have doubts that it will result in significant improvements without action being taken to address broader cultural issues at CASA, as we will discuss further.

The combination of intensifying workloads, psychosocial hazards and the criticality of the work performed by CASA staff is a recipe for failure. It has been well documented that combinations of these same factors at the aviation regulating authorities of the United States and New Zealand led to recent catastrophic aviation accidents and losses life. CASA must address these factors before a similar catastrophe occurs in Australia.

Training and currency of CASA technical staff

Aviation is a fast paced, complex and evolving industry and technical staff require regular training to stay at the cutting edge of new processes and technology. Particularly for government entities and regulators, it's essential to ensure adequate internal professional capacity to meet not only the current needs of the community and industry, but their future projections and the COVID-19 recovery.

CASA exists to meet Australia's obligations as a signatory to the International Civil Aviation Organisation (ICAO) Treaty^v. It is a requirement of international treaty that Australia have a compliant Civil Aviation Authority (CAA). The ICAO treaty requires that CASA employ inspectorate staff and maintain the same level of technical knowledge, training and currency as those in the industry which is being regulated.

Simply put, if CASA intends to be an effective regulator of the aviation industry, and if Australia is to meet its obligations under international law, then CASA's technical staff must be equally as trained and current on technical knowledge as the airlines and operators that CASA oversees.

CASA has work to do to properly understand the skills requirements for different technical roles, and to properly plan to maintain them. An internal audit of CASA's Flying Currency and Training (FCAT) program from early 2020 showed that CASA did not have a centralised forward program or plan for training and maintaining skills currency among its flying officers^{vi}.

CASA staff currently face barriers in accessing FCAT and other technical professional development and currency training, including:

1. Lack of clarity on the processes to follow in requesting approval for training.
2. Inconsistent application of training request processes between different teams and states.
3. Conflicting advice on what training and currency is required for different roles.
4. Lengthy time delays in processing applications for training.
5. Rejections of training applications without adequate justification.

Poor change management

CASA are proposing a wide- ranging restructure of their technical workforce comprising of significant repositioning and realignment of the organisation's major functions and operations. CASA have also been enacting a new suite of regulations requiring industry to change the way they conduct aviation operations and maintenance. While a model exists detailing how CASA's different core functions will be positioned in the future, it is not currently clear what staff will be required to perform those functions, what their classifications or required skills will be, how many staff will be required to deliver those functions or whether staffing numbers will be reduced as a result. It's also unknown when the transition to the new structure will occur.

As previously discussed, CASA have determined not to appoint new staff to fill current vacant positions until the new structure is in place –leaving some critical gaps in the organisation and compounding workloads. The uncertainty about the future adds an element of psychosocial risk.

Alongside the foreshadowed restructure, changes to workplace policies and procedures are occurring regularly. Increasingly members are reporting that they are being directed to decrease the amount of in-person investigative work they carry out. In some areas, the scope of their tasks are being restricted by management to the point that they are 'ticking a checklist from an office tower' rather than conducting detailed on-sight investigation in the field.

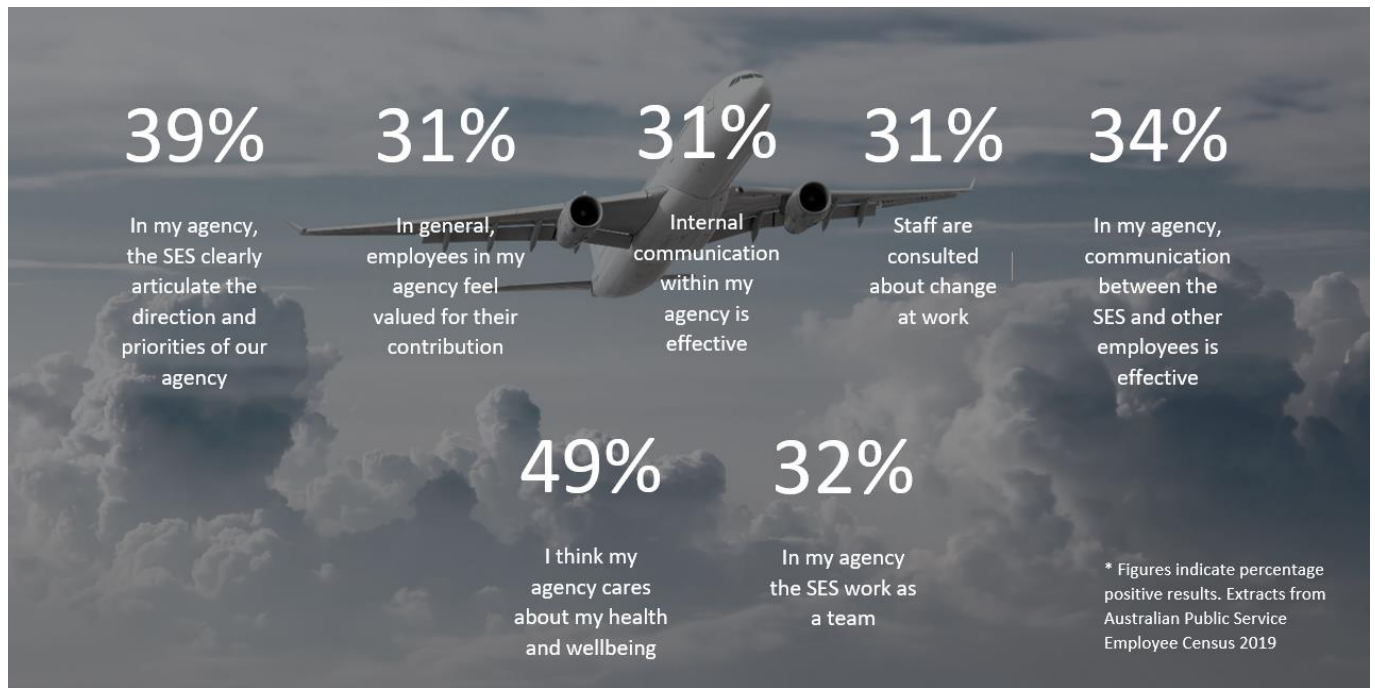
This increased focus by senior management driving a centralised job management system for the whole of Australia removes the ability for regional managers to exercise local discretion to prioritise or focus on real time issues on the ground in that region. A central feature of this approach is replacing face to face audits (involving more expensive travel) with cheaper desk-top/video based audits – the result being that an officer's ability to uncover issues and demonstrate an oversighting presence is minimised.

There are three problems with this type of approach:

1. when changes are made to the way work is conducted without the involvement of the people conducting that work (and when the suggestions of those who conduct the work are ignored), the employees become disengaged.
2. By failing to involve those subject matter experts in decisions about how work should be done, the likelihood of perverse and unintended outcomes and risks to safety is increased.
3. Technical expertise requires continual use and honing to remain sharp. By limiting the ability for staff to use the breadth of their technical and problem-solving skills, CASA are overseeing the decline in those skills, risking becoming an ineffective regulator.

Staff engagement and loss of confidence

CASA senior management take a top down approach to managing workplace change. They fail to adequately engage with the workforce, explain or involve them in workplace change, and do not appropriately capture or respond to ideas and concerns of technical staff. This results in staff feeling isolated and ignored as though they are somehow separate to the changes being implemented. The 2019 Australian Public Service Census (extracts below) painted a bleak picture of the level of confidence in CASA leadership among staff.



The Australian Public Service Census, and Professionals Australia's own surveys of members indicate that serious problems exist in the level of confidence that employees have in the direction and management of current leadership. We know that there are currently many managerial staff at CASA seeking to do the best they can. Unfortunately, they are hampered by a prevailing culture which leaves most staff disengaged, not believing the agency cares about their wellbeing.

The first two major risks called out in CASA's Corporate Plan are directly impacted by workforce culture and confidence in management:

1. **Regulatory failure:** An air accident resulting in fatalities arises from or is attributed to a CASA failure in regulatory or safety oversight, resulting in a loss of stakeholder and public confidence in CASA as a competent and effective safety regulator and public institution.
2. **Inadequate capability:** CASA's organisational capacity is insufficient to meet its strategic agenda of reform and BAU, which leads to criticism that CASA cannot deliver, resulting in loss of stakeholder confidence.

Plainly, failure to address the issues with employee engagement places CASA at significant risk in these two categories. It is clear from examples already discussed in this paper, that reductions in regulatory oversight, reducing staffing numbers, rising psychosocial risks and reducing levels of confidence in leadership from employees has contributed to catastrophic outcomes and loss of life occurring overseas. CASA must take urgent action to address these risks before the same outcome is realised in Australia.

Following similarly damning APS Census results, and a report by the honourable Anthony M North QC, Airservices Australia responded to the seriousness of the state of their agency's culture by engaging Ms Elizabeth Broderick AO to conduct a systemic review of Airservices Australia's operation. Nothing short of a similar independent, systemic review of CASA's organisational culture is required.

Airservices Australia

While CASA have responsibility for safety regulations, licensing and certification, Airservices Australia has responsibility for airspace management, communications, navigation and airport rescue and firefighting services. The operation, staffing issues and technical capacity of Airservices Australia therefore has a profound impact on the state of Australia's general aviation industry.

Culture

Two recent reports (The North Report 2019^{vii} and The Broderick Report 2020^{viii}) have shown that the workplace culture at Airservices Australia has high levels of bullying, harassment and sexism. The North Report concluded that "There is a serious argument that the culture of the Airservices workforce put at risk its ability to fulfil its statutory obligation to ensure the safety of air navigation in Australia,"

While the agency initially rebuffed the claims that culture was affecting aviation safety as alarmist and false, they moved quickly after the release of The Broderick Report to commit to implement all of the recommendations. The Chief Executive gave an unequivocal commitment to work with unions throughout the implementation process, and regular consultative forums and status reports are occurring.

The reports forced the agency's leaders and employees to face challenging realities but, in contrast with CASA, it is now impossible to deny these problems exist and Airservices is attempting to improve. The Civil Aviation Safety Authority could take a lesson from Airservices about how to respond to concerns about poor culture and resultant risks to aviation safety.

COVID-19

The global pandemic and the downturn in the international and domestic aviation sectors have hit Airservices hard. The agency is funded from fees and charges levelled at industry. Even though the services which the agency provide cover a huge span of commercial and general aviation industry, the lion's share of fees and charges paid to the organisation come from international flights.

90% of Airservices revenue traditionally comes from the top 10 commercial aviation operators. International flights generate more revenue as they are heavier, use more fuel and travel more flight sectors. Domestic aviation provides only a fraction of Airservices' total revenue compared to the international aviation industry.

Airservices' management have faced unprecedented challenges as covid19 has caused revenue to dry up. Although commercial aviation has significantly scaled down, Airservices is still required to provide services, particularly to the general aviation industry, and deliver aviation firefighting services at airports crammed full of grounded airliners. On top of it all, they've faced challenging decisions about maintaining staffing levels, aware of the need to maintain technical capacity in order to service the post-COVID recovery, while being directed by government to adapt to the size of the industry.

The challenges of 2020 have highlighted the deficiencies in Airservices funding model, where the government essentially rely on private sector capital to underwrite the safe operation of the critical aviation industry. The impact of an underfunded, scaled down Airservices Australia on the operation of general aviation, as air navigation, air traffic control and firefighting resources are stretched thin, would be significant. The Commonwealth Government must find the right funding model to maintain Airservices' capability and expertise through the covid19 crisis.

Restructuring and technical capacity

It is not known what the long term effects of the global pandemic will be on the flying public's attitude to air travel. Surveys show that the exponential increase in video conferencing and remote working has changed the attitudes of business travellers, while recreational travellers are far more likely to holiday domestically, lacking the confidence to travel too far abroad. Modelling indicates that the aviation industry is on a slow, 3-year recovery path which will likely only reach 80% of the industry's pre-COVID capacity. This means that Airservices funding model will likely be unsuitable for a post-COVID world.

As a result of this reality and the government's direction to "fit the industry" Airservices have embarked on a process to significantly restructure operations, including by pursuing redundancies. It's essential that any restructuring is performed in a considered, methodical way. Mistakes in the redesign and restructuring of Airservices could significantly damage the aviation industry's, and the nation's, post COVID recovery.

The preference of the Morrison government has been to cut public service jobs under the guise of increasing efficiency, with the true cost of ever increasing reliance on outsourcing and contractors being downplayed and hidden off the balance sheet. This approach would be a disaster in an agency with a funding model that is as precarious as Airservices.

The Government have claimed that outsourcing is an efficient way of providing services. When large departments take this approach, it has been possible to hide the true cost of consultants and labour hire contracts in other budget lines. But after years of enduring these cuts, it is now abundantly clear that outsourcing drives up the cost of providing public services. For example, the Senate Legal and Constitutional Affairs Reference Committee noted early in 2020^x that the ASL cap has led agencies to use more contract labour, which costs the taxpayer more in the long run.

Australians are also increasingly sceptical about outsourced services. The Centre for Policy Development's 2017 report *What Do Australians Want*^x showed that 82% of Australians want government to retain the skills and capability to deliver services directly, with government seen as the preferred provider on key indicators of cost, accessibility, quality, accountability and affordability.

Airservices' response to the COVID-19 crisis has been dictated by the Morrison Government's insistence on maintaining a funding model that is manifestly not fit for current purposes, and unlikely to be suitable for the post-COVID recovery. This stands in complete contrast to the Government's broader approach, which has featured waves of investment in public health, social support and public infrastructure.

The success of this broader approach, demonstrates that Airservices should not be forced to cut its way out of trouble. The expertise and capability of Airservices' technical workforce will be required as the aviation industry reopens and for the post-COVID recovery. In addition, this expertise and capability is required right now to preserve the value of decades of investment into aviation assets and infrastructure by government and industry.

Recommendations

Considering the issues discussed in this submission, Professionals Australia recommend a number of steps be taken to improve the operation and effectiveness of CASA and Airservices, to enable them to better service Australia's general aviation industry:

1. Immediate action must be taken to fill vacancies and address the gaps in technical capacity at CASA.
2. As both CASA and Airservices are undergoing significant workplace change, action should be taken to develop and implement a plan to mitigate workload intensification and psychosocial hazards among the workforce in consultation with staff, unions and workplace health and safety representatives.
3. CASA should improve their technical training:
 - investigate, understand and agree on the training and currency requirements of all CASA technical positions and maintain that information centrally,
 - develop a plan to ensure all CASA technical staff receive the training required to ensure CASA's mission and meet the requirements of their roles,
 - ensure that where minimum levels of training are provided for in contracts and employment conditions, CASA has a plan to facilitate that training.

4. To improve staff engagement robust, inclusive, and transparent systems should be adopted which effectively engage with, and facilitate consultation with, employees on all aspects of workplace change including changes to operational procedures and policies, to ensure that:
 - employees understand the intent of the change,
 - employees have an opportunity to contribute their expertise to the change management process and avoid perverse outcomes and safety risks.
5. An independent, systemic review of CASA's organisational culture must be undertaken to address the serious issues in culture, confidence, and engagement of employees.
6. The reliance on the operation of industry, particularly commercial aviation, to generate funding for the functioning of CASA and Airservices has been demonstrated as deficient. Alternative funding models should be investigated with a view to developing one robust enough to weather industry disruption such as that caused by COVID-19.
7. As Airservices Australia embarks on significant restructuring and expected downsizing, it is crucial that the agency maintains a critical mass of engineering and technical skills to remain an informed and competent technical service provider, capable of supporting the industry to recover from the COVID-19 downturn.

ⁱ CAA admits safety inspection failings over fatal helicopter crash. News Hub, New Zealand 20/05/19

<https://www.newshub.co.nz/home/new-zealand/2019/05/caa-admits-safety-inspection-failings-over-fatal-helicopter-crash.html>

ⁱⁱ Submission to the Inquiry into the Administration of the Civil Aviation Safety Authority (CASA) and related matters made by the Australian Government Division of the Association of Professional Engineers, Scientists and Managers Australia, 2008

ⁱⁱⁱ The Senate Standing Committee on Rural and Regional Affairs and Transport. Administration of the Civil Aviation Safety Authority (CASA) and related matters. September 2008. www.aph.gov.au/~media/wopapub/senate/committee/rrat_ctte/completed_inquiries/2008_10/casa/report/report_pdf.ashx

^{iv} 11th Revision of the International Classification of Diseases (ICD-11), World health Organisation

^v International Civil Aviation Organization (ICAO), specialised agency of the United nations www.icao.int

^{vi} CASA internal audit, Flying Currency and Training Systems Selection Process Final Report 2020

^{vii} "A report concerning the workplace of Airservices Australia" 26 June 2019 by the honourable Anthony M North QC

^{viii} A Review of Culture at Airservices Australia by Elizabeth Broderick & Co, July, 2020
<https://www.airservicesaustralia.com/about-us/how-we-work/culture-review/>

^{ix} The Senate Legal and Constitutional Affairs References Committee - Impact of changes to service delivery models on the administration and running of Government programs

^x What Do Australians Want? Active and Effective Government Fit for the Ages | DISCUSSION PAPER | December 2017
<https://cpd.org.au/2017/12/what-do-australians-want-discussion-paper-december-2017/>