

Gold Coast – compliance with Noise Abatement Procedures

June 2025

1 Executive Summary

The complaint

1.1 An Instrument Landing System (ILS), which concentrates landing aircraft in a narrow path, was introduced at Gold Coast airport to facilitate easier landings in poor weather. Concerned residents petitioned the Administrative Appeals Tribunal (AAT), which made it a condition of the airport's Major Development Plan that a Noise Abatement Procedure (NAP) be developed to ensure that the ILS would only be used when weather conditions demanded it, or in emergencies.

The complainant in this matter continued to make complaints about aircraft using the ILS until Airservices Australia (Airservices) stopped responding to him because their review of his prior complaints determined no further action.

The ANO's review found that overall use of the ILS had increased by around 50% between 2019 and 2024, although there was no increase in general traffic. Notably, pilot nominated usage of the ILS tripled. Airservices Noise Complaints and Information Service (NCIS) appears to have been unaware of the increase in ILS use. Since the use of the ILS could vary depending on conditions, it was wrong to determine complaints about its use without any examination of whether the relevant conditions applied.

Monitoring and reporting on NAPs generally

1.2 There have been long-term concerns by affected communities that the use of NAPs is not monitored or enforced. A Ministerial direction dating from 1999 required Airservices to report the use of NAPs to the Secretary of the Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts. The reports are of a brief pro-forma nature and demonstrate no effective monitoring or public accessibility. The Government's Aviation White Paper noted the lack of transparency about aircraft noise impacts and included a direction to Airservices that it publishes quarterly reports on its monitoring of NAPs. The first was due at the end of 2024 but no reports have been published by Airservices for the quarters ending December 2024 or March 2025. Online, publicly accessible automated reporting has been released on the Aircraft In Your Neighbourhood website and is intended to fulfill this reporting requirement.

Airservices has no effective and comprehensive system for monitoring and reporting on the use of NAPs. It currently cobbles together information from various sources to produce ad hoc reports as the need arises. Airservices has released much of its online automated publicly accessible system but, given its history in this area and complexity of this project, the development and introduction of this system would benefit from an independent review.

Recommendation

1.3 The Board agree terms of reference for a systemic issue review under Part 9 of the ANO Charter of Airservices' capacity to effectively monitor and report on the use of Noise Abatement Procedures.

2 Introduction

- 2.1 An ILS is defined as a precision runway approach aid with two radio beams that together provide pilots with both vertical and horizontal guidance during an approach to land¹.
- 2.2 Flying an ILS approach reduces a pilot's workload by allowing them to rely on the guidance provided by the ILS, freeing them to concentrate on other critical aspects of flight operations². When a pilot has greater and recent experience operating on ILS approaches this further reduces pilot workload³.
- 2.3 Gold Coast Airport submitted a Major Development Plan to install an ILS in September 2015 with the intent of reducing missed approaches, departures and delays due to bad weather^{4 5}. At the time, Gold Coast Airport was the only major city international airport without an ILS.
- 2.4 The new ILS required a flight path extending north for about 18 kilometres in a straight line from the airport, intended to give aircraft sufficient distance to line up with the runway and lock in with the ILS to receive guidance⁶. Much of the new flight path overlies residential land.
- 2.5 In making the decision to approve the ILS in January 2016, the then Deputy Prime Minister and Minister for Infrastructure and Regional Development, Warren Truss, was aware of the 'substantial community concern regarding potential additional aircraft noise in the areas to the North of the Airport under the proposed new ILS flight path'⁷.
- 2.6 The Minister's approval was appealed by local community groups and a determination made by the AAT to affirm the approval, with conditions^{8 9}.
- 2.7 The conditions required Airservices to design NAPs to minimise the use of the ILS to situations where poor weather conditions affect visibility; for operational requirements; and during emergencies¹⁰.

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¹ SKYbrary, 'Instrument Landing System', viewed 17 March 2025, <u>Instrument Landing System (ILS)</u> SKYbrary Aviation Safety

² Florida Flyers, 'Instrument Landing Systems: How to Fly a Precision ILS Approach - #1 Ultimate Guide', viewed 4 June 2025, <u>Instrument Landing Systems: How To Fly a Precision ILS Approach - #1 Ultimate Guide</u>
³ Australian Transport Safety Bureau, 'Perceived Pilot Workload and Perceived Safety of RNAV (GNSS) Approaches', p.30, 2006, viewed 4 June 2025, <u>Perceived Pilot Workload and Perceived Safety of RNAV (GNSS) Approaches</u>

⁴ Gold Coast ILS Project Approved, Jan 25 2016, viewed 17 March 2025, Gold Coast ILS project approved – Australian Aviation

⁵ Truss, Warren, 'ILS Approval Letter', 2016, viewed 24 March 2025, <u>5b2b6d1d09c257d216ed26a5_appletter.pdf</u>

⁶ Airservices Australia, 'Instrument Landing System for Gold Coast Airport', viewed 17 March 2025, Fact sheet Instrument landing system for Gold Coast Airport November 2018.pdf a9a2391b452701eea534 eeeefd1cd6b8

⁷ Truss, Warren, 'ILS Approval Letter', 2016, viewed 24 March 2025, <u>5b2b6d1d09c257d216ed26a5_appletter.pdf</u>

⁸ Gold Coast Airport, 'Gold Coast Airport welcomes AAT ILS decision', 2 March 2017, viewed 17 March 2025, Truss, Warren, 2016, https://www.goldcoastairport.com.au/latest-news/gold-coast-airport-welcomes-aat-ils-decision

⁹ Airservices Australia, 'Airservices Acknowledges Decision on Gold Coast Instrument Landing System', 3 March 2017, viewed 17 March 2025, <u>Airservices acknowledges decision on Gold Coast Instrument Landing System - Airservices</u>

¹⁰ Airservices Australia, 'Instrument Landing System for Gold Coast Airport', viewed 17 March 2023, <u>Fact-Sheet-Noise-Abatement-Procedures-Gold-Coast.pdf</u> e11e7e6fdb355fa990a9be8d0e341392

2.8 Under the NAPs, Air Traffic Controllers (ATC) can nominate for the pilots to use the ILS due to poor weather – when the visibility is less than 4000 metres and/or the cloud base is below 800 feet. ATC must decide whether the ILS will be nominated up to thirty minutes prior to the arrival of an aircraft so the flight crew can program the allocated approach. Pilots can nominate to use the ILS due to operational requirements at any time.

3 The complaint

- 3.1 The complainant advised that Airservices' NCIS had not responded to ten separate noise complaints about the use of the ILS made between April and December in 2024. However, records from NCIS showed 11 complaints about ILS usage from April 2023 to December 2024, with seven made on one day in September 2024. Further information about the complaint history is below.
- 3.2 The outcome sought by the complainant was that a specific response should be provided to each complaint, including investigating the concern, explaining why it happened, and advising if there was an opportunity to consider an improvement.
- 3.3 From the broader community, from July 2019 to January 2025 Airservices had received complaints from 58 individual complainants about ILS usage. In 2024, Airservices received 25 contacts from 15 complainants about ILS usage.
- 3.4 The ANO has received three complaints about ILS usage in the same period, two from individuals and one from a community group.

4 The investigation

- 4.1 The investigation included assessment of the complaint to the ANO, complaints made to NCIS, responses from NCIS, Airservices online documents and relevant documentation provided by Airservices at the ANO office's request.
- 4.2 Additionally, the ANO office sourced material from online sources including the Australian Transport Safety Bureau and the Bureau of Infrastructure and Transport Research Economics (BITRE).

5 Operational hours of Gold Coast tower

- 5.1 Between March 2020 and December 2024, the operational hours of Gold Coast tower were reduced due to workforce management being impacted by COVID-19¹¹ 12.
- 5.2 In 2022, a flight crew member raised a safety concern to the Australian Transport Safety Bureau (ATSB) through the Repcon process regarding the hours of operation of the Gold Coast tower, and its associated airspace¹³. The reporter also raised concerns

¹¹ Australian Transport Safety Bureau, 'Concern regarding the operational hours of Gold Coast tower', 17 March 2023, viewed 19 March 2025, Concern regarding the operational hours of Gold Coast tower | ATSB

¹² Airservices Australia, 'Australian Aviation Network Overview', December 2024, viewed 19 March 2025, <u>Australian Aviation Network Report</u>

¹³ Australian Transport Safety Bureau, 'Concern regarding the operational hours of Gold Coast tower', 17 March 2023, viewed 19 March 2025, Concern regarding the operational hours of Gold Coast tower | ATSB

- that they have witnessed the Gold Coast tower cease operations abruptly with no warning.
- 5.3 Prior to this, two separate reports to the ATSB through the Repcon process raised concerns regarding the staffing and qualification levels of Gold Coast tower controllers.

6 Instrument Landing System usage

- 6.1 The Aircraft in Your Neighbourhood website shows that of the 442 jet aircraft (833 total aircraft) that arrived on the ILS (from February 2019 to February 2020), 90% used it when ATC had nominated it as the approach due to the cloud base and low visibility conditions as provided in the NAPs¹⁴. Approximately 10% of jets used the ILS approach when it was not nominated by ATC.
- 6.2 Airservices supplied data that shows that of the 673 jet aircraft (1278 total aircraft) that arrived on the ILS (from January 2024 to December 2024), 79% used it when ATC had nominated it as the approach due to the cloud base and low visibility conditions provided for in the NAPs. Approximately 21% of jets used the ILS approach when it was not nominated by ATC.
- 6.3 10% of pilot nominated usage in the earlier period is 44 flights, 21% in the second period is 141 flights the percentage has doubled and the number of jet flights using the ILS because of pilot nomination has more than tripled. That leaves an overall increase of ATC usage from 400 to 532 up about 30%.
- 6.4 This data was compared against BITRE data of Regular Public Transport arrivals into the Gold Coast for the same time periods¹⁵. This data showed the number of aircraft arrivals in 2019 and 2024 were almost the same so the significant increase in the use of the ILS cannot be explained by increased traffic generally.
- 6.5 The ANO requested information from Airservices regarding why pilots nominated the use of the ILS and whether NAP non-adherence by airlines was raised with them. Airservices responded:

Our ATCs do not question pilots on the reasons for any 'required' operation. As the pilot is responsible for the safety of the aircraft, our controllers are not expected to question these requirements. This is part of the reason there are not records of this.

Where we become aware of a pattern of NAP non-adherence, we will investigate directly with the airline. This would normally involve first questioning if there is any reason for the increased use (flyability issues etc) and then asking the airline remind their pilots of the NAPs and the expectation that they are applied. We will then continue to monitor the situation to understand if the issue has been resolved.

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¹⁴ Airservices Australia, 'The Instrument Landing System', viewed 21 March 2023, <u>The Instrument Landing System – AsA National Insightfull</u>

¹⁵ Bureau of Infrastructure, Transport and Research Economics, 'Regular Public Transport Operations', October 2024, viewed 21 March 2025, WebMonthlyAirportOctober2024.xlsx

- I note the NAPs are not mandatory and Airservices has no powers to compel pilots or airlines to apply them when the pilot states a requirement for a specific mode. We engage actively on the matter but cannot force their use if a pilot deems another operation is required.
- 6.6 Airservices later held meetings with airlines (Virgin and Qantas/Jetstar) to determine the reasons for the increase in pilot nomination of the ILS. The ANO requested to attend these meetings, but this was not supported by Airservices. Airservices advised the ANO afterwards that airlines had stated their pilots typically nominate usage of the ILS when the pilot is experiencing a high workload or due to weather related operational issues. One airline also noted they favour using the ILS when approaching from the north as it reduces track miles, this usage clearly does not meet the AAT conditions. Airservices noted that airlines were open to increasing their pilot's awareness of the AAT conditions for usage of the ILS by amending operational documents and conducting pilot education.
- 6.7 The ANO also questioned Airservices about the increase in ATC usage, stating it was unlikely the weather had worsened by 30% over the period in question. Airservices stated that in 2019 ILS conditions occurred in 2.57% of all hours (excluding curfew hours). In 2024, ILS conditions occurred over 5.07% of all hours. This does appear to explain the increases in ATC ILS nominations.
- 6.8 Airservices later provided a comparative analysis of Gold Coast ILS usage in March 2019 and March 2024 which included weather conditions. Although not an exhaustive examination, it did show that weather conditions in March 2024 explained much of the ATC nominated usage. However, 37.5% of pilot nominations were still not due to weather.
- 6.9 The ANO asked whether ILS usage was being reported to the community. Airservices advised they previously reported on ILS usage to members of the Gold Coast Community Aviation Consultation Group (CACG) through monthly reports sent via email direct to members. This ceased in February 2024 due to the supplier of the reports, Envirosuite, stopping this report. Airservices advised this ceased due to inaccuracies in data raised by CACG members and that an agreement was reached to cease until the issues could be resolved. Airservices further advised that CACG members have not raised any concerns nor has NCIS received complaints requesting ILS usage reporting. However, an ANO representative attended Gold Coast CACG meetings in February and May 2025 and noted that members were interested in continuing to receive data about ILS usage.
- 6.10 At the May 2025 Gold Coast CACG meeting, Airservices provided the CACG with a summary of ILS usage in 2024, and advised they would make the full data set available to CACG members by email later. The summary presented at the CACG showed that across 2024, 10% of ILS usage fell outside of ILS criteria and 64% of that usage outside ILS criteria was pilot nominated. When this data was later provided to CACG members by email, the data had been further refined, showing that 18% of ILS usage fell outside the ILS criteria, with 65% of this usage attributed to pilot nomination and 35% to light aircraft training.

- 6.11 Community groups such as Stop Flight Path Impacts have long held concerns about the usage of the ILS, with around a quarter of usage being questioned ¹⁶. Pilot nominated usage is of particular concern, with this issue noted by community members in Gold Coast CACG meetings attended by the ANO.
- 6.12 There appears to be multiple reasons for the increase in pilot nominated usage of the ILS. There is evidence that pilot workload and the relative ease of using the ILS was a significant factor in pilots nominating usage of the ILS and the tripling in pilot nominated usage of the ILS coincided with the reduction in tower hours at the Gold Coast. As such, it does appear that ATC staffing issues and perceptions of safety amongst flight crews may have been one factor leading to increased pilot nomination of the ILS. Increased periods of bad weather in 2024 also contributed to increased ILS usage, and this appears to explain the 30% increase in ATC nominations. Whatever the reasons for the increase in ILS usage, it is beyond doubt that there has been a significant increase in the proportion of aircraft using it and that Airservices took no action to address the impact on the community affected by noise.

7 Complaint handling

- 7.1 The complainant made 40 complaints to NCIS from 2016 to 2025, with eleven responses supplied and several information sheets provided for additional information. Of those complaints, 19 related to the use of the ILS between 2019 and 2024. Seven of the eleven responses from NCIS are related to the use of the ILS.
- 7.2 The earlier responses from NCIS provided relatively thorough explanations of the conditions in which the ILS will be used and the factors in deciding to nominate the approach for ATC and pilots. The individual circumstances of the flight identified by the complainant are also advised. In the later responses, the complainant is referred to previous response and NCIS state they would not be responding to each individual use of the ILS as it did not raise any new issues.
- 7.3 In fact, the complaints were justified. The ILS was being increasingly used by higher proportions of aircraft strongly suggesting the NAP regarding its use was being ignored.

8 Noise Abatement Procedures

- 8.1 NAPs for major airports are listed with Departure and Approach Procedures on Airservices' website. NAPs for smaller aerodromes are also listed in the En Route Supplement Australia Aerodrome Facilities Charts. These are typically presented under the heading of NAPs, but some are published under the Flight Procedures heading.
- 8.2 In May 1999, the then Minister issued a direction to Airservices requiring it to develop and implement effective aircraft NAPs and report on compliance with those procedures¹⁷. Specifically, the direction required that Airservices report on compliance

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¹⁶ Stop Flight Path Impacts, 'ILS Usage', viewed 21 March 2025, <u>ILS Compliance Monitoring — STOP FLIGHT PATH IMPACTS</u>

¹⁷ Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts, 'Aviation White Paper', p.163 August 2024, viewed 20 March 2025, <u>Aviation White Paper – Towards 2050</u>

- to the Secretary of the Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts¹⁸.
- 8.3 During the process of producing its current White Paper, the Australian Government directed Airservices to publish a quarterly report on noncompliance with NAPs at all civil airports where Noise and Flight Path Monitoring Systems (NFPMS) are in place¹⁹. The first report was due to be produced by the end of 2024. Airservices missed this deadline and advised the ANO that a report will be produced in 2025.
- 8.4 The ANO was advised that Airservices complied with the Ministerial direction issued in 1999 as part of its quarterly operations reporting. The ANO requested copies of at least one report from each year from 2003 onwards. Excerpts from 2020 to 2023 were later provided, but the reporting in these documents only included a statement that Airservices operated NFPMS at airports and that quarterly noise information was available online.
- 8.5 Airservices also provided a copy of a report on usage of NAPs from 1 July 2023 to 1 September 2024. The report appears to rely on input from a variety of disparate sources some of which appear to be unreliable and are noted 'for information only'. The report does not cover all the NAPs supposedly in operation at each of the airports covered. At Brisbane, for example, the report only covers SOPPROPS usage. It is hard to ascertain the number of NAPs that are not covered but the report's introduction notes 81 aerodromes with NAPs and 31 NAPs in controlled airspace, far more than the subject matter of the report. The levels of compliance appear relatively strong at some airports (Sydney) but weak at smaller airports (Archerfield, Jandakot, Sunshine Coast).
- 8.6 In response to ANO questions, Airservices initially advised that they currently do not have any automated systems that enable regular comparison of operations against NAPs but are in the process of developing this capability through the Aircraft In Your Neighbourhood website. As of the start of June 2025, automated reporting for Brisbane, Sydney, Melbourne, Perth, Hobart, Adelaide and Canberra is online. Some of this reporting is relatively complex (such as Sydney) and others are quite minimal, with more detail to be added over the coming months. Airservices further advised that automated reporting at Gold Coast (including ILS monitoring), Cairns and the Sunshine Coast will come online later in June 2025.
- 8.7 The ANO also conducted a brief review of the provenance of NAPs and found issues with them. For example, the Gold Coast NAPs reference the Air Navigation (COOLANGATTA AIRPORT CURFEW) Regulations 1999 when these were superseded by the Air Navigation (Gold Coast Airport Curfew) Regulations 2018²⁰. The page was last amended on 23 May 2019. The NAPs for Sydney Airport reference Air Navigation (Aerodrome Flight Corridors) Regulations when these were repealed in 2018, it was last amended on 1 December 2022²¹. The NAPs for Adelaide advise that the Adelaide Curfew Act and Regulations commenced on 27 August 2000, but the Regulations were

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¹⁸ Airservices Australia, 'Annual Report 1998-99', 1999, p.73-74, viewed 25 March 2025, <u>Airservices Australia</u> Annual Report 1998-1999

¹⁹ Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts,

^{&#}x27;Aviation White Paper, p.163, August 2024, viewed 20 March 2025, Aviation White Paper - Towards 2050

²⁰ Airservices Australia, 'Gold Coast Noise Abatement Procedures', 23 May 2019, viewed 24 March 2025, BCGNA5.dgn

²¹ Airservices Australia, 'Sydney Kingsford Smith Noise Abatement Procedures', 1 December 2022, viewed 24 March 2025, <u>SSYNA6.dgn</u>

- replaced by the Adelaide Airport Curfew Regulations in 2018²². The page was last amended on 28 November 2024. Airservices has referred these issues to its Aeronautical Information Services area for review.
- 8.8 The ANO consistently receives complaints about non-adherence or issues with the structure of NAPs at major airports, with Brisbane regularly receiving the most complaints. NAPs at smaller towered aerodromes also consistently draw complaints, with NAPs related to circuit operations the most significant issue.

9 Findings

- 9.1 The complaints to Airservices were made during a period of significantly increased usage of the ILS. After good initial responses, the complainant's persistence was met with a standard response and ultimately no response. Complaint handling would have benefited from an assessment of overall usage of the ILS, rather than only explanations of why the ILS might be used and the circumstances of an individual flight.
- 9.2 Historically, Airservices has not been effectively monitoring usage of the ILS. It appears there were not any mechanisms in place for Airservices to become aware of increased usage of the ILS; to question airlines about compliance or to report non-compliance. Systems are being developed to address this issue but are still in their infancy.
- 9.3 Airservices does not have in place effective systems to monitor and report on compliance with NAPs generally. While some progress has been made in recent times, there has been a significant failure to address this problem since at least 1999. The ANO provided its assessment of this matter to Airservices in March 2025 and while some constructive action has occurred in response, the complaint cannot be considered resolved. Given the complexity of the issues and the amount of time that is likely to be required to address them, it would be remiss of the ANO to indefinitely extend the time for Airservices to resolve the matter rather than finalise the complaint by report to the Board.

10 Recommendations

10.1 In response to the ANO's review, Airservices has begun to address the complaint with respect to the operation of the ILS at Gold Coast airport. It has more closely investigated the reasons for the increase and brought to the attention of airlines the increased use by pilots. It reported its progress to the Gold Coast CACG meeting in May 2025. This was apparently well received by CACG members as it appeared long standing concerns were beginning to be addressed. It is premature to consider the complaint resolved but in the expectation that Airservices will continue to address the issues and report to the Gold Coast CACG, I make no recommendations regarding Airservices' monitoring and reporting on the use of the ILS at Gold Coast. Airservices has also committed to a change in complaint handling procedures, with complainants to be provided with more information about the same issue if one year or more has elapsed since their last complaint about the same issue.

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²² Airservices Australia, 'Adelaide Noise Abatement Procedures', 28 November 2024, viewed 24 March 2025, PADNA02.dgn

- 10.2 The International Civil Aviation Organization promotes a balanced approach to managing aircraft noise. This involves four pillars reduction at the source; land use planning and management; NAPs; and operating restrictions²³. The Australian Government's stance is that no new operating restrictions should be introduced at airports²⁴. As such, NAPs are the only operational mechanism by which aircraft noise can be ameliorated at airports without pre-existing noise restrictions and are a significant means of noise reduction at airports with operating restrictions. NAPs are routinely placed into airport Major Development Plans and Airport Master Plans as a way in which aircraft noise will be addressed. There are long-standing concerns from communities affected by aircraft noise that NAPs are not effectively monitored. This is clear from Ministerial statements, a Ministerial directive and the Aviation White Paper.
- 10.3 Clause 82 of the ANO Charter provides that where the ANO identifies a systemic issue in the course of reviewing a complaint and there is a public interest that it be subject to an independent review, the ANO may undertake a review. Clause 73 of the Charter requires the ANO to prepare terms of reference for such a review and submit them to the Airservices Board. Consequently, I recommend that the Airservices Board agree with the ANO on final terms of reference for a systemic issue review. The proposed terms are: -

The ANO conduct a review of Airservices' capacity to effectively monitor and publicly report on compliance with Noise Abatement Procedures.

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²³ International Civil Aviation Organization, 'Balanced Approach to Aircraft Noise Management', viewed 16 May 2025, <u>Aircraft Noise</u>

Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts, 'Aviation White Paper', p.154, August 2024, viewed 7 April 2025, <u>Aviation White Paper – Towards 2050</u>