



AUSTRALIAN FEDERATION OF AIR PILOTS

THE AUSTRALIAN FEDERATION OF AIR PILOTS (AFAP)
SUBMISSION TO THE STANDING COMMITTEE ON RURAL
AND REGIONAL AFFAIRS AND TRANSPORT (RRAT)
OF THE AUSTRALIAN SENATE:

THE IMPACT AND MITIGATION OF AIRCRAFT NOISE

APRIL 2024

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Executive Summary

- A well-functioning aviation system is a critical part of Australia's national infrastructure. The Australian aviation industry provides many benefits to the community and economy.
- This submission sets that any discussion and considerations related to aircraft noise must be taken within the context of the necessity and positivity that air transport provides to all in Australia, either directly or indirectly
- The responsibility for administering noise issues lies with Airservices Australia but this has been impacting Airservices ability to align their conduct and service delivery with the needs of aviation safety, as legislated. Examples of their misplaced prioritisation include:
 - The resistance to deliver standardised departure and approach paths for Launceston airport.
 - Refusal to take to public consultation a change to Melbourne airport's arrivals that would benefit safety.
 - Airservices refuses to accept the regulatory decision to maintain the runway direction choice related to wind direction and speed (tailwind standards).
 - Selection of runway use at Sydney airport is strongly driven by noise abatement aims, even when this means international standards on crosswind limits for runway selection are overruled.
 - The Gold Coast airports primary approach means is not able to be used other than on a very limited basis.
- The AFAP believes that Airservices is inappropriately prioritising politics related to aircraft noise over that of the legislated priority of the safety of air navigation. The AFAP posits that another agency should be handed the responsibility of aircraft noise from Airservices.
- The aviation regulator needs to be provided with the ability to regulate Airservices in all areas it is meant to have the authority. Currently Airservices can find and misuse the regulatory regime discrepancies to suit its own organisational wants - meaning disfunction and diminished safety outcomes in our aviation safety protection system.
- The AFAP asserts that recommendations from this inquiry must be made within the context of aviation safety being the primary concern and acknowledgement that aircraft noise part of air transport providing great positive benefits to the Australian community and economy.

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Background

1. The Australian Federation of Air Pilots (AFAP) represents over 5,500 professional pilots in aviation safety and technical matters and is the largest professional pilot association in Australia. We engage in policy reforms through our active safety and technical committee, which is a major contributor to the development of Australian and international aviation safety standards. The AFAP is also a foundation member of the International Federation of Airline Pilots' Associations (IFALPA), the global body representing professional pilot associations worldwide. Through IFALPA, the AFAP contributes to the international aviation standards established by the International Civil Aviation Organisation (ICAO).
2. The AFAP also partners with the other major pilot association in Australia, the Australian and international Pilots Association (AIPA), on safety and technical matters. This partnership is called the Australian Airline Pilots' Association (AusALPA) and represents joint positions of the AFAP and AIPA on aviation safety and technical matters. Some of these joint positions are referred to and quoted in this submission.
3. As a key stakeholder in the aviation industry, the AFAP welcomes the opportunity to provide input into the Rural and Regional Affairs and Transport (RRAT) References Committee's inquiry into the impact and mitigation of aircraft noise and other related matters.

AVIATION SIGNIFICANTLY BENEFITS THE AUSTRALIAN COMMUNITY AND ECONOMY

Aircraft noise needs to be considered within the context of the benefits of air transport

4. The effect of aircraft noise on amenity, physical and mental wellbeing and everyday life of residents cannot be practically considered in isolation from the reality that the noise is a byproduct of a very positive interaction and connection of people and their goods all over Australia and the world. Air transport is at the heart of global economic growth, it creates employment, facilitates trade, enables tourism and supports sustainable development all around the world.
5. Australia is an island nation that relies on aviation to connect us with the global community and trading partners. This connectivity allows us to visit friends and family, experience the world's cultures and provides access to better healthcare and education.
6. Our nation's geographically dispersed population means that aviation contributes a greater role to national connectivity than compared to other nations. Additionally, the national economy is heavily reliant upon the output of the resources sector and in turn, the resources sector is heavily reliant upon air transport, which enables the connectivity and participation of its staffing resources from the population centres to the largely remote locations of many resource sites.
7. The AFAP believes that any recommendations from this inquiry necessarily should be considered and developed within the context of the facts of aviation being an essential enabler of connectivity and it how brings positive benefits to our community and economy.

NECESSARY SAFETY BARRIERS TO SOME MITIGATION AND LIMITATION OF AIRCRAFT NOISE

Flight path design – Prioritising and balancing factors

8. Flight paths are designed with a number of principles and these are based upon many factors, including the safety of air navigation, the operational characteristics and limitations of the aircraft flying the routes, efficiency (cost and environmental considerations) and noise. Of all these factors, safety of flight is the primary consideration but the others are always considered as part of the overall or holistic picture.
9. ICAO sets out principles to designing flight paths and as a nation state who is a signatory to the associated international convention, Australia is obliged to align with these standards and practices unless we have a genuine and valid reason not to do so.
10. Airservices Australia's flight path design principles were revised in 2020. The AFAP had representation to those consultative meetings and can attest to a fair consideration and inclusion of all flight path design factors. Whilst the safety of air navigation was reiterated and noise was included in the principles too, the AFAP believes that more explicit emphasis on aviation safety was possible and necessary in the final draft to better set community expectation in alignment with meeting the flight path design principles. This was a lost opportunity on behalf of Airservices, who led the discussions and consultation group.

Air Services Act (1995)

11. The Air Services Act ("the Act") provides the legislative head of power for the establishment of Airservices Australia and the manner in which Airservices Australia (AA) must perform its functions, which is found in section 9 of the Act.
12. Section 9 of the Act (quoted below in total) sets out that:
 - (1) In exercising its powers and performing its functions, AA must regard the safety of air navigation as the most important consideration.
 - (2) Subject to subsection (1), AA must exercise its powers and perform its functions in a manner that ensures that, as far as is practicable, the environment is protected from:
 - (a) the effects of the operation and use of aircraft; and
 - (b) the effects associated with the operation and use of aircraft.
 - (3) AA must perform its functions in a manner that is consistent with Australia's obligations under:
 - (a) the Chicago Convention; and
 - (b) any other agreement between Australia and any other country or countries relating to the safety of air navigation.
13. Paragraph (3) (a) refers to the ICAO standards and principles referred to earlier in this submission.
14. Paragraph (2) requires AA to consider environmental protection whilst performing its functions but it does not explain or provide determinations with regard to prioritisations of environmental protection factors. For example, flight paths that are longer to avoid impacting populated areas

from noise pollution is an environmental consideration but this would necessarily cause lengthier flight and increase fuel emissions, which is a detriment to the environment.

15. Regardless of a lack of guiding clarity for how to prioritise competing environmental impacts, the Act is clear that the *“the safety of air navigation [is] the most important consideration”* (Section 9, paragraph 1).

Aviation safety is based on standardisation

16. Standardisation is a foundation stone of aviation safety and has been since the wild early pioneering years of aviation, where lessons were unfortunately learnt the hard and tragic way. Aviation is a complex socio-technical industry with many inter-connected parts, variables and professionals that coordinate to operate in an often-fast paced environment.
17. Given the realities of the safety environment of aviation, risks can only be addressed and managed to acceptable levels of safety when expectations and procedures are highly standardised. One key part of this standardisation is the design of flight paths and the way they are flow. The standardisation involved is the reason professionals that have never met each other before can safely and efficiently coordinate on the day of operations with each other harmoniously.
18. When there is a greater divergence from standardisation and an increase in flexible arrangements – including other types of workarounds and divergences from common practices - safety margins are reduced, the established defences to hazards become less effective and risk is increased.
19. Any alteration from standardised practices chips away at safety margins with each divergence and this can create either a cumulative or multiplier effect upon the safety outcome.

SELECT EXAMPLES OF AIRSERVICES AUSTRALIA’S AVOIDANCE OF PRIORITISING SAFETY

Launceston airport arrivals and departures

20. Standard Instrument Departures (SIDs) and Standard Instrument Arrivals (STARs) provide a safe and efficient way of prescribing a large amount of information through procedure design. Both depict the lateral profile of an instrument departure or arrival route and the level and speed restrictions along it. They are designed to match the capabilities of the aircraft flying these departure and arrival routes, safe terrain and obstacle avoidance, efficient route tracking and community noise considerations. This mix of influencing factors are not always complimentary to each other and the safety of flight aspects must take precedence over other factors.
21. For several years, our pilot members have been calling for the introduction of SIDs and STARs at Launceston airport. The current lack of standard flight procedures and profiles for the arrivals have led to some safety incidents and increased safety difficulties and inefficiencies with operating the aircraft.

22. We have been reliably informed that SIDs and STARs for Launceston airport have been designed and drafted years ago by Airservices (at least from 2019). However, aversion to proceed with promulgation of these exists due to the necessary enlivening of public consultation processes.
23. The review of the departure and arrival procedures for Hobart airport were not handled very well at all and this invigorated a lot of opposing community sentiment for what Airservices imposed upon the community. To be clear, we also provided feedback at the time to their consultations with our input being unilaterally dismissed. Much of our input aligned with the grievances of the local community, albeit, based upon differing reasons.

Steep approach into Melbourne

24. For arriving aircraft to Melbourne (Tullamarine) there exists an approach procedure from the south that has a design flaw. This approach and arrival issue can be experienced by aircraft arriving to Melbourne from many directional quadrants but only exists when aircraft need to line up with the runway from the south.
25. There is a particular way point named SHEED that has a crossing height limitation that mandates aircraft to be higher than would otherwise be compared with normal approach design standards. With the remaining distance to run to the landing threshold limited, this creates an approach angle steeper than the typical safety standards and approach angles.
26. This approach angle difference significantly alters the aircraft configuration and control settings and diminishes safety margins. The reduction and diminishment of the typical safety buffer has led to airline mitigation of the increased safety risk. For example, Virgin Australia has ceased allowing their flight crew to accept this approach (effectively banning it). Whereas Qantas has created an alternative procedure to deal with the risk.
27. In any event, this indicates that both of these airlines have safety data that indicate that this nonstandard restriction requires safety risk mitigation. The AFAP is aware that this situation has influenced an increased level of go-arounds/missed approaches because of the steep angle creating an increased number of unstable approaches.
28. Aviation industry stakeholder attempts to get Airservices to lower the waypoint crossing altitude have been raised a number of times, including by the AFAP. This occurred in safety meetings and via other engagement opportunities.
29. The feedback from Airservices personnel to our representatives has been that Airservices doesn't want to alter this operational restriction at the waypoint SHEED, including moving it laterally, because of the necessity for Airservices to then consult with the community, which would enliven contributions related to aircraft noise.

Attempted decreases to safety standards at Brisbane airport

30. The alteration of aviation safety standards and flight paths have become popular considerations for many in the community to alleviate their frustrations with aircraft noise. Unfortunately,

Airservices have been aiding and abetting these initiatives by ignoring regulatory decrees and their legislated primary responsibilities.

31. For Brisbane airport flight operations, there is still a politically based push from Brisbane Airport Corporation and Airservices Australia to increase tailwind limits above that in the ICAO standards to appease the noise complaints.
32. CASA has already reviewed the proposal and has reiterated that they are firm on keeping the 5kt international standard at Brisbane (and other airports). However, Airservices are still advocating for increasing the limits in spite of the regulatory ruling. Airservices have never publicly stated that they accept the regulatory decision related to the maintaining of the 5 knots tailwind limit but have insinuated that they will continue to discuss and pursue the option.
33. The AFAP was consulted by the organisation that Airservices tasked with researching the basis of the current standards and it was clear to us that the imperative was on finding a reason for an alternative to the internationally researched and agreed safety standards. Their review didn't focus upon why the standards were there, we had to be proactive to have this included into the discussions.
34. For the purposes of the less informed reader, having an allowance for any portion of tailwind is predominantly due to the variability of wind conditions in the real-world environment. The limit isn't arbitrary and has been well researched and risk assessed by experts in the recent past. The allowance for take offs and landings with some tailwind is not without safety risk consequence.

Sydney airport flight paths and runway selections

35. Sydney (Kingsford-Smith) airport runway choices are heavily influence by noise abatement and noise sharing aims and requirements. This can mean that runway choice is not always based upon the best or safest operational and prevailing weather conditions.
36. Into wind take offs and landings are always the safest options but when other determiners are included in the choice, detriments to safety may also be introduced. These can include such things as increase mechanical turbulence from nearby buildings that would otherwise not be affecting the runway operations if a more into-wind option had been the choice. Increased crosswind and tailwind operations beyond those set out by ICAO, do become introduced into the operational environment as well.
37. These noise-based choices for runway selection do have impacts on the safety margins.

Gold Coast Approaches

38. Aircraft arrival approaches that track with alignment (straight-in) to the landing runway are known to provide a higher level of safety to those that don't. The Gold Coast airport has a runway aligned approach which is seldom available for use due to the noise abatement conditions imposed upon operations.

39. The AFAP isn't advocating for unfettered use of this approach but does want to have acknowledged that compromises to safety are being made in the name of appeasement to noise sensitivities of the community, in this case those in the Gold Coast city.

RELIEVE AIRSERVICES OF AIRCRAFT NOISE RELATED RESPONSIBILITIES

Safety outcomes need to be served

40. Airservices has become politically risk adverse to the point that it persistently pushes for degradations to international aviation safety standards and avoids introducing necessary changes to appease noise complainants (including pre-emptively) and relieve itself of public scrutiny.
41. The 2023 Aviation Green Paper stated that *"Airservices Australia's approach to aircraft noise management reflects the International Civil Aviation Organization's (ICAO) Balanced Approach to Aircraft Noise Management"*. The AFAP is not sure of how this comparative assessment has been developed but we disagree with this statement. We believe that, whilst the responsibility of aircraft noise remains with Airservices Australia, they will continue to compromise on their legislated primary responsibility of the safety of air navigation.
42. The Government should develop policies to relieve Airservices of all aircraft noise related responsibilities and assign the responsibility to another agency, relieving the divided priorities of two insoluble ends, noise and safety.

RECOMMENDATIONS FROM THE INQUIRY

Recommendations must align with the holistic context

43. Recommendations arising from this inquiry cannot be solely focused on aircraft noise alleviation ideas and must consider unintended consequences on safety and efficiency of air transport too.
44. However, the AFAP believes that public consultation and considering community inputs on noise is an important part of the process of an accountable government, including the agencies of government.
45. It is important for all government agencies to respect community concerns whilst following processes and meeting their obligations, including those set out through legislation. It is a reasonable expectation for Airservices, and other agencies, to be required to follow and navigate the path forward with all of these factors included. The outcomes and recommendations from this inquiry should do the same.

Airspace regulation and management

46. The relationship between CASA and Airservices must be reviewed with an aim to identify and rectify all the areas where CASA is insufficiently enabled to regulate Airservices. For example, the

CASA Office of Airspace Regulation (OAR) has only partial ability to regulate Airservices, who have ignored many recommendations by the OAR, such as the reclassification of airspace around Avalon airport (since at least early 2020).

47. According to the 2021 Australian Airspace Policy Statement (AAPS), the Office of Airspace Regulation (OAR) will be a distinct operational unit of CASA. What is not clear is what that text means or is intended to convey in terms of airspace regulatory governance. What is clear is that it is not as “distinct” as it needs to be to operate effectively to regulate Airservices.
48. While there is a manager and dedicated staff within the OAR, there are also three levels of management between the OAR and the DAS/CEO of CASA. Each of those supervising levels of management bring with them the politics of bureaucracy and the potential to impose perceptions that may suppress real safety benefits or simply seek to appease other agencies most affected by OAR advice.
49. The AFAP believes that it is necessary to elevate the OAR to a report level direct to the CASA DAS/CEO and to ensure that the management of the OAR is sufficiently supported to do so.

Review of Airservices – Reassign noise management to a different agency

50. In our view, Airservices is generally a “problem agency” which operates with too much autonomy from oversight and accountability. For example, in recent years they have let their staff resourcing numbers reduce well below operational needs.
51. Airservices displays a pattern of inability to reconcile their aviation safety priorities with that of the political pressures upon it due to community aversion to aircraft noise. Aviation safety is already experiencing a detrimental impact on safety decisions, which mustn’t be allowed to continue.
52. The AFAP believes that this inquiry should be recommending that the Government take up a policy position to relieve Airservices from being the primary agency involved in the management and mitigation of aircraft noise upon the community.



Australian Federation of Air Pilots

April 2024