The Auditor-General Auditor-General Report No.28 2021–22 Performance Audit

Civil Aviation Safety Authority Planning and Conduct of Surveillance Activities

Civil Aviation Safety Authority

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Canberra ACT 19 May 2022

Dear Mr President Dear Mr Speaker

In accordance with the authority contained in the *Auditor-General Act 1997*, I have undertaken an independent performance audit in the Civil Aviation Safety Authority. The report is titled *Civil Aviation Safety Authority Planning and Conduct of Surveillance Activities*. Pursuant to Senate Standing Order 166 relating to the presentation of documents when the Senate is not sitting, I present the report of this audit to the Parliament.

Following its presentation and receipt, the report will be placed on the Australian National Audit Office's website — http://www.anao.gov.au.

Yours sincerely

Grant Hehir

Auditor-General

The Honourable the President of the Senate
The Honourable the Speaker of the House of Representatives
Parliament House
Canberra ACT

AUDITING FOR AUSTRALIA

The Auditor-General is head of the Australian National Audit Office (ANAO). The ANAO assists the Auditor-General to carry out his duties under the Auditor-General Act 1997 to undertake performance audits, financial statement audits and assurance reviews of Commonwealth public sector bodies and to provide independent reports and advice for the Parliament, the Australian Government and the community. The aim is to improve Commonwealth public sector administration and accountability.

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Audit snapshot

Auditor-General Report No.28 2021–22

Civil Aviation Safety Authority Planning and Conduct of Surveillance Activities

? Why did we do this audit?

- ► CASA's surveillance activities contribute to improving aviation safety by assessing whether aviation industry participants continue to meet their obligations under the *Civil Aviation Act 1988* and associated regulations.
- ► CASA has not been the focus of an ANAO performance audit since 2010. There have been a number of changes and events affecting CASA since 2010.



Key facts

- ► In 2020–21, CASA undertook 769 surveillance events compared with 1,035 in 2019–20, 1,634 in 2018–19 and 1,121 in 2017–18.
- CASA identified that 230 out of 306 planned surveillance events that weren't conducted in 2019–20 (75 per cent) were due to the impact of the COVID-19 pandemic.
- ► The level of effort applied to surveillance by inspectors over the period 2017–18 to 2020–21 declined by 25 per cent for detailed surveillance activities and by 31 per cent for less detailed surveillance activities.

What did we find?

- While CASA has appropriate policies and procedures and largely implements its surveillance functions, its planning and conduct of surveillance activities is partly effective.
- ► CASA does not have a documented strategy for surveillance and its approach to identifying risk is inconsistent with its risk management policies.
- ► There has been a downward trend in surveillance in recent years, commencing prior to the COVID-19 pandemic.
- ► There has been a reduction in the level of detail in surveillance reporting to the board and government over time. Recent reporting does not accurately reflect some of the issues CASA has identified.

1 2 7

What did we recommend?

- ► The Auditor-General made seven recommendations addressing program design, risk management, strengthening conflict of interest arrangements and improving the completeness and comprehensiveness of its reporting.
- CASA agreed to all recommendations.

115

769

922

staff allocated to surveillance activities as of February 2022.

surveillance events completed in 2020–21.

safety findings issued in 2020–21.

Summary and recommendations

Background

- 1. The Civil Aviation Safety Authority (CASA) was established on 6 July 1995 as Australia's aviation safety regulator and is required to regard the safety of air navigation as the most important consideration when carrying out its functions. In 2021–22, CASA's expenditure was estimated to be \$212 million with an average staffing level of 832.
- 2. CASA is a corporate Commonwealth entity under the *Public Governance, Performance and Accountability Act 2013* (PGPA Act) and undertakes its functions in accordance with the *Civil Aviation Act 1988* (Civil Aviation Act), the *Airspace Act 2007*, Australia's obligations under the Convention on International Civil Aviation (Chicago Convention) and other international agreements.
- 3. CASA issues authorisations to persons and organisations to participate in aviation activities if they meet the necessary standards and requirements. CASA is responsible for conducting surveillance on authorisation holders (AHs) within Australia and for Australian AHs overseas.
- 4. In conducting surveillance activities, CASA's primary objective is to determine whether an AH is fulfilling its obligations under the Civil Aviation Act, including managing safety risk and complying with legislation and regulations.
- 5. The National Oversight Plan (NOP) outlines CASA's overarching approach to safety oversight.

Rationale for undertaking the audit

- 6. CASA's surveillance activities contribute to improving aviation safety by assessing the safety performance of aviation industry participants and whether they continue to meet their obligations under the Civil Aviation Act and associated regulations. The audit provides independent assurance to the Parliament on the appropriateness of CASA's surveillance approach and its planning and conduct of surveillance activities.
- 7. CASA and its operations have not been the focus of an ANAO performance audit since 2010. Changes and events affecting CASA since 2010 have included:
- amendments to section 9A of the Civil Aviation Act on 7 November 2019 which required CASA to take into account the different risks associated with each aviation industry sector and to consider the economic and cost impact in setting safety standards; and
- the undertaking of the Aviation Safety Regulation Review over the period November 2013 to June 2014 and the implementation of surveillance-related recommendations.

Audit objective and criteria

- 8. The objective of the audit was to assess whether CASA has implemented effective arrangements for the planning and conduct of surveillance activities.
- 9. To form a conclusion against this objective, the following high-level criteria were applied.
- Has CASA established an appropriate surveillance approach?

- Is CASA effectively monitoring compliance and regularly reviewing the effectiveness of its planning and conduct of surveillance activities?
- Is there regular reporting to the Board and the government?
- 10. The scope of the audit covered the period from 1 July 2018 until 31 December 2021.

Conclusion

- 11. While CASA has appropriate policies and procedures and largely implements its surveillance functions, its planning and conduct of surveillance activities is partly effective.
- 12. The appropriateness of CASA's approach to surveillance is diminished as CASA does not have an overarching strategic plan and its approach to prioritising surveillance does not incorporate risk likelihood or clearly specify why it does not. CASA's risk approach is not applied consistently across all sectors and industry delegates and there has not been full compliance with conflict of interest declaration requirements by CASA staff. CASA's surveillance approach largely complies with Australia's international obligations.
- 13. CASA has been partly effective in monitoring compliance and reviewing its planning and conduct of surveillance activities. While CASA has a system for monitoring compliance, there has been a downward trend in the level of surveillance in recent years, a trend that commenced prior to the COVID-19 pandemic. In addition, CASA has not regularly reviewed and updated its planned surveillance approach. There is no quality assurance process in place for reviewing the quality of surveillance activities, and there has been no plan developed for reviewing the National Oversight Plan.
- 14. CASA has regularly reported to its Board and the government on surveillance activities, however, reporting needs to be complete and comprehensive. There has been a reduction in the level of detail in surveillance reporting over time. Recent reporting does not accurately reflect some of the issues CASA has identified.

Supporting findings

Surveillance approach

- 15. While the legislative framework requires a comprehensive surveillance approach, CASA's National Oversight Plan (NOP) underpinning its surveillance activities only consists of high-level principles. The implementation of the NOP has not been supported by a project plan, a monitoring and evaluation approach with defined review milestones and policy, procedures, and guidance to support campaign and response surveillance. (See paragraphs 2.1 to 2.22)
- 16. CASA has a range of appropriate policies, procedures, and guidance in place to support its surveillance approach. Some, including its surveillance guidance, have not been updated on a timely basis. (See paragraphs 2.24 to 2.35)
- 17. CASA has developed a risk-based approach to its surveillance activities, which can be improved. CASA's documented risk policy lacks clarity and does not consider risk likelihood. There is a lack of currency in identified sectoral aviation safety risks and CASA's risk approach does not incorporate broader sectoral and operator risks. CASA's surveillance approach is not consistently applied across all sectors and industry delegates and there have been delays to the identification

and implementation of key focus areas in surveillance scoping. In addition, there has not been full compliance with conflict of interest declaration requirements. (See paragraphs 2.36 to 2.74)

- 18. CASA's surveillance approach largely complies with Australia's obligations relating to surveillance under the Chicago Convention. The key shortcomings are that:
- CASA does not have a resourcing framework to match anticipated levels of surveillance activity with the technical and other staff needed to meet these levels;
- CASA's training and work allocation arrangements do not ensure that inspectors possess and retain the necessary skills and competencies to undertake the surveillance tasks that they are assigned to;
- there has been a lack of succession planning to ensure adequate capacity in key technical areas;
- the currency of CASA's guidance needs to be maintained and the NOP documented; and
- CASA's enforcement approach can be improved. (See paragraphs 2.77 to 2.99)

Monitor compliance and review the planning and conduct of surveillance activities

- 19. CASA has been partly effective in monitoring industry compliance and acting upon identified non-compliance. A decline in surveillance commenced prior to the COVID-19 pandemic and there has been inconsistent application of surveillance guidance. Surveillance data is not timely, lacks accuracy and is not supported by current metadata. CASA did not meet its goal of acquitting safety findings in 2021 and has no system of monitoring surveillance referrals to enforcement. (See paragraphs 3.1 to 3.40)
- 20. CASA is not regularly reviewing and updating its surveillance approach. There is no quality assurance process in place for reviewing the quality of surveillance activities. There has been no monitoring and evaluation plan developed for reviewing the National Oversight Plan and the National Surveillance Selection Process has not been reviewed since its implementation in July 2018. CASA does not have a consistent process for considering Safety Assurance Reviews and does not have a current surveillance framework quality assurance program. (See paragraphs 3.43 to 3.67)

Reporting to the board and government

- 21. While there has been regular reporting to the Board, reporting has not been complete and comprehensive on performance issues related to surveillance activities. CASA does not report on the effectiveness of surveillance and does not include sufficient information in its reporting to the Board, including on the number of authorisation holder performance indicator (AHPI) assessments overdue. CASA's reporting on incident and accident data requires improvement as it relies on a lagged indicator. (See paragraphs 4.1 to 4.22)
- 22. CASA's reporting to the Minister does not reflect some of the performance issues and delays CASA has identified with surveillance activities. (See paragraphs 4.23 to 4.26)

Recommendations

Recommendation no. 1 Paragraph 2.13

The Civil Aviation Safety Authority formalise and fully document the National Oversight Plan including relevant governance processes, performance and review milestones.

Civil Aviation Safety Authority response: Agreed

Recommendation no. 2 Paragraph 2.63

The Civil Aviation Safety Authority improve its approach to risk by:

- incorporating risk likelihood as part of its approach to surveillance planning or clearly establish the basis for not considering risk likelihood in its prioritisation of authorisation holders for surveillance; and
- applying the risk and prioritisation framework consistently across all sectors and industry delegates.

Civil Aviation Safety Authority response: Agreed

Recommendation no. 3 Paragraph 2.75

The Civil Aviation Safety Authority strengthen its approach to obtaining conflict of interest declarations by regulatory staff and managing any risks that are identified.

Civil Aviation Safety Authority response: Agreed

Recommendation no. 4 Paragraph 3.41

The Civil Aviation Safety Authority implement a process for tracking and reporting on surveillance referrals to enforcement.

Civil Aviation Safety Authority response: Agreed

Recommendation no. 5 Paragraph 3.68

The Civil Aviation Safety Authority review its National Oversight Plan and National Surveillance Selection Process.

Civil Aviation Safety Authority response: Agreed

Recommendation no. 6 Paragraph 4.17

The Civil Aviation Safety Authority improve the completeness and comprehensiveness of its reporting to the Board to increase transparency related to its surveillance activities.

Civil Aviation Safety Authority response: Agreed

Recommendation no. 7 Paragraph 4.27

The Civil Aviation Safety Authority improve the completeness and comprehensiveness of its reporting to the Minister to increase transparency related to its surveillance activities.

Civil Aviation Safety Authority response: Agreed

Summary of entity response

23. The Civil Aviation Safety Authority's summary response is provided below and its full response can be found at Appendix 1.

CASA welcomes constructive external scrutiny of its planning and conduct of surveillance activities. CASA acknowledges the level of work undertaken by the ANAO and thanks them for their professionalism and consideration during the audit.

CASA agrees with the seven recommendations and is pleased they complement changes made in 2018 to the way we conduct our surveillance activities as well as our new national operating model established in 2021. This is recognition of CASA's ongoing commitment to improve the way we plan and conduct our surveillance activities in support of aviation safety in Australia.

While CASA fully supports the recommendations, there are instances where CASA considers additional context could have clarified the basis on which a conclusion was reached and also avoided potentially incorrect conclusions being drawn by the reader.

In particular, CASA notes that given that the ANAO uses different audit methodologies to the International Civil Aviation Organization (ICAO), CASA does not consider the ANAO's findings in any way invalidate the outcome of ICAO's 2017 assessment, which concluded that Australia's effective implementation of ICAO standards and recommended practices related to surveillance obligations was 96.25%.

Key messages from this audit for all Australian Government entities

24. Below is a summary of key messages, including instances of good practice, which have been identified in this audit and may be relevant for the operations of other Australian Government entities.

Governance and risk management

- Regulation needs an effective risk-based compliance monitoring approach which is supported by sound project management and appropriate review.
- Compliance monitoring needs to be appropriately resourced with relevant skills and experience and supported by an effective training management system to ensure technical capabilities are maintained.
- Procedures and guidance are important to ensure the delivery of policy, including regulation, is consistent with achieving intended outcomes.
- It is important to maintain the currency of all supporting documentation, including metadata, to enable robust data management and analysis.
- Transparent and accurate performance reporting, including to Boards and government, is key to good governance and enables the entity to assess its performance against its purpose.

Audit findings

1. Background

Overview

- 1.1 The Civil Aviation Safety Authority (CASA) was established on 6 July 1995 under the *Civil Aviation Act 1988* (Civil Aviation Act) as Australia's aviation safety regulator with a range of functions including: civil air operations in Australian territory; the operation of Australian aircraft outside Australian territory; classifying Australian administered airspace; and determining the services and facilities provided by approved air navigation service providers.
- 1.2 CASA is a corporate Commonwealth entity under the *Public Governance, Performance and Accountability Act 2013* (PGPA Act) and is part of the Infrastructure, Transport, Regional Development and Communications portfolio. The CASA Board, which comprises a chair and the Director of Aviation Safety¹ and up to five other members, is the accountable authority of CASA under the PGPA Act.
- 1.3 CASA undertakes its functions in accordance with the Civil Aviation Act, the *Airspace Act* 2007, Australia's obligations under the Convention on International Civil Aviation (Chicago Convention) and other international agreements. Under section 9A of the Civil Aviation Act, CASA is required to regard the safety of air navigation as the most important consideration when carrying out its functions.
- 1.4 Under the Civil Aviation Act, the Minister may give the board written directions about the performance of its functions or the exercise of its powers including the appropriate strategic direction for CASA and the manner in which CASA should perform its functions. The Minister's most recent direction, Statement of Expectations for the Board of the Civil Aviation Safety Authority for the Period 31 January 2022 to 30 June 2023, was issued to the board on 13 January 2022 and sets out the Minister's expectations for CASA in regard to its operations and performance.
- 1.5 CASA has a single outcome: 'Maximise aviation safety through a regulatory regime, detailed technical material on safety standards, comprehensive aviation industry oversight, risk analysis, industry consultation, education and training'. In 2021–22, CASA's expenditure is estimated to be \$212 million with an average staffing level of 832.

Surveillance

1.6 CASA regulates the aviation industry using a suite of orders and regulations under the authority of the Civil Aviation Act. CASA issues the relevant authorisations required by persons and organisations to participate in aviation activities — in the form of licences, certificates,

¹ The term 'Director of Aviation Safety' is the statutory title of the person performing the role of managing CASA and this term is used interchangeably with the term 'Chief Executive Officer' both within and outside of CASA.

authorisations, approvals and permissions — if they meet the necessary standards and requirements.²

- 1.7 CASA is responsible for conducting surveillance on authorisation holders (AHs) within Australia and for Australian CASA AHs overseas. The main AH types include:
- Air Operator's Certificate (AOC);
- recreational, private and commercial pilot flying training (Part 141 of the Civil Aviation Safety Regulations 1998 (CASR));
- integrated and multi-crew flying training (Part 142 of CASR);
- approved maintenance organisations (AMO) (Part 145 of CASR and regulation 30 of the Civil Aviation Regulations 1988 CAR 30); and
- delegates and authorised persons (airworthiness).
- 1.8 In conducting surveillance activities, CASA's primary objective is to determine whether an AH is fulfilling its obligations under the Civil Aviation Act, including managing safety risk and complying with legislation and regulations.
- 1.9 The National Oversight Plan is CASA's overarching 'approach' to safety oversight with three of its four pillars underpinning surveillance including: the National Surveillance Selection Process (NSSP) (planned surveillance); response surveillance (unplanned in response to incidents, accidents or emerging risks); and campaign surveillance (coordinated surveillance activities of multiple AHs within a sector on a specific issue). The remaining pillar, regulatory services (which includes cost recovery and payment of fees), is not considered surveillance, but is considered when planning surveillance.
- 1.10 Surveillance activities are conducted by CASA staff in office locations across Australia (see Figure 1.1).

The term 'Civil Aviation Authorisation' is defined in section 3 of the Civil Aviation Act as 'an authorisation under this Act or the regulations to undertake a particular activity (whether the authorisation is called an AOC, permission, authority, licence, certificate, rating or endorsement or is known by some other name)'. CASA also conducts surveillance on certain persons or organisations who are not authorisation holders such as organisations who do not hold an AOC involved in the shipping of dangerous goods and approved self-administering aviation organisations.

Figure 1.1: CASA office locations, June 2021



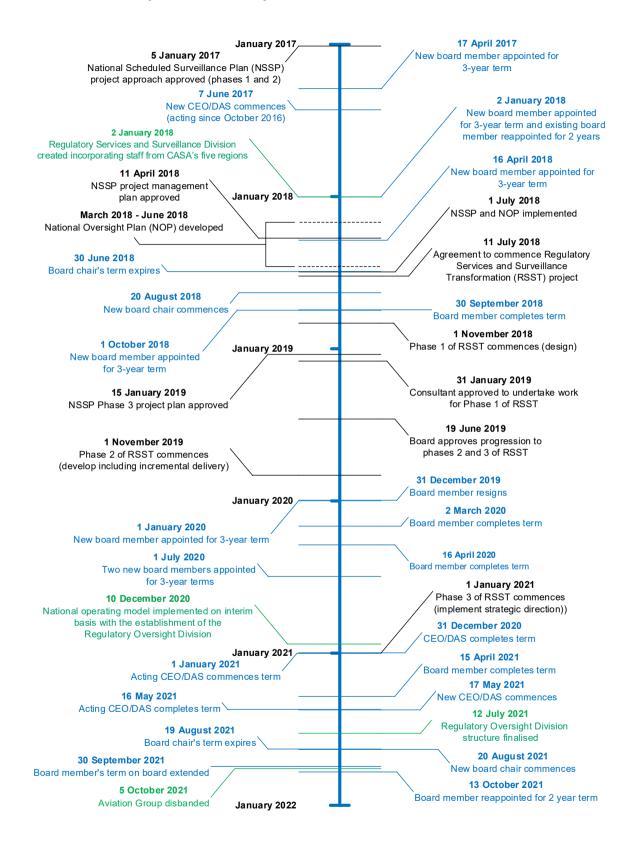
Note: CASA's satellite office on Horn Island is not permanently staffed and is used to provide training and facilities for staff conducting surveillance activities and inspections.

Source: CASA annual report 2020-21, p. 6.

Organisational and surveillance activity changes

- 1.11 Since 2017, there have been changes to the CASA board, the Director of Aviation Safety and several changes to CASA's approach to surveillance activities including the implementation of the:
- National Surveillance Selection Process, which was approved in January 2017 and came into effect on 1 July 2018. The NSSP involved the development of an annual planned surveillance schedule, based on a standardised approach to prioritising, classifying and scheduling surveillance activities;
- National Oversight Plan (NOP) on 1 July 2018 with the separation of planned, response and campaign surveillance as a result of the NSSP; and
- National Operating Model for regulatory oversight services (including the functions of guidance, entry control and surveillance) under the Regulatory Services and Surveillance Transformation program (RSST). The RSST (which commenced in July 2018 and was finalised in July 2021) involved a move to a national approach to managing surveillance activities based largely on dedicated surveillance teams.
- 1.12 The timing of these changes is summarised in Figure 1.2.

Figure 1.2: Timeline of CASA board changes and surveillance-related activities, January 2017 to January 2022



Source: CASA annual reports 2017-18 to 2020-21; CASA documentation.

Rationale for undertaking the audit

- 1.13 CASA's surveillance activities assess the safety performance of aviation industry participants and whether they continue to meet their obligations under the Civil Aviation Act and associated regulations. The audit provides independent assurance to the Parliament on the appropriateness of CASA's surveillance approach and its planning and conduct of surveillance activities.
- 1.14 CASA and its operations have not been the focus of an ANAO performance audit since 2010. Changes and events affecting CASA since 2010 have included:
- amendments to section 9A of the Civil Aviation Act on 7 November 2019 which required CASA to take into account the different risks associated with each aviation industry sector and to consider the economic and cost impact in setting safety standards; and
- the undertaking of the Aviation Safety Regulation Review over the period November 2013 to June 2014 and the implementation of surveillance-related recommendations.

Audit approach

Audit objective, criteria and scope

- 1.15 The objective of the audit was to assess whether CASA has implemented effective arrangements for the planning and conduct of surveillance activities.
- 1.16 To form a conclusion against this objective, the following high-level criteria were applied.
- Has CASA established an appropriate surveillance approach?
- Is CASA effectively monitoring compliance and regularly reviewing the effectiveness of its planning and conduct of surveillance activities?
- Is there regular reporting to the Board and the government?
- 1.17 The scope of the audit covered the period from 1 July 2018 until 31 December 2021.

Audit methodology

- 1.18 The audit methodology involved:
- review and analysis of relevant agency records;
- review and analysis of relevant inspection and audit data in Sky Sentinel (CASA's IT surveillance management tool); and
- meetings with key staff and site visits to CASA's national and regional offices.
- 1.19 The audit was conducted in accordance with ANAO Auditing Standards at a cost to the ANAO of approximately \$642,406.
- 1.20 The team members for this audit were Sandra Dandie, Kai Swoboda and Brian Boyd.

2. Surveillance approach

Areas examined

The ANAO examined whether CASA had developed an appropriate surveillance approach.

Conclusion

The appropriateness of CASA's approach to surveillance is diminished as CASA does not have an overarching strategic plan and its approach to prioritising surveillance does not incorporate risk likelihood or clearly specify why it does not. CASA's risk approach is not applied consistently across all sectors and industry delegates and there has not been full compliance with conflict of interest declaration requirements by CASA staff. CASA's surveillance approach largely complies with Australia's international obligations.

Areas for improvement

The ANAO made three recommendations aimed at: formalising and documenting the National Oversight Plan; improving the approach to risk incorporating risk likelihood or clearly establish the basis for its emphasis on risk consequence for the allocation of authorisation holders into the three surveillance groups; and a stronger approach to identifying and managing conflicts of interest.

The ANAO suggests a number of areas where compliance with international obligations can be improved including developing a resourcing framework and finalising outstanding changes to training and competency arrangements. The ANAO also suggests that CASA clarify its risk management guidance and further develop its key focus areas for surveillance and communicate these to industry in advance of each year's scheduled surveillance.

- 2.1 An appropriate surveillance approach underpins confidence in the aviation sector. The ANAO examined:
- legislative and other requirements because they are the key elements of the regulatory framework which underpins CASA's surveillance approach;
- policies, procedures and guidance for staff and stakeholders as they enable a consistent regulatory approach and clarifies expectations about how surveillance activities are conducted;
- risk management which supports decision making on the allocation of resources to surveillance activities; and
- whether CASA is meeting international standards directly related to surveillance activities because Australia is required to be compliant with the Chicago Convention.

Is CASA's surveillance approach compliant with the relevant legislative frameworks?

While the legislative framework requires a comprehensive surveillance approach, CASA's National Oversight Plan (NOP) underpinning its surveillance activities only consists of high-level principles. The implementation of the NOP has not been supported by a project plan, a monitoring and evaluation approach with defined review milestones and policy, procedures, and guidance to support campaign and response surveillance.

Legislative and regulatory framework

- 2.2 As noted in paragraphs 1.1 to 1.4, CASA is subject to a range of legislation, regulation, and requirements in carrying out its functions. This includes the *Public Governance, Performance and Accountability Rule 2014*, the Regulator Performance Guide and consideration of the Commonwealth Risk Management Policy 2014.
- 2.3 The *Civil Aviation Act 1988* (the Civil Aviation Act) does not contain detailed rules governing aviation safety, with these contained within the relevant regulations and other legislative instruments that are made under the Civil Aviation Act (see Appendix 3). The aviation safety regulations incorporate a mix of a prescriptive, compliance-based approach and an outcome-based (or performance-based) framework.³
- 2.4 One of CASA's functions under the Act is to conduct 'comprehensive aviation industry surveillance, including assessment of safety-related decisions taken by industry management at all levels for their impact on aviation safety'.

CASA's surveillance framework and approach

- 2.5 CASA's surveillance activities⁴ are directed towards assessing whether an authorisation holder (AH)⁵ complies with the requirements of the Civil Aviation Act and its associated regulations. CASA's surveillance framework incorporates the processes, policies and guidance, IT systems, training and staffing arrangements that underpin the design and implementation of surveillance activities.
- 2.6 CASA's surveillance approach, the National Oversight Plan (NOP), provides the basis for the annual planning and allocation of resources for CASA's surveillance activities. As noted at paragraph 1.9, the NOP consists of four 'pillars' comprising: planned surveillance⁶; response surveillance; campaign surveillance; and regulatory services (the assessment and/or review of a regulatory approval, variation, exemption or instrument).

Prescriptive compliance-based regulation consists of clear rules to be followed, with assessments based on a finding that these rules are being followed or they are not. An assessment of a performance-based framework requires an understanding of the objective that the framework seeks to achieve and whether relevant systems and approaches have been established to this objective.

⁴ Surveillance activities includes surveillance events to detect and address noncompliance such as audits of documentation and systems, operational checks of equipment, inspections of premises and assessments of safety performance.

The term 'authorisation holder' refers to an authorisation to undertake a particular activity, whether the authorisation is called an Aircraft Operator Certificate, permission, authority, licence, certificate, rating or endorsement.

Prior to July 2018, responsibility for planning scheduled surveillance was assigned to CASA's regional offices which at the time were each allocated responsibility for all interactions (approvals, guidance and surveillance) with specified authorisation holders.

Planned surveillance

2.7 The National Surveillance Selection Process (NSSP) forms the basis of CASA's planned surveillance activities, with the establishment of a prioritised annual schedule of surveillance activities from 2018–19 across most types of AHs.⁷ The NSSP manual notes that:

The NSSP is a systematic approach to planned surveillance selection, prioritising authorisation holders and creating a national planned surveillance schedule that aims to optimise resource usage for planned surveillance activities across CASA.

2.8 CASA notes that the nationally coordinated annual development of the NSSP is informed by updated AH data and a categorisation of AHs into one of three groups (A, B or C) that determines the prioritisation of surveillance activities based on an assessment of the risk consequence associated with the activities of each AH (see paragraph 2.50).

Response surveillance

- 2.9 Response surveillance events are those activities that are conducted on AHs in direct response to incidents, accidents, intelligence, or emerging safety risks. They are not NSSP, campaign surveillance or regulatory services events.
- 2.10 Decisions about undertaking response surveillance activities in response to safety occurrence information are made by surveillance managers and can include:
- desktop or site reviews;
- a review for the national manager such as a safety assurance review or a review for enforcement; and
- no further action.

Campaign surveillance

2.11 CASA defines its campaign surveillance as 'coordinated surveillance activity focusing on multiple authorisation holders within an identified sector of the industry over a defined period. These are conducted to focus on a particular issue'. CASA advised the ANAO in August 2021 that there is no specific documented process for developing campaign surveillance activity. CASA noted:

It follows the basic process of the sector for the campaign being identified by the Executive, Terms of Refence identified and the National Manager Surveillance assigns responsibility for coordinating and managing the campaign to a suitably qualified Surveillance Manager (and then the surveillance is undertaken as outlined in the CASA Surveillance Manual).

As at December 2021, authorisation holders included in the NSSP were air operator certificate holders, approved maintenance organisations, flight training organisations and flight training, airworthiness industry delegates, dangerous goods cargo carriers, dangerous goods training providers, foreign air transport air operators, approved self-administering aviation organisations, controlled area exemption holders, remotely piloted aircraft operator certificate holders, design authorised persons, approved design organisations, manufacturing organisations, maintenance training organisations, aircraft registration industry delegates, certified aerodromes, aeronautical telecommunications and radionavigation services service providers, air traffic services training providers, instrument flight procedure design providers, aeronautical information management providers, aeronautical information service providers and data service providers, aviation rescue firefighting services providers.

National Oversight Plan

2.12 While there has been reference to the National Oversight Plan in CASA's portfolio budget statements since 2020–21 as well as CASA's corporate plans since the 2018–19 corporate plan, the NOP has not been documented to ensure a comprehensive surveillance approach, despite being CASA's overarching model in conducting surveillance activities. Implementation of the NOP has also not been supported by a project plan, a monitoring and evaluation approach with defined review milestones and policy, procedures, and guidance to support campaign and response surveillance. A draft report of an internal review undertaken by CASA in 2020 came to similar conclusions.⁸

Recommendation no. 1

2.13 The Civil Aviation Safety Authority formalise and fully document the National Oversight Plan including relevant governance processes, performance and review milestones.

Civil Aviation Safety Authority response: Agreed.

2.14 The National Surveillance Selection Process, which has been in place since 2018, establishes the operating arrangements for the National Oversight Plan (which consists of four pillars (planned surveillance, response activities, regulatory services and national sector campaigns)). The Civil Aviation Safety Authority (CASA) aims to have formalised and fully documented the National Oversight Plan (NOP) by the end of 2022-23.

Governance arrangements

- 2.15 CASA's governance framework for surveillance is largely incorporated into its general accountability and reporting framework (see Appendix 4). Key decision-making committees involved in surveillance oversight include:
- the Aviation Safety Committee (ASC) an advisory and monitoring committee on matters related to regulatory and safety compliance, safety strategies, safety performance, international safety developments and emerging aviation safety risks; and
- the Oversight Executive Group (OEG) an executive committee chaired by the executive manager, regulatory oversight that manages and administers decision-making on regulatory oversight including approving the NSSP schedule, determination of key focus areas for surveillance (see paragraph 2.65 for further information) and coordinating surveillance-related activities.
- 2.16 As of December 2021, the surveillance manual incorporated governance arrangements for surveillance activities for CASA's regional offices and sectoral surveillance activities. This included monthly meetings of the 'controlling office surveillance priority review group' (SPRG) covering each regional office and weekly meetings of the 'regional oversight committee' (ROC) in each regional office. The purpose of these was to manage resource availability, detailed planning and identify necessary deviations for OEG consideration.

⁸ In February 2022, CASA advised the ANAO that the draft report had not been 'validated or endorsed by management'. CASA's records did not evidence why an internal review that CASA had commissioned had not been subject to management consideration and, as appropriate, action on the recommendations.

- 2.17 In August 2021, CASA advised the ANAO that this governance framework terminology was being phased out and was being replaced with weekly surveillance planning meetings and that, once this was finalised, manuals and policies would be updated to reflect the change.
- 2.18 CASA published an update to the surveillance manual in January 2022 with revised governance arrangements to reflect the national surveillance model that was implemented on an interim basis in December 2020 and finalised in July 2021.

Engagement with government agencies and stakeholders

- 2.19 The Australian Transport Safety Bureau (ATSB) is a key partner agency for CASA in its surveillance approach. The ATSB is responsible for the independent investigation of aviation accidents and other safety occurrences.
- 2.20 CASA has a formal Memorandum of Understanding (MOU) with the ATSB to guide the separation of responsibilities, communication/notification arrangements and cooperation in relation to commencing and conduction investigations. CASA has regular interactions with the ATSB about the status of ATSB safety investigations safety data. CASA also participates in biannual operational meetings with the ATSB as required under the MOU.
- 2.21 The Aviation Safety Advisory Panel (ASAP) is the primary advisory body through which CASA directs its engagement with industry and seeks input on current and future regulatory and associated policy approaches.¹⁰
- 2.22 CASA has regularly updated the ASAP on the progress of its organisational changes and surveillance approach since September 2019 and has also considered surveillance activities on COVID-19 pandemic affected AHs and the development of sector risk profiles.

Are there appropriate policies, procedures and guidance in place to support CASA's surveillance approach?

CASA has a range of appropriate policies, procedures, and guidance in place to support its surveillance approach. Some, including its surveillance guidance, have not been updated on a timely basis.

Policies and procedures

2.23 The primary objective of CASA's surveillance activities is to assess whether an AH is fulfilling its obligations under the Civil Aviation Act and associated regulations. CASA has a range of policies and procedures to support its inspectorate staff to plan and undertake surveillance activities to make such an assessment, with some of these publicly available (see Appendix 5). The provision of technical guidance, tools and the provision of safety critical information is a critical element identified by the International Civil Aviation Organization (ICAO) as part of complying with international obligations (see paragraph 2.79).

⁹ The exchange of safety information between the ATSB and CASA is governed by a 'Safety Information Policy Statement'.

¹⁰ The ASAP consists of two CASA representatives and between six and 10 individuals representing the aviation community. The panel has met between three and four times each year since it was established in September 2017.

- 2.24 CASA's surveillance manual and the NSSP manual are the key guiding documents for staff in preparing for and undertaking surveillance activities, including guidance on:
- the types of surveillance events conducted;
- governance and accountability arrangements for the review and approval of surveillance events and event reporting;
- processes required when conducting surveillance events including planning documents and arranging and documenting meetings;
- processes required to reschedule or not proceed with NSSP events;
- processes for the referral of AHs for enforcement action; and
- management of information within the IT systems that support surveillance activities.

Guidance

- 2.25 Guidance material needs to provide CASA staff with clear processes and requirements to be followed in undertaking surveillance activities. Where guidance material is unclear, there is a risk that CASA's surveillance approach will be applied incorrectly.
- 2.26 CASA's central guidance to inspectorate staff on key elements of the surveillance process are publicly available on the CASA website and information provided to AHs as part of the audit process provides links to this material.
- 2.27 The ANAO's examination of CASA guidance material revealed instances where guidance was confusing and incomplete. CASA records include staff noting a lack of guidance or uncertainty in relation to some surveillance tasks. The ANAO also identified some areas where the surveillance manual could be improved. For example:
- Neither the CASA Surveillance Manual nor the NSSP Manual identify the interval between level 1 surveillance events. This is despite ICAO noting in section 1.6 of its Manual of Procedures for Operations Inspection, Certification and Continued Surveillance that: 'The areas to be covered in the surveillance activities over a period should be similar to those examined during the original certification process'.
- CASA has issued guidance related to certain surveillance-related activities using Temporary Management Instructions (TMIs).¹¹ While elements of some TMIs have been incorporated into the surveillance manual at the termination of a TMI, there have been instances where there has been a significant gap between the expiry of a TMI and the issuing of a revised TMI.
- 2.28 The surveillance manual was updated nine times between the start of 2017 and December 2021. An update to the manual was published in January 2022 to reflect the changed CASA organisational structure that was implemented on an interim basis eleven months earlier (in December 2020 before being finalised in July 2021) and to remove material that was no longer relevant to existing surveillance practices. The NSSP manual, published in April 2019 some 10 months after the implementation of the NSSP in July 2018, has not yet been updated to reflect

¹¹ These include TMIs related to the implementation of the NSSP, the accomplishment of NSSP surveillance events during the COVID-19 pandemic and the air operator certificate subsequent issue surveillance process.

CASA's changed organisational and surveillance governance arrangements and the implementation of the AOC subsequent issue review process from 1 July 2019.

Stakeholder communication

- 2.29 CASA's stakeholder engagement and communication on surveillance activities includes direct contact with AHs, consultation through the Aviation Safety Advisory Panel (see paragraph 2.21) and broad industry communications via its website and regular industry updates.
- 2.30 CASA's broad communication on surveillance activities to industry included information about the Regulatory Services and Surveillance Transformation (RSST) project implementation (see paragraph 1.11) over the period October 2019 to June 2021. CASA's adoption of key focus areas for surveillance activities (see paragraph 2.65 for further detail) for the periods November 2020 to June 2021 and for 2021–22 was communicated to stakeholders using CASA's industry communications channels and individual messages to AHs for the period November 2020 to June 2021.

Delegate oversight

- 2.31 The Civil Aviation Act and associated regulations provide that some of CASA's powers and functions may be delegated to a 'delegate' or 'authorised person'.¹² Industry delegates are managed across different areas of CASA and information about delegates is derived from several IT systems.
- 2.32 CASA has undertaken a range of activities since early 2017 to improve the systems used to store and report information about delegates. This included approving a workplan to update the industry delegates management manual in September 2018.
- 2.33 A CASA internal review in late 2019 that produced an updated inventory of industry delegates noted:

It cannot be confirmed that this is a complete list of delegates within CASA. In collecting data, the team discovered inconsistencies in the information provided and information able to be collected through other means, for example there are several delegates managed through the regional offices and these appear to be managed individually. There is no complete list of these (regional Office issued instruments) available to the research team and collating one was not feasible in the time allocated to this enquiry.

- 2.34 An update provided to the CASA board in April 2021 noted the 'approximate' numbers of delegates in different categories and that data on half of the delegate categories was held in the European Aviation Processing (EAP) system. Of the 12 delegate categories, five categories, covering approximately 1,652 delegates, were not included in the NSSP framework for scheduled surveillance.
- 2.35 As of December 2021, the latest version of the Industry Delegate Management manual was published more than 10 years earlier (in May 2011). CASA advised the ANAO in January 2022 that it is 'currently reviewing the [manual] and intend to incorporate the [manual] into the existing Airworthiness Protocol Framework over time as part of continuous improvement'. CASA has not

A delegation vests a person with CASA's power whereas an authorisation relates only to a specific task associated with the exercise of a power. The main types of industry delegates provide airworthiness services (such as approval of changes to a system of maintenance and the issue of export airworthiness approvals and special flight permits); aviation medical examiners; and English language proficiency assessors.

committed to a timeframe for the completion of this work. CASA is also considering incorporating additional classes of delegates within the NSSP in future years.

Does CASA apply a risk-based approach to planning and conducting surveillance activities?

CASA has developed a risk-based approach to its surveillance activities, which can be improved. CASA's documented risk policy lacks clarity and does not consider risk likelihood. There is a lack of currency in identified sectoral aviation safety risks and CASA's risk approach does not incorporate broader sectoral and operator risks. CASA's surveillance approach is not consistently applied across all sectors and industry delegates and there have been delays to the identification and implementation of key focus areas in surveillance scoping. In addition, there has not been full compliance with conflict of interest declaration requirements.

Identification of relevant risks

- 2.36 Under section 16 of the *Public Governance, Performance and Accountability Act 2013* (PGPA Act), CASA is required to establish and maintain an appropriate system of risk oversight and management. CASA has an enterprise risk management framework which incorporates CASA's: Board policy on risk management; Board strategic risks and risk appetite statement; and risk management manual.
- 2.37 CASA's risk management manual establishes risk management requirements and guidance to staff in identifying and managing risks in relation to operational/project risks and strategic risks.¹³ This includes a 'CASA risk matrix' to guide staff in rating the likelihood and consequence of risks as well as determining the effectiveness of risk controls. The risk management manual notes that:

Aviation safety risk is considered and managed in accordance with the CASA Aviation Safety System Manual [CASS]. The process for managing aviation safety risk is consistent with the CASA Risk Management Policy and aligns, where feasible, to the CASA Risk Management Manual.

Aviation safety risk is monitored by the Aviation Safety Committee.

- 2.38 The aviation safety system manual includes a risk assessment matrix that also incorporates a consequence and likelihood criteria rating. The consequence rating is between insignificant (no safety implications) and critical (aircraft accident with greater than nine fatalities) and the likelihood criteria includes consideration of quantitative assessment of the likelihood (where data is available).
- 2.39 CASA has advised that the:

CASS manual requires updating to accommodate the relatively recent publication of the CASA Risk Management Manual.

2.40 The ANAO considers that there is a lack of clarity in CASA risk management created by risk management guidance that is out of date.

¹³ CASA adopted a new risk management manual in November 2021. This document consolidated two separate documents, the risk management framework and the risk management guideline.

Operational risks

- 2.41 Surveillance operational risks involve those risks that CASA face while conducting surveillance activities, such as workplace health and safety (WHS), surveillance conduct and IT system management. CASA identifies and records operational risk in a centralised risk register.¹⁴ Operational risks identified in business planning assessed as medium or high are reported to the Board Audit and Risk Committee (BARC) on a quarterly basis.
- 2.42 A key operational risk for CASA's surveillance activities is the timely implementation of the surveillance related functionality of the European Aviation Processing (EAP) IT system. This is intended to replace CASA's Sky Sentinel IT system (see Appendix 6).
- 2.43 CASA's November 2021 risk management manual notes that operational risks are 'captured in divisional business plans and presented on the business risk profile (reviewed quarterly)'. In February 2022, CASA advised the ANAO that risk ceased to be recorded in divisional risk registers following the release of the centralised risk register 'so there is no need for them to appear there'. With the ANAO noting that this advice was inconsistent with the risk management manual, CASA advised the ANAO in March 2022 that:

CASA acknowledges that this excerpt would benefit from revision as it implies risks can still be recorded in divisional business plans and risk registers. In reality, risks are identified and assessed through business planning (which is conducted during preparation of divisional business plans) but the risks are now being recorded in the Risk Register not individual risk registers or business plans.

2.44 The ANAO considers that there would be merit in CASA promptly clarifying in the relevant manuals the process for the recording and assessment of risks and how these are to be reported.

Aviation safety risks

- 2.45 CASA holds and receives a wide range of aviation safety information and data to identify aviation safety risk at a sectoral and operator level including:
- surveillance/regulatory activities;
- sectoral analysis conducted by CASA;
- industry reporting such as mandatory defect reporting, public reporting of low flying/aviation safety concerns and occurrence reporting received from the ATSB; and
- accident reporting by the ATSB and other aviation regulators including individual accident reports and trend reporting.
- 2.46 CASA uses a range of separate approaches to store this aviation safety information such as the centralised risk register, documented Sector Safety Risk Profiles (SSRPs), surveillance activity information from Sky Sentinel and regulatory information held in the EAP system. Aviation safety risks were to be identified on the CASA aviation safety risk register prior to the adoption of a centralised register in December 2021.
- 2.47 Some of these approaches are yet to be fully implemented or are undergoing change so not all aviation safety risks are identified or are current.
- CASA changed its approach to sector risk profiling in August 2021 away from developing a published SSRP report to forming sectoral working groups that would convene for each

¹⁴ Reporting of operational risks was made at branch level prior to August 2020.

- sector every 18 months and publish a 'sector risk focus document'. CASA's work on SSRPs commenced in 2014 and only 7 of 14 SSRPs were finalised.
- CASA advised the ANAO in November 2021 that it is 'currently populating the aviation safety risk register based on the outcomes of internal risk analysis workshops. To date Large Aeroplanes and Small Aeroplanes have been completed. The risk assessments are developed to support CASA's decision-making by demonstrating how CASA controls (regulations) mitigate risk. In the future it is hoped that outputs of surveillance can be used in conjunction with these risk assessments to better understand the impact of surveillance trends on risks for different aviation sectors'.
- 2.48 The ANAO considers that CASA needs to finalise its work on identifying aviation safety risks and update these on a regular basis.

Surveillance planning

Consideration of risk consequence and risk likelihood

- 2.49 The scheduling of planned surveillance using the NSSP was implemented on 1 July 2018. Since the implementation of the NSSP, around 1,000 surveillance events have been scheduled annually (see Appendix 7).
- 2.50 According to the NSSP manual, the first step in prioritising authorisation holders (AHs) for the purpose of developing the annual surveillance schedule has been to allocate AHs into three groups (A, B and C) based solely on risk consequence with surveillance oversight based on their grouping (see Table 2.1).
- Group A authorisation holders are associated with a higher risk consequence, such as regular public transport carrying more than 9 passengers, aerodromes with high to very high levels of regular public transport or general aviation traffic and associated service and product providers.
- Group B authorisation holders are those which do not more appropriately belong in groups A and C.
- Group C authorisation holders are associated with a lower risk consequence, such as those
 involved in small operations involving single pilot and no passenger activity, aerodromes
 with occasional general aviation traffic and certain low volume product manufacturers.
 Charter operators are not included in this group.

Table 2.1: National Surveillance Selection Process AH groups and number of identified AHs, 2021–22

Group	Risk consequence	Scheduled surveillance approach	No. of AHs in group 2021–22
Α	Higher	Continuous engagement	271
В	Not higher or lower	Ranking system to prioritise surveillance based on:	1747
		a maximum interval between surveillance activities and the time since the last surveillance activity	
		 selected operator characteristics using the AHPI tool^a (see paragraph 3.9) 	
		surveillance coverage of operator systems in the previous three years	
		surveillance outcomes in the previous four years	
С	Lower	None	180

Note a: The AHPI (Authorisation Holder Performance Indicator) tool is an assessment completed by CASA staff using a word picture questionnaire. The questionnaire covers factors associated with the AHs management, organisation, operations and regulatory history.

Source: ANAO analysis of CASA documentation.

2.51 CASA's risk management manual requires consideration of both risk consequence and risk likelihood (see paragraphs 2.37 to 2.39). CASA's categorisation of authorisation holders solely based on risk consequence is inconsistent with these requirements. In February 2022, CASA advised the ANAO that:

The Minister's Statement of Expectations makes clear the expectation that our focus has to be on the safety of the travelling public. To comply with this, the consequences of an accident must be a key factor, not just the likelihood. I also note that our approach is consistent with the Commonwealth risk management better practice guidance as well as ISO 31000:2018 (Risk Management).

- 2.52 The ANAO notes that the Commonwealth risk management guidance¹⁵ and ISO 31000:2018 both include a risk management approach that incorporates risk consequence and risk likelihood as part of the risk management process.
- 2.53 The ANAO suggests that CASA should incorporate risk likelihood into its risk assessment approach to group authorisation holders as part of its surveillance approach. If this approach is not adopted, the ANAO suggests CASA should clearly establish the basis for not considering risk likelihood in its allocation of authorisation holders into the three surveillance groups.

Consideration of sectoral and operator risks

2.54 As noted in Table 2.1, a measure of operator risk is incorporated into the NSSP scheduling for group B only. There is no consideration within the group allocation criteria for the prioritisation

¹⁵ Department of Finance, Resource Management Guide 211 Implementing the Commonwealth Risk Management Policy – Guidance, Department of Finance, Canberra, 2016, p. 33, available from https://www.finance.gov.au/government/managing-commonwealth-resources/implementing-commonwealth-risk-management-policy-rmg-211 [accessed 23 March 2022].

of surveillance according to identified sector risk, such as that identified in sector-based risk profiles (see paragraph 2.47).

- 2.55 Risk indicators used for surveillance planning by aviation regulators in New Zealand and Canada include several broader indicators of risk including national safety concerns and initiatives, sector trends and the presence of a safety management system. Aviation regulators in these two countries also use risk likelihood as a basis for prioritising surveillance.
- 2.56 CASA considered an alternative method in January 2020 to assess risk to prioritise surveillance resources to achieve the NSSP target in the second half of 2020–21. This approach proposed the use of an operator risk profile for AOCs and Approved Maintenance Organisations (AMOs) based on a formula that included the Authorisation Holder Performance Indicator (AHPI) score, location, incidents and number of aircraft operated/maintained and the number of regulatory services tasks completed, the latter of which was assumed to decrease risks as a result of AH interactions with CASA. CASA advised the ANAO in January 2022 that this approach was one option considered in reviewing alternative methods to achieve the NSSP target. The ANAO notes that the approach was not implemented and that CASA has advised the ANAO that the current approach includes the use of desktop surveillance events and 'remote surveillance' using a multimedia approach to validate AH compliance without physically attending on-site.

COVID-19 pandemic response and consideration of sectoral and operator risks

- 2.57 CASA paused surveillance for two weeks from 20 March 2020 to 'enable a considered review of planned surveillance for the remainder of the NSSP year'. In May 2020, CASA established principles to adapt the NSSP schedule to consider emerging and changing risks for each sector and an assessment of all AHs against identified risks.
- 2.58 An interim methodology to give a more detailed consideration of risks at the sectoral and operator level was established in June 2020 to guide decision making on undertaking surveillance to October 2020. This was to consider those operators who were not able to be audited as part of the 2019–20 scheduled program, those operators included in the first three months of the 2020–21 program and those response activities on hand or that may arise over the period to October 2020.
- 2.59 Additional risk criteria considered in prioritising surveillance for these operators over this period included:
- sectors where there was an imminent increase in sector risk identified; and
- operators where organisational risks were rated higher using changes in the level of activity, the AHPI score, whether there had been a loss of key personnel and the share of staff who were no longer operational.
- 2.60 CASA advised the ANAO in December 2021 that this surveillance methodology was not completely implemented. CASA noted that the remaining NSSP events for 2019–20 were assessed to determine highest priority and the NSSP for 2020–21 was split into two tranches with the first including a three-month schedule that included organisations assessed to be a higher priority.

Sectoral approaches to surveillance prioritisation

2.61 There are several sectors that are not included in the NSSP prioritisation process or have a sector-based prioritisation process.

- Industry delegates such as 'Designated Aviation Medical Examiners' and 'English language standard assessors' are subject to alternate surveillance activities and are not included in the NSSP.
- The aerodrome and remotely piloted aircraft systems sector are prioritised separately and then included in the NSSP schedule. They are not rated consistently with the other sectors.
- 2.62 The ANAO considers that the segmented approach to surveillance prioritisation for industry delegates that are not included in the NSSP and the approach used for some sectors within the NSSP does not provide for a clear and consistent risk management approach across CASA. As noted in paragraph 2.35, CASA is considering incorporating additional classes of delegates within the NSSP in future years.

Recommendation no. 2

- 2.63 The Civil Aviation Safety Authority improve its approach to risk by:
- incorporating risk likelihood as part of its approach to surveillance planning or clearly establish the basis for not considering risk likelihood in its prioritisation of authorisation holders for surveillance; and
- applying the risk and prioritisation framework consistently across all sectors and industry delegates.

Civil Aviation Safety Authority response: Agreed.

2.64 CASA has a sound risk management process, which provides for consideration of likelihood risk in accordance with best practice but does apply a heavier focus on risk consequence on surveillance events to best support aviation safety outcomes. In accordance with Recommendation 1 and 5, CASA will address this recommendation when formalising the National Oversight Plan (NOP) and finalising its review of the National Surveillance Selection Process (NSSP).

Surveillance conduct

Surveillance scope

- 2.65 Determining the scope of surveillance events incorporates elements of judgement by CASA staff in assessing risk and is informed by a range of information including previous surveillance events, and other safety data related to an AH. As part of the NOP, CASA intended to annually mandate from 1 July 2019 key focus areas (KFAs) for each sector that would be used by surveillance staff in their surveillance activities, with the intention that 80 per cent of effort would be directed towards the specified high risk areas.
- 2.66 The initial development of KFAs in early 2019 was informed by factors such as issues that arose from routine monitoring, high risk occurrence types and sector risks identified through the sector risk profiles. However, the development of the KFAs was delayed and none were published for the 2019–20 period.
- 2.67 KFAs for the period to 2020–21 were not published until November 2020, with CASA's approach to developing the KFAs noting that:

COVID-19 significantly changed the aviation risk environment. This means that reliance on historical data and sector profiles, which is often a good predictor of future conditions, did not provide CASA with an appropriate focus this year. Instead RSSD [Regulatory Services and Surveillance Division] developed an alternative approach to utilise past data and sector risk profiles, in combination with COVID-19 sector-based survey information, inspector expertise and international benchmarking.

- 2.68 CASA announced the KFAs for 2021–22 in September 2021. CASA's approach to KFAs for this period was largely based on a qualitative review by CASA's surveillance staff, rather than a consideration of sector-based data on safety risks.
- 2.69 Delays to the identification and use of KFAs have limited the ability of CASA to target identified areas of risk within sectors. Further development of KFAs should incorporate quantitative data on risk in addition to qualitative reviews by CASA staff and be communicated to industry in advance of each year's NSSP schedule commencing.

Managing conflicts of interest

- 2.70 There is a potential ongoing risk to CASA's reputation and the effective conduct of surveillance activities that inspectorate staff may be influenced or appear to be influenced in their decision making by any professional background in the aviation industry, personal interests or the interests of family members.
- 2.71 CASA staff are required under an instruction issued by the CASA Director of Aviation Safety¹⁶ (see paragraph 1.2) to complete a conflict of interest (COI) declaration using CASA's online COI management system within seven days of commencement with CASA.¹⁷ Staff are also required to review and confirm that their COI declaration remains correct during their annual performance cycle discussions and to immediately update their declaration when they become aware of a change in circumstances which might give rise to an actual, potential or perceived conflict of interest between their private or pecuniary interests and their duties as a CASA officer.¹⁸
- 2.72 A May 2021 internal audit report on CASA's fraud control and integrity review found that more than 30 per cent of staff who had declared a conflict of interest when they had applied for a job with CASA had not made a declaration within seven days of their commencement and that CASA did not have a system in place to manage the requirement to annually review and confirm that COI declarations remained current.
- 2.73 Examination by the ANAO of a targeted sample of COI declarations made by selected senior CASA surveillance staff and an inspectorate team involved in regulatory activities revealed a range of issues associated with the implementation of CASA's COI approach including:
- the non-declaration of previous employment within the aviation sector;

¹⁶ The CASA Director of Aviation is also the Chief Executive Officer of CASA.

¹⁷ The instruction also requires all ranked candidates in a recruitment process and all non-ongoing staff to complete a conflict-of-interest form to enable the identification and assessment of any actual, potential or perceived conflicts of interest with their duties and functions as CASA officers.

Guidance provided to CASA officers in relation to identifying and assessing actual, potential or perceived conflicts of interest in making these declarations included examples of the kinds of personal interests that need to be disclosed and managed such as prior employment with an operator subject to regulatory oversight by CASA and a financial interest in an operator regulated by CASA.

- senior surveillance staff not completing a COI declaration or making an initial declaration several years after their commencement or as required in November 2017 at the time of the implementation of the COI declaration management system;
- inconsistent practices observed for staff in making new declarations including where a conflict of interest had been noted by managers; and
- the holding of airline shares by several staff did not always result in action being taken to manage conflicts of interest.
- 2.74 CASA advised the ANAO in February 2022 that it had undertaken activities in response to the internal audit on fraud control and integrity review including:
- revising and re-releasing the conflict of interest training module in late 2021, requiring completion by staff of COI training every two years; and
- a planned amendment to the performance management system at the beginning of the 2022–23 cycle to prompt staff to discuss their COI declarations with their supervisors and update as necessary.

Recommendation no. 3

2.75 The Civil Aviation Safety Authority strengthen its approach to obtaining conflict of interest declarations by regulatory staff and managing any risks that are identified.

Civil Aviation Safety Authority response: Agreed.

2.76 CASA's conflict of interest (COi) framework is well developed, and is contained in a Board Policy, a Chief Executive Officer Instruction and in the requirement that COi declarations must be completed during recruitment and procurement processes. Following an internal audit report in 2021, CASA reviewed its mandatory training requirements, by including a reminder that COi declarations are to be completed at the commencement of employment and introducing a requirement for follow-up training at two-yearly intervals. While it is currently mandatory for staff to discuss existing COi arrangements with their supervisors during annual performance and communication scheme discussions, from 2022-23 the online system will be reconfigured to include acknowledgement that staff have made a COi declaration and that their declaration is up to date. This will help to ensure that annual COi discussions take place, COi declarations are upto-date and that any risks are identified and managed. Once these changes have been applied for a 12-month period, CASA will assess the improvements and look to identify further scope for strengthening declaration arrangements for regulatory staff, including for managing any risks that are identified.

Does CASA's surveillance approach comply with Australia's obligations under international agreements and commitments?

CASA's surveillance approach largely complies with Australia's obligations relating to surveillance under the Chicago Convention. The key shortcomings are that:

• CASA does not have a resourcing framework to match anticipated levels of surveillance activity with the technical and other staff needed to meet these levels;

- CASA's training and work allocation arrangements do not ensure that inspectors possess and retain the necessary skills and competencies to undertake the surveillance tasks that they are assigned to;
- There has been a lack of succession planning to ensure adequate capacity in key technical areas;
- The currency of CASA's guidance needs to be maintained and the NOP documented; and
- CASA's enforcement approach can be improved.

International agreements and commitments

- 2.77 The Civil Aviation Act requires CASA's surveillance activities to be performed in a manner consistent with Australia's obligations under the Chicago Convention¹⁹ and any other agreements between Australia and other countries relating to the safety of air navigation.
- 2.78 CASA has entered into bilateral agreements with eight countries relating to the reciprocal recognition of technical approvals for airworthiness and memoranda of understanding for the promotion of civil aviation safety. CASA also has agreements with the European Aviation Safety Agency (EASA) regarding cooperation on the oversight of the Airbus A380 fleet and for the inspection of foreign aircraft under the EASA Safety Assessment of Foreign Aircraft (SAFA) program.
- 2.79 Australia is required to meet eight 'critical elements' under the Chicago Convention, five of which directly relate to surveillance activities (Table 2.2).

Table 2.2: Chicago Convention Annex 19 critical elements related to surveillance

Critical element	Summary of requirements		
State civil aviation systems and safety oversight functions. (critical element 3)	The establishment of a Civil Aviation Authority (CAA) and/or relevant authorities or government agencies, headed by a Chief Executive Officer, supported by the appropriate and adequate technical and non-technical staff and provided with adequate financial resources.		
Technical personnel qualifications and training (critical element 4)	The establishment of minimum knowledge and experience requirements for the technical personnel performing safety oversight functions and the provision of appropriate training to maintain and enhance their competence at the desired level. The training should include initial and recurrent (periodic) training. A system for maintaining the training records for technical personnel is required to be implemented.		
Technical guidance, tools and provision of safety-critical information (critical element 5)	The provision of technical guidance (including processes and procedures), tools (including facilities and equipment) and safety-critical information, as applicable, to the technical personnel to enable them to perform their safety oversight functions in accordance with established requirements and in a standardised manner. In addition, this includes the provision of technical guidance by the oversight authority to the aviation industry on the implementation of applicable regulations and instructions.		

¹⁹ The Chicago Convention on International Civil Aviation (the Chicago Convention) establishes the international framework for aviation rules and regulation, including the establishment of the International Civil Aviation Organization (ICAO). Australia ratified the convention in 1947. The primary legislation in Australia that gives effect to the convention is the *Air Navigation Act 1920*, which contains provisions for regulations to be made for the purpose of carrying out, and giving effect to, the Chicago Convention and international standards and recommended practices contained in any Annex to the convention.

Critical element	Summary of requirements
Surveillance obligations (critical element 7)	The implementation of processes, such as inspections and audits, to proactively ensure that aviation licence, certificate, authorisation and/or approval holders continue to meet the established requirements and function at the level of competency and safety required by the State to undertake an aviation-related activity for which they have been licensed, certified, authorised and/or approved to perform. This includes the surveillance of designated personnel who perform safety oversight functions on behalf of the CAA.
Resolution of safety concerns (critical element 8)	The implementation of processes and procedures to resolve identified deficiencies impacting aviation safety, which may have been residing in the aviation system and have been detected by the regulatory authority or other appropriate bodies.

Source: International Civil Aviation Organization, Annex 19 to the Convention on International Civil Aviation, Safety management, Second edition July 2016.

2.80 The International Civil Aviation Organization (ICAO), the international organisation established by the Chicago Convention, undertakes a range of oversight activities to ensure states are fulfilling their responsibilities under the convention. This has included two audits of Australia's arrangements to implement the critical elements which scored Australia's effective implementation as 83.38 per cent in 2008 and 94.98 per cent in 2017. In 2008, the effective implementation for critical element 3 (State civil aviation systems and safety oversight functions) was 90.93 per cent and for critical element 4 (technical personnel qualifications and training) it was 51.14 per cent. In 2017, the respective effective implementation rates for these critical elements were assessed to be 98.77 per cent and 92.31 per cent respectively.

Complying with international agreements and commitments

- 2.81 Annual calendar year targets for the inspection of foreign aircraft are agreed with EASA for the SAFA program each year. CASA has largely met its agreement with EASA, having completed 494 EASA inspections of foreign aircraft over the period July 2017 to December 2021. While CASA exceeded the target in 2019, CASA advised that it did not meet the 2020 target due to the inability to undertake inspections from March to October 2020 as a result of the COVID-19 pandemic restrictions.
- 2.82 In assessing compliance with the Chicago Convention requirements, the ANAO examined CASA's performance against selected parts of the surveillance-related critical elements.

Inspectorate resourcing

- 2.83 ICAO critical element 3 requires that signatories to the Chicago Convention ensure that aviation regulators are established with sufficient and qualified personnel and are adequately resourced for the management of safety.
- 2.84 As of 30 June 2021, CASA employed 857 staff, with around 115 staff allocated to surveillance activities as of February 2022. Of the total staff at 30 June 2021, 338 staff worked in technical classifications (Table 2.3). Not all these technical staff undertake surveillance activities, with the separation of guidance and regulatory functions from surveillance across some areas. The number of technical staff has declined over almost all classifications, with an increase in staff employed in the 'Aviation Safety Regulator Other' classification.

Table 2.3: CASA technical staff, 2017 to 2021

	June 2017	June 2018	June 2019	June 2020	June 2021
Aviation Safety Regulator – Aerodrome Inspector	14	10	9	10	9
Aviation Safety Regulator – Airworthiness Inspector	63	63	59	51	49
Aviation Safety Regulator – Aviation Safety Advisor	8	7	8	7	7
Aviation Safety Regulator – Othera	115	118	124	130	148
Aviation Safety Regulator – Safety Systems Inspector	16	16	15	12	11
Certificate Team Manager	30	37	42	46	35
Flight Training Examiner	13	12	10	11	11
Flying Operations Inspector	77	79	71	68	68
Total technical staff	336	342	338	335	338

Note a: The 'Aviation Safety Regulator Other' category includes 84 different types of position classifications including cabin safety inspectors, dangerous goods inspectors, manufacturing inspectors and remotely piloted aircraft systems inspectors.

Source: CASA annual reports (2017 to 2020) and CASA documentation (June 2021).

- 2.85 Proposals by CASA staff for additional surveillance resources put to CASA management over recent years have included modelling of anticipated workloads across parts of CASA's inspectorate, outlined key priorities that need to be met and noted the need for succession planning in some areas to cover staff absences considering the number of staff at, or approaching, retirement age.
- 2.86 Internal CASA communication on achieving the 2020–21 NSSP targets included advice in September 2020 to adjust the type of audit required to be conducted from a more detailed level 1 audit to a level 2 audit if a risk assessment supported this approach. Another proposal in January 2021 to achieve the remaining events in the last six months of the period was to reconsider, following a separate risk assessment process, whether the scheduled events should be carried out as a desktop audit, a virtual audit or an on-site audit.
- 2.87 In reviewing the resources required in May 2021 to fully deliver the NSSP program for the Regulatory Oversight Division in 2021–22, CASA staff estimated in a paper considered by the OEG that it required an additional 43 technical staff, including 26 airworthiness inspectors, nine flight operations inspectors and eight safety systems inspectors. CASA advised the ANAO that this paper was considered in the context of finalising staffing levels/allocation for the national operating model structure that was implemented on 12 July 2021.
- 2.88 CASA's People Committee identified in May 2021 that CASA did not have a formal succession planning strategy for critical roles and that the lack of a formal approach to succession planning may impact on the ability of CASA to deliver on critical functions in the future. CASA advised the ANAO

in February 2022 that there were several workforce planning projects underway to address these issues including a project to review critical roles and a review of the job family framework.²⁰

2.89 CASA's compliance with critical element 3 is reduced by the lack of a resourcing model for surveillance activities and the absence of formalised succession planning. CASA should develop a surveillance resourcing framework to match anticipated levels of activity with the technical and other staff needed to meet these levels, including continuing with succession planning activities recently commenced. The framework should also consider comparisons with equivalent overseas regulators on surveillance staffing and the level of aviation activity in different sectors.

Technical personnel skills, training and competency

- 2.90 A training directive issued by the CASA's Director of Aviation Safety (see paragraph 1.2) requires that all regulatory staff must be provided with the technical and administrative training to effectively fulfil safety oversight responsibilities.²¹ A stated purpose of the directive is to ensure that staff training complies with the ICAO critical element 4 requirements.
- 2.91 CASA has established a formal training program for its inspectorate staff that incorporates mandatory induction training covering general organisational policies as well as technical training which includes on the job elements and ongoing recurrency requirements. CASA aligns its training with ICAO requirements.
- 2.92 In late 2018, mandatory training completion rates for foundation training for CASA's flying operations; airworthiness; and safety systems inspectors across all CASA regions were at or close to 100 per cent. Completion rates for on-the-job training and recurrent training varied across regions and the evidence showed that training had not been completed in full for these inspector types. While training data from September 2021 show that there has been an overall improvement in completion rates for these inspector types, with foundation and advanced training completion rates at or approaching 100 per cent, advanced training completion rates across 30 'other' inspector types covering 135 inspectors was 71 per cent.
- 2.93 CASA delivered recurrency training for its inspectorate staff in 2017, 2019 and 2021. The attendance rate for the 2017 training was less than 60 per cent and the attendance rate for the 2019 training, delivered between June 2019 and February 2020, was 98.7 per cent. CASA advised the ANAO that the attendance rate for the 2021 training, delivered in October 2021, was 93.2 per cent, with seven staff yet to begin the training.
- 2.94 Staff in specified positions must hold and maintain flight crew licence qualification and to undertake flying currency and training (FCAT) to ensure they can adequately and safely conduct certain duties relevant to their position. Approvals to undertake FCAT are made on an ad hoc basis as individual inspectors look ahead at their own allocated jobs and identify the required currency for the tasks. Since 2017–18, annual expenditure on FCAT for CASA staff has declined by 70 per cent, from \$2.2 million in 2017–18 to \$0.7 million in 2020–21 (Figure 2.1).

The project to identify critical roles is part of CASA's succession planning strategy. This included collecting information from business areas in late 2021. The job family framework is a workforce segmentation tool that maps positions to roles and functions. As of 30 June 2021, around one-third of CASA's technical staff were aged 60 or more and around five per cent were aged 70 or more. This presents a challenge for CASA of its ageing technical workforce and the need for appropriate recruitment strategies, training and succession planning.

²¹ The training directive was first issued in October 2015 and has been updated on a number of occasions.

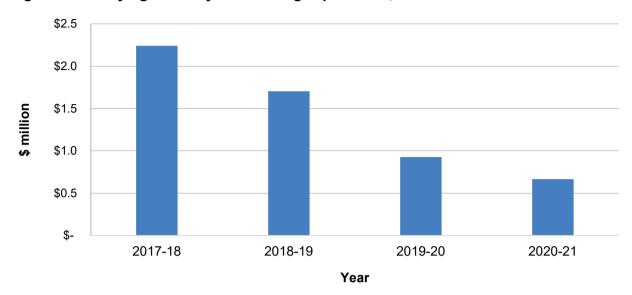


Figure 2.1: Flying currency and training expenditure, 2017–18 to 2020–21

Source: ANAO analysis of CASA documentation.

2.95 Internal audits conducted during 2019 and early 2020 on CASA's training management and FCAT included findings relating to monitoring and follow-up of progress against mandatory training requirements, assessment of formal competency prior to the allocation of tasks and assessment of training programs against currency requirements for job roles. Implementation of these recommendations is monitored by CASA's Board Audit and Risk Committee. While CASA had largely implemented the recommendations from these audits by December 2021, the implementation of some recommendations had been delayed:

- evaluation of training programs to determine training relevance to roles (expected completion March 2022) and criteria to conduct and sign off on the on-the-job training component of training programs (expected completion 24 December 2021);
- strengthening controls to limit allocation of tasks to staff with confirmed competency (expected to be closed in April 2022)²²; and
- improved FCAT planning (expected completion March 2022).²³

2.96 CASA advised the ANAO in January 2022 that:

Subject to [Board Audit and Risk Committee] approval, the Training Internal Audit recommendations will meet the expected completion dates. However, should there be a need for a digital solution to be built and implemented, that will not be achievable by the current completion date.

[Regulatory Oversight Division] expects that the review/planning portion of the FCAT Internal Audit recommendations will met by 31 March 2022 ... However, implementation may not be fully

Implementation of the recommendation to strengthen controls on the allocation of tasks to staff with a confirmed competency is dependent on adoption of additional functionality in the EAP system. The existing approach relies on managers allocating staff in accordance with training records.

²³ CASA advised the ANAO in February 2022 that the Board Audit and Risk Committee was 'closely monitoring' this recommendation.

- completed by March 2022 as any changes to processes/systems will require consultation as well as training of staff. It may also require a digital solution to be built and implemented.
- 2.97 While CASA's surveillance staff have largely completed mandatory training requirements and undertaken recurrency training on a regular basis, without the finalisation of the internal audit recommendations noted in paragraph 2.95 CASA's compliance with ICAO critical element four is reduced.
- 2.98 The ANAO suggests that the internal audit recommendations on CASA's training management and FCAT, noted in paragraph 2.95 be fully implemented.

Other surveillance-related critical elements

- 2.99 ANAO analysis shows that CASA can improve on its compliance with other surveillance-related ICAO critical elements including:
- surveillance obligations (critical element 7) formalising and documenting the NOP (paragraph 2.12);
- technical guidance, tools and provision of safety-critical information (critical element 5) improvements to CASA's guidance (paragraphs 2.23 to 2.28); and
- resolution of safety concerns (critical element 8) improvements to CASA's enforcement approach (paragraphs 3.37 to 3.40).

3. Monitor compliance and review the planning and conduct of surveillance activities

Areas examined

The ANAO examined whether CASA effectively monitored compliance and reviewed the effectiveness of its planning and conduct of surveillance activities.

Conclusion

CASA has been partly effective in monitoring compliance and reviewing its planning and conduct of surveillance activities. While CASA has a system for monitoring compliance, there has been a downward trend in the level of surveillance in recent years, a trend that commenced prior to the COVID-19 pandemic. In addition, CASA has not regularly reviewed and updated its planned surveillance approach. There is no quality assurance process in place for reviewing the quality of surveillance activities, and there has been no plan developed for reviewing the National Oversight Plan.

Areas for improvement

The ANAO made two recommendations aimed at CASA implementing a process for tracking and reporting on surveillance referrals to enforcement, and review of the National Oversight Plan and, in particular, the National Surveillance Selection Process (NSSP).

- 3.1 Surveillance is CASA's method of monitoring aviation industry compliance with the regulatory framework. The ANAO examined whether CASA:
- is monitoring compliance because non-compliance with regulation by the aviation industry increases the risk of incidents and accidents; and
- has developed a process for its review and update of its surveillance approach as required by the *Public Governance, Performance and Accountability (PGPA) Act 2013*.

Does CASA effectively monitor industry compliance and act upon identified non-compliance?

CASA has been partly effective in monitoring industry compliance and acting upon identified non-compliance. A decline in surveillance commenced prior to the COVID-19 pandemic and there has been inconsistent application of surveillance guidance. Surveillance data is not timely, lacks accuracy and is not supported by current metadata. CASA did not meet its goal of acquitting safety findings in 2021 and has no system of monitoring surveillance referrals to enforcement.

3.2 CASA is responsible for conducting surveillance events on all civil aviation authorisation holders (AHs) within Australia and for Australian AHs overseas. CASA undertakes different levels of surveillance on AHs that CASA indicates will involve a broadly scoped systemic review or be more specific, narrowly scoped with a focus on a particular aspect of the authorisation. The CASA Surveillance Manual notes that the type of audit to be undertaken will be determined by the

surveillance team (previously referred to as the authorisation management team)²⁴, that is, there is flexibility in determining the type of surveillance event to be undertaken.

- 3.3 A level 1 audit²⁵ is a: '...structured, forward-planned, larger-type surveillance event'. Level 1 audits include:
- Systems Audits generally involves a multi-disciplinary team of inspectors undertaking a
 more comprehensive on-site assessment of activities that an operator is authorised to
 undertake;
- Health Checks a more narrowly scoped systems audit requiring less resources with a focus on specific areas of the operator's authorised activities; and
- Post Authorisation Review a surveillance event that CASA mandates to be conducted within six to 15 months after an initial authorisation is issued '...to ensure standards are being maintained'.
- 3.4 A level 2 audit is less formal, shorter in duration with the scope of the audit more narrowly defined '...and may be in the form of checklist-based compliance and product checks of a specific section of its systems'.
- 3.5 Figure 3.1 shows an overall decline in the total number of all surveillance events (level 1 and 2) on AHs holding all certificate types from 2017–18 to 2020–21. There was a substantial rise in surveillance event activity in 2018–19, largely driven by a greater proportion of response events (not planned) compared to planned events conducted with declines in 2019–20 and 2020–21 over the period impacted by the COVID-19 pandemic.

²⁴ The Surveillance Team is defined in the January 2022 CASA Surveillance Manual (CSM) as a group of Inspectors led by a Surveillance Manager that plan and manage surveillance activities on authorisation holders oversighted by their respective offices/branches. The Authorisation Management Team was defined in the January 2021 CSM as an allocation of inspectorate staff assigned to conduct the aviation safety and regulatory oversight of a number of authorisation holders.

²⁵ CASA's process for conducting a Level 1 surveillance event includes: developing a timetable with a proposed onsite start and finish date; providing written notification of the proposed surveillance event to the AH at least one month prior to the event; conducting an entry meeting; regular engagement with the AH over the surveillance event period; conducting an exit meeting; appropriately keeping records; providing a written surveillance report to the AH and following up on any safety findings identified in the surveillance event and required action, including enforcement.

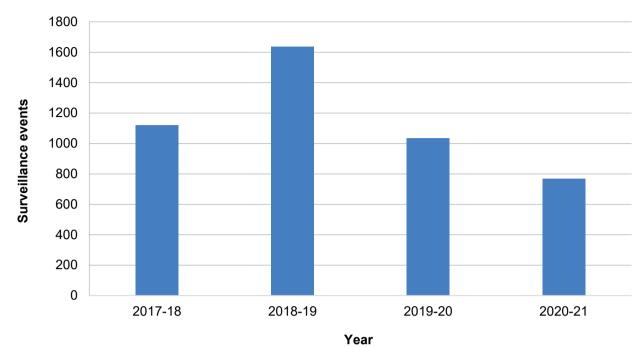


Figure 3.1: Total number of surveillance events: 2017–18 to 2020–21

Notes: CASA data used for this figure cannot be disaggregated showing level 1 and 2 surveillance events.

CASA noted changes to regulations and the surveillance approach over this period.

Source: ANAO analysis of CASA data.

Assessment of an authorisation holder

- 3.6 The CASA Surveillance Manual notes that the first stage in CASA's surveillance process is to assess the apparent risk to safety presented by an AH. Surveillance Teams (Authorisation Management Teams prior to January 2022) are expected to assess a variety of information including outstanding safety findings and safety finding history; system risk profile/history; time since the last level 1 and level 2 surveillance event; any available additional intelligence and results from the last authorisation holder performance indicator (AHPI) survey (discussed at paragraph 3.9).
- 3.7 Prior to January 2022, Authorisation Management Teams were also expected to formally discuss AH performance profiles within the team either one, six or 12 monthly, depending on the risk rating of the AH. There were no CASA meeting records to indicate there were formal discussions by the relevant oversight groups responsible for the review of AH performance profiles (pre and post-implementation of the National Oversight Plan), as required according to the CASA Surveillance Manual (CSM) prior to January 2022. CASA advised the ANAO in November 2021 that:

This level of monitoring suited the previous regional model, but not the national model so there is an element of 'catching up' to do in relation to the CSM. The previous model was conducive to considering authorisation holders by regional office as it was a smaller group to review. The new national model creates a much larger group to conduct these reviews on which is less efficient and the level of effort this requires may have been misunderstood. The national model is shifting to a more 'data profile' approach which will also include a monitoring portion but that is still developing.

3.8 Since the January 2022 update of the CSM, Surveillance Teams are not required as a team to formally discuss AH performance profiles.

Authorisation holder performance indicator (AHPI) survey

- 3.9 One of CASA's key tools to inform its assessment of an AH and the prioritisation of surveillance scheduling for group B authorisation holders (AHs) is the AHPI. An AH is assessed by CASA and scored according to the AH's response to the AHPI 'word picture survey'. The survey asks questions that will be associated with the AH's compliance covering relevant documents and procedures, decision making, assurance, training, and communication that, if deficient, are deemed by CASA to have the potential to trigger or contribute to adverse safety outcomes.
- 3.10 The highest 10 per cent of AHPI scores will have a category one oversight posture (prior to January 2022, formal discussion was expected to be held with the AH within one month of completing the AHPI, from January 2022 this requirement changed to 6 monthly), and the remainder category two (prior to January 2022, formal discussion was expected to be held with the AH within 6 months of completing the AHPI, from January 2022 this requirement changed to 12 monthly).
- 3.11 The CASA Surveillance Manual indicates that AHPI assessments are undertaken every 6 to 12 months, depending on the risk to safety posed by AHs. CASA was unable to provide time series data on the progress in undertaking AHPIs, including at a regional level, from 2018–19 to 2020–21 as '...Sky Sentinel is unable to produce reports at this level of detail'.
- 3.12 Figure 3.2 illustrates the ANAO's point in time analysis of AHPIs overdue as of 30 June 2021.

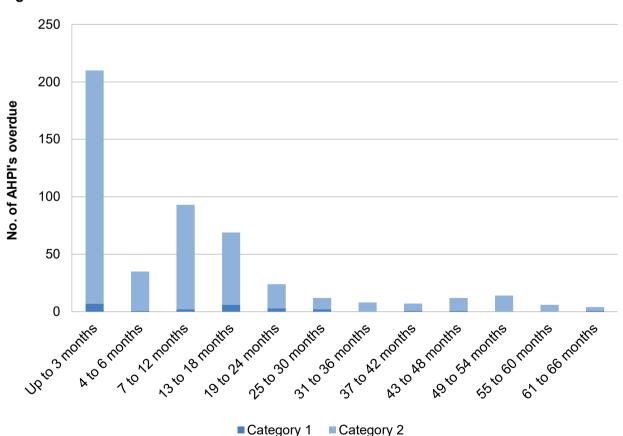


Figure 3.2: Number of AHPIs overdue as of 30 June 2021

Source: ANAO analysis of CASA data.

- 3.13 As at 30 June 2021, there were nearly 500 AHs which CASA identified as having overdue AHPIs, or 21 per cent of all AHs. The proportion of overdue AHPIs considered by CASA to be high priority was 5 per cent.
- 3.14 CASA currently reports weekly on AHPIs due in the next month and AHPIs overdue to its National Surveillance Managers' meeting. CASA in its reporting to the Aviation Safety Committee (ASC) in October 2021, indicated that '...a backlog of AHPIs exists due to previous prioritisation away from AHPIs in some regional offices. Current surveillance managers are now conducting a focussed campaign to complete AHPIs. Further, the forthcoming Surveillance Workshop will be tasked with reviewing the AHPI process to determine if there is a more effective way of achieving the safety outcome desired' (further detail on the ASC is at paragraphs 2.15 and 3.52 to 3.56).
- 3.15 On 2 November 2021, there were 322 AHPIs overdue. As of 16 March 2022, there were 420 AHPIs overdue.

Planned Surveillance

- 3.16 The annual development of the NSSP schedule generally commences in April each year with a draft schedule developed by reviewing data on AHs in Sky Sentinel and the electronic document management system files; automatically including all Group A AHs; and prioritising Group B AHs (see paragraph 2.50 for further detail on groups). The NSSP annual schedule is then sent to managers and staff in regional offices for further refinement based on local knowledge with the final schedule approved by the Oversight Executive Group (OEG).
- 3.17 An AH can hold multiple related certificate types. Where an AH holds multiple related certificates, CASA noted in its NSSP 2020–21 draft schedule development guidance that subordinate or lower priority permissions are not included in the NSSP, although CASA also notes that all related permissions must be considered when preparing to conduct planned surveillance for relevant AHs.
- 3.18 Figure 3.3 shows NSSP surveillance events reported by CASA as either commenced or completed as a proportion of AHs from 2018–19 to 2020–21. It illustrates a significant decline over time in the proportion of AHs that are being subject to surveillance. CASA advised the ANAO in November 2021 that it is not possible to provide data on planned events prior to the introduction of the NSSP.

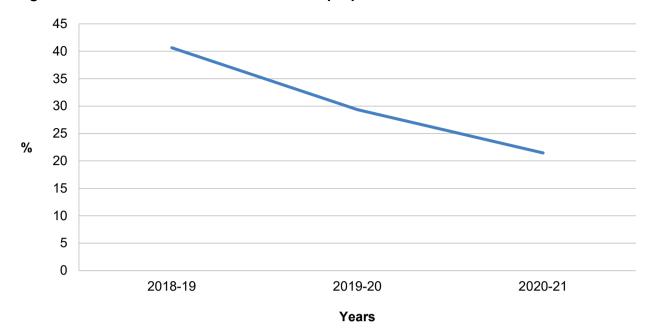


Figure 3.3: NSSP surveillance events as a proportion of all authorisation holders

Note: NSSP surveillance includes commenced or completed events in the relevant year.

Source: ANAO analysis of CASA data.

Response and campaign surveillance

3.19 Table 3.1 shows the number of response and campaign surveillance events undertaken by CASA between 2018–19 and 2020–21 (further detail on response and campaign events can be found at paragraphs 2.9 and 2.11). There was a 50 per cent decline in response events each year. There were 6 and 7 campaign surveillance events undertaken in 2018–19 and 2020–21 respectively, with no campaign surveillance events undertaken in 2019–20.

Table 3.1: Response and campaign events

Events	2018–19	2019–20	2020–21
Response	711	362	186
Campaign	6	0	7

Source: CASA data.

- 3.20 CASA calculates the number of response events by determining those events that occurred that were not: identified in Sky Sentinel as campaign events; or on the NSSP schedule. Prior to the introduction of the NSSP, CASA has indicated that '...there was no construct that differentiated between planned, response and campaign events', and therefore the number of these events undertaken each year was not separately monitored.
- 3.21 The ANAO analysed CASA data for the period from 2018–19 and 2019–20 and found that there were substantial differences from the period when the response event was scheduled (CASA has advised the ANAO that this is a proposed date 'which may get refined as planning evolves') and when the response event started. There were 94 non-NSSP events where the period between 'surveillance event scheduled start date' and 'surveillance event on-site start date' was

over 31 days. There were 41 non-NSSP events where the period between 'surveillance event scheduled start date' and 'surveillance event on-site start date' was over 62 days. There were 17 events that had a period of between 120 days and 369 days.

3.22 CASA advised the ANAO in December 2021 that:

There are a number of reasons why a surveillance event was created and kept open for a significant length of time, such as:

- The issue turned out to be a non-event and the person who raised the event didn't go back into Sky Sentinel and cancel the event
- The event was created and then we couldn't get to the location because of COVID travel restrictions
- The event was created as a follow up based on the results of a scheduled event and was used as a form of placeholder (this practice is no longer used)
- The event was created, and priorities changed and the event was put back to a more suitable date.

There is a lot more control now that we have a dedicated monitoring and response surveillance team and our surveillance reporting dashboard helps surveillance managers to monitor all of their scheduled and unscheduled surveillance events on a daily basis.

Monitoring an Air Operator's Certificate (AOC) and an Approved Maintenance Organisation (AMO) certificate

- 3.23 The Air Operator's Certificate (AOC) and the Approved Maintenance Organisation (AMO) certificate are the main certificate types that CASA oversights and, in 2020–21, made up 34 per cent and 29 per cent of all AHs respectively. The AOC is initially issued for 12 months and subsequent issue for either: three years for air transport (includes what is defined in CASA's Air Operator's Handbook as regular public transport and charter) and complex aerial work operations; or seven years for non-complex aerial work, and aerial application operations.²⁶
- 3.24 Figure 3.4 shows the number of surveillance events conducted on AOC and AMO AHs over the period from 2015–16 to 2020–21, and those events as a proportion of the total number of AOC and AMO AHs. The data shows a downward trend in the surveillance of AOCs and AMOs, albeit with increase in surveillance activity in 2018–19 (see paragraph 3.5). The ANAO's analysis on the calendar years prior to the impact of the COVID-19 pandemic in 2020 also shows a slight downward trend in the surveillance of AOCs with AMOs.

²⁶ CASA Air Operator's Handbook Volume 1–General Matters, page 35, available from https://www.casa.gov.au/sites/default/files/2021-09/air-operators-certificate-handbook-volume-1-general-matters.pdf [accessed 24 January 2022].

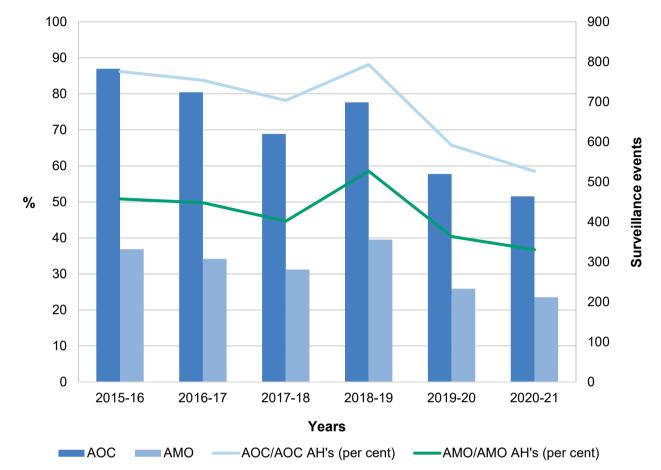


Figure 3.4: Surveillance of AOCs and AMOs

Source: ANAO analysis of CASA data and CASA Annual Reports.

3.25 In planning surveillance, CASA categorise its AOCs and AMOs into groups A, B or C (see paragraph 2.50 for further detail on groups). As of 8 July 2021, CASA data showed an overall decline in AOC and AMO Authorisation Holders in Groups A and C, with an increase in Group B for AMO Authorisation Holders, seen in Table 3.2.

Table 3.2: AOC and AMO authorisation holders categorised by group

	A	В	С		
	AC	OC			
2018–19	91	534	193		
2019–20	79	491	188		
2020–21	71	536	150		
AMO					
2018–19	153	434	68		
2019–20	118	477	27		
2020–21	103	494	25		

Source: ANAO analysis of CASA data.

- 3.26 The CASA NSSP Manual notes that Group A AHs should be subject to continuous surveillance and be subject to a surveillance event at least every year. CASA has not mandated the regularity of Level 1 audits, that is, the maximum period of time allowed between audits.
- 3.27 Figure 3.5 shows level 1 AOC and AMO surveillance events as a percentage of the number of AHs in that year for group A, B and C. While the data shows an increasing proportion of Group A AOC AHs being subject to level 1 audits, this is driven by a decline in AHs categorised into Group A and an increase in events from 2018–19 to 2020–21. For AMOs, the pattern continues for Groups A and B. While there was an increase in the ratio of level 1 surveillance events for Group C, this was driven by a substantial decline in AHs and only 1 surveillance event for Group C was conducted in 2018–19 and 2020–21.

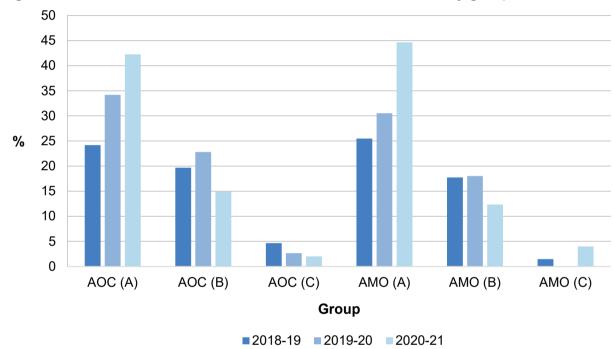


Figure 3.5: Ratio of level 1 AOC and AMO surveillance events by group

Source: ANAO analysis of CASA data.

- 3.28 The ANAO examined CASA analysis on the conduct of AOC and AMO surveillance events undertaken in mid-2020. Findings suggested that there was an inconsistent approach to the surveillance of Group A large passenger carrying airlines (AHs that are to be subject to continuous surveillance) with significant variation in the extent of surveillance between airlines. For example, one major airline had not had a level 1 surveillance event for its AOC and AMO certificate for a period of four and three years respectively.
- 3.29 CASA issued a Temporary Management Instruction in November 2020 providing guidance on when an on-site surveillance event and a desktop surveillance event should be conducted prior to the renewal of an AOC (within 6 to 12 months of the AOC expiring for Group A and B AHs and within 3 months of the AOC expiring for all AHs respectively). Notwithstanding this, CASA does not monitor whether mandated surveillance events required for renewal of AOCs are commenced and completed within the required timeframes after being planned.

Aerodromes

3.30 Aerodrome surveillance is undertaken in the Regulatory Oversight Division where most surveillance is managed (further details in Appendix 4). Figure 3.6 shows the total number of aerodrome surveillance events and the number of those that were level 1 events from 2017–18 to 2020–21. There was an overall decline in level 1 surveillance events with the period prior to the potential impact of the COVID-19 pandemic showing the greatest decline.

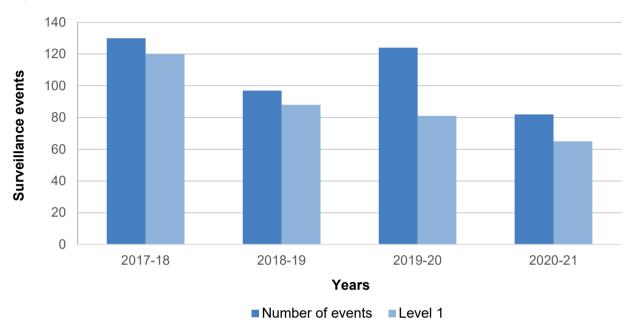


Figure 3.6: Aerodrome surveillance

Source: ANAO analysis of CASA data.

Surveillance effort

3.31 In the NSSP schedule, the resources scheduled for the surveillance event (the number of hours or inspectors allocated) is dependent on whether the surveillance event is classified as a level 1 or level 2. Figure 3.7 shows the number of hours and inspectors (proxy for effort) taken to undertake both level 1 and level 2 surveillance events from 2017–18 to 2020–21. There has been a trend decline in the number of hours dedicated to level 1 and 2 surveillance events from 2017–18 to 2020–21. While there was an increase in the number of inspectors in 2018–19 dedicated to level 1 and 2 surveillance events, there was an overall trend decline from 2017–18 to 2020–21.



Figure 3.7: Surveillance effort — hours and inspectors

Source: ANAO analysis of CASA data.

COVID-19 pandemic

3.32 CASA expected the NOP to be impacted by the COVID-19 pandemic, with surveillance affected by restrictions which, to varying degrees, prevented on-site surveillance events. To address the impact of the COVID-19 pandemic, CASA planned to replace some on-site surveillance events with desktop and remote surveillance events where CASA deemed it appropriate. CASA identified that 230 out of a total of 306 NSSP surveillance events that weren't conducted in 2019–20 (75 per cent) were due to the impact of the COVID-19 pandemic. CASA's own observation has been that the number of desktop events did not increase substantially to compensate for on-site surveillance not being undertaken.

Metadata

3.33 Metadata²⁷ is necessary for developers and users of CASA data to accurately analyse and report on information collected in surveillance. In October 2019, the ANAO found, in assessing

²⁷ Recordkeeping Metadata is defined in the Australian Government Recordkeeping Metadata Standard 2.2 as 'Structured or semi-structured information that enables the creation, management and use of records through time and across domains. Recordkeeping metadata can be used to identify, authenticate and contextualise records and the people, processes and systems that create, manage, maintain and use them'.

compliance against the government's Digital Continuity 2020 policy (DC2020)²⁸ that CASA had partially implemented Australian Government Recordkeeping minimum metadata standards. CASA agreed to the ANAO recommendation that CASA should:

Complete the assessment of existing business systems and processes to ensure that information created, captured, stored used to deliver services, or inform decision making meets minimum metadata standards and functional requirements for the management, transferral, and disposal of information.

- 3.34 CASA inputs information into the Sky Sentinel system during surveillance activity on AHs and their interactions with CASA. Data from the Sky Sentinel system is relied on by CASA for reporting purposes. Sky Sentinel does not interact with other systems within CASA.
- 3.35 While CASA has an information quality control process in place, the ANAO's examination of record keeping related to CASA surveillance events revealed that there were wide ranging omissions and errors.
- 3.36 Metadata for Sky Sentinel was last updated in November 2017 and does not account for the changes arising from the introduction of the NSSP and the NOP.

Acting on non-compliance

- 3.37 Critical element eight identified in ICAO's international standards and practices on safety management (see Table 2.2) is on the resolution of safety concerns²⁹ and relates to processes to remedy identified issues including enforcement action. CASA reports that it enhances aviation safety by 'taking appropriate enforcement actions when necessary'.
- 3.38 CASA identifies safety findings in its surveillance reports with AHs having 21 days to respond and address the findings. AHs that don't address issues identified in safety findings can be referred to enforcement. The process involves the relevant regional Surveillance Manager recommending enforcement to the Executive Manager of the Regulatory and Oversight Division who, after reviewing the case, may refer the AH to CASA's enforcement team.
- 3.39 As shown in Figure 3.8, while the number of safety findings for level 1 surveillance events has declined over the period from 2017–18 to 2020–21, this was combined with an initial increase in total surveillance events in 2018–19 followed by a decline thereafter so that the proportion of safety findings decreased before sharply increasing. For level 2 surveillance events, there was an increase for the period from 2017–18 to 2018–19 before declining for the period 2019–20 to 2020–21. As a proportion of total surveillance events, there was a slight decline.

²⁸ Auditor-General Report No.11 2019-20 Implementation of the Digital Continuity 2020 Policy.

²⁹ Critical element eight relates to the implementation of processes and procedures to resolve identified deficiencies impacting aviation safety, which may have been residing in the aviation system and have been detected by the regulatory authority or other appropriate bodies.

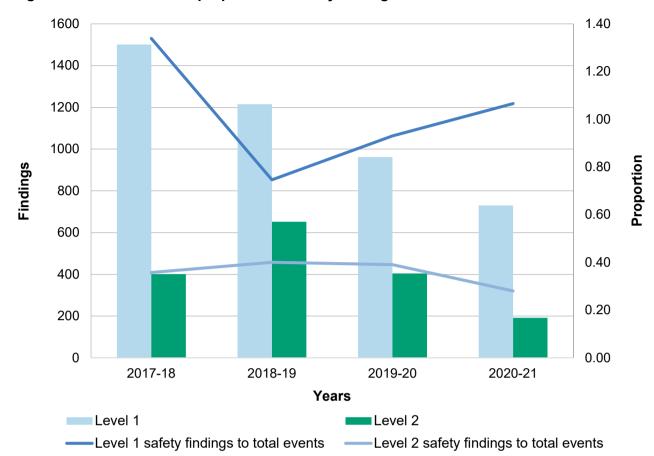


Figure 3.8: Number and proportion of safety findings for surveillance events

Source: ANAO analysis of CASA data.

3.40 Since 2018–19, CASA has reported once, in its 2020–21 Annual Report, on outstanding safety findings (defined by CASA as not closed out). CASA advised the ANAO in October 2021 that it is unable to provide data on the number/type of surveillance referrals to enforcement and has indicated that it is working towards being able to develop a system to be able to report on this information.

Recommendation no. 4

3.41 The Civil Aviation Safety Authority implement a process for tracking and reporting on surveillance referrals to enforcement.

Civil Aviation Safety Authority response: Agreed.

3.42 CASA is committed to capturing the source of the evidence for any contravention of the aviation legislation referred to enforcement. This will be done during its migration of systems to a cloud-based environment. Reporting on the number of surveillance-related referrals to enforcement is expected to be provided to the Aviation Safety Committee (ASC) by the end of 2022. CASA notes that all current referrals into enforcement which have resulted from the conduct of surveillance are able to be identified manually and are actively managed and monitored through CASA's Coordinated Enforcement Process (CEP) until they are closed out. However, the IT system supporting the CEP does not allow CASA to easily identify completed matters which were referred to enforcement as a result of surveillance activity. As noted above, this system will be updated to facilitate tracking and reporting to the ASC.

Is CASA regularly reviewing, and where appropriate, updating its surveillance approach?

CASA is not regularly reviewing and updating its surveillance approach. There is no quality assurance process in place for reviewing the quality of surveillance activities. There has been no monitoring and evaluation plan developed for reviewing the National Oversight Plan and the National Surveillance Selection Process has not been reviewed since its implementation in July 2018. CASA does not have a consistent process for considering Safety Assurance Reviews and does not have a current surveillance framework quality assurance program.

Review of the National Oversight Plan (NOP) and the National Surveillance Selection Process (NSSP)

- 3.43 While CASA's NOP was implemented on 1 July 2018 with the introduction of the NSSP and defined and separately monitored campaign and response surveillance (see paragraph 1.11), the NOP is not supported by a review process including a proposed monitoring and evaluation approach (see paragraph 2.12).
- 3.44 The NSSP was expected to be reviewed and updated over time. An internal audit of governance arrangements supporting the NSSP in 2018, reported that:
 - Internal audit supports plans for further NSSP assurance activity as part of the 2018–19 Strategic Internal Audit Program.
- 3.45 The internal audit recommended:
 - that the NSSP project team pauses to conduct a review to consider the lessons identified, take action to remove ambiguity of the project throughout CASA, address the Project Management Plan review comments and finalise planning project artefacts, enforce project management disciplines, formalise milestones and track progress.

- 3.46 CASA management's response was:
 - A review of the NSSP project was undertaken by EM RSSD and the PMP was finalised. The outcome of the review and commitment by CASA personnel resulted in the project delivering Phase 2 'on time' and 'within budget'.
- 3.47 However, the review was not documented, and there has been no comprehensive review of the NSSP approach since it was implemented including how risk is incorporated into surveillance planning.
- 3.48 CASA advised the ANAO in February 2022 that a review of the NSSP is expected to be completed by June 2022.

Safety Assurance Reviews

- 3.49 CASA's process for review of aviation incidents and accidents, in addition to regulatory reviews related to the Australian Transport Safety Bureau and Corporate Integrated Reporting and Risk Information System (CIRRIS) incidents³⁰, includes an internal Safety Assurance Review (SAR).³¹ The purpose of the SAR is to determine whether any immediate safety related action is needed to be undertaken by CASA to prevent an incident or accident reoccurring.
- 3.50 The SAR considers the relevant AH profile; surveillance history; details of the incident; immediate action necessary for aviation safety; and learnings for CASA. While the CASA Executive Manager of the Regulatory Oversight Division (EM ROD) is responsible for commissioning the internal review, oversight responsibility was:
- not identified prior to June 2020;
- after June 2020 provided by the OEG, consistent with amendments to the CASA Surveillance Manual; and
- provided by both the OEG and the ASC from June 2021 until November 2021.
- 3.51 While CASA recommends that SARs are completed within 30 days of commissioning, this timeframe can be varied by the EM ROD. While CASA was able to provide eight SARs to the ANAO with incidents covering a three year period from 2019 to 2021, two of the reports were not dated. From CASA records, the ANAO identified a further three SARs commissioned, with one not finalised, dating back to 2019. In addition, ANAO analysis shows that there have been substantial delays between the commissioning of SARs and their finalisation (up to 484 days).

Consistent with the *Transport Safety Investigation Act 2003*, Airservices Australia is required to report certain types of air transport safety (ATS) occurrences to the Australian Transport Safety Bureau (ATSB). CASA also requires Airservices to report certain types of ATS occurrences as soon as possible. Air Traffic Controllers are responsible for reporting ATS occurrences in the CIRRIS ATS Occurrence Module, which generates an occurrence notification to both the ATSB and CASA.

The Terms of Reference outline that 'In identifying such action as may be necessary or appropriate for CASA to take in the interests of safety, a ROD SAR will have regard to: CASA's regulatory posture with regard to the operator(s) at the time of the accident/incident or occurrence including recent surveillance, regulatory services and enforcement activity. Any immediate action CASA might consider necessary in the interest of aviation safety. Any significant learnings for CASA from the specific accident/incident or issue, and Any further matters that might be considered relevant by the EM ROD given the circumstances of the incident.

Aviation Safety Committee

- 3.52 CASA's ASC first convened in April 2017. Membership of the ASC includes senior management across CASA who are scheduled to meet monthly. The ASC has evolved over time with its standing items for discussion being reviewed and updated since its inception.
- 3.53 Reporting on surveillance to the ASC has been primarily on:
- surveillance conducted compared to the schedule of planned surveillance;
- the outcome of campaign surveillance; and
- updates on the Regulatory Services and Surveillance Transformation (RSST).
- 3.54 CASA first developed a scorecard in July 2021 to provide the ASC with data on 'available' safety metrics and associated performance targets to '...support the ASC to monitor safety performance across all relevant elements'.
- 3.55 In June 2019, CASA provided a report to the ASC on its analysis comparison of international accident rates (accidents per million departures) from 2008 to 2018, shown in Table 3.3.

Table 3.3: Average accident rate from 2008 to 2018^a

All Country States	AUS	CAN	NZL	USA
3.14	2.17	5.20	0.41	2.58

Note a: CASA indicated that 'Data has been extracted from the ICAO iStars API Data Service. The accident rate is based on scheduled commercial operations involving fixed-wing aircraft with a maximum take-off weight (MTOW) above 5700kg. Departures data is comprised of scheduled commercial operations that involve the transportation of passengers, cargo and mail for remuneration and is collated by the ICAO Air Transport Bureau. Estimates are made where data has not been provided by States'.

Source: CASA analysis.

- 3.56 In refining this work, the ASC commissioned a comparative International Benchmarking of Aviation Safety Performance within Air Transport study in mid-2019, comparing accident rates internationally '...to identify significant variations and where possible to understand why these variations exist to review' and '...depending on the reasons for such variations, Australia may be able to learn from the experience of other States'.
- 3.57 Reporting on initial results from the study in May 2020 compared Australia to the United States of America on the average accident and fatal accident rate per million hours flown from 2006 to 2018. The analysis found that there was minimal difference between countries for fatal accidents. For non-fatal accident rates, results showed that Australia had almost three times the number of accidents per million flight hours than the USA for non-scheduled flights in the air transport segment. CASA advised the ANAO in December 2021 that '...there has not been further reporting to the ASC on international benchmarking. An updated version of the report will be completed in 2022'.

Third-party audits

- 3.58 The CASA Surveillance Manual indicates that third party audits are expected to be reviewed by CASA in preparation for a surveillance event. Third party audits refer to audits undertaken by non-CASA personnel to fulfil requirements of other authoritative bodies.³²
- 3.59 CASA commissioned an internal audit as a health check on third party industry audits as part of its 2019–20 Audit Program. The report was finalised in June 2020. The internal audit found that:
 - ...existing policy and procedural guidance materials and training are insufficient to guide surveillance teams on how third-party audits should be considered and documented in a meaningful and consistent way. Interviews with nominated personnel and review of a sample of surveillance events identified challenges when considering third-party audit reports to inform the approach and scope of future surveillance events. Internal Audit was advised that given these challenges there was a reluctance by some members of CASA inspectorate to use third-party audit reports when determining the scope and timing of CASA scheduled surveillance.
- 3.60 CASA responded to the report recommendations by updating its manual and providing training.
- 3.61 The ANAO's analysis of CASA surveillance reporting on third party audits suggests a lack of alignment between CASA's application of its regulation and the scope and elements assessed in third party audits. In addition, CASA is not monitoring its use of third-party audits, with CASA noting:

Due to limitations within Sky Sentinel, there is no capacity to link receipt of a third-party audit. The [surveillance technical officers] provide a reference on Form 1189 (scoping for surveillance events) if there has been a third-party audit report sent to CASA, however a manual search would need to be done on all surveillance folders to identify if third party audits had been provided. Please note that it's not mandatory for an Authorisation Holder to provide CASA with third party audit reports so there have been minimal received.

Quality assurance of surveillance

3.62 CASA's Surveillance Framework Quality Assurance program was established in 2013–14. The program reviewed a select number of surveillance events on their consistency with the CASA Surveillance Manual. The program was undertaken outside of the division responsible for surveillance, providing a level of separation between surveillance and the review of surveillance. CASA does not have a current surveillance framework quality assurance program. CASA advised the ANAO in November 2021 that:

The area that conducted the quality assurance reviews like your example is no longer part of CASA's structure. We used to have a dedicated Continuous Improvement team that was disbanded a couple of years ago as a result of a structural change and the people from that team went onto different parts of the organisation. I was advised that this team was responsible for conducting the quality assurance review, but any findings were the responsibility of the relevant area for action or information.

Examples of third party audit providers that CASA noted in its internal audit include the: International Air Transport Association (IATA) Operational Safety Audit — an internationally recognised and accepted evaluation system designed to assess the operational management and control systems of an airline; and Basic Aviation Risk Standard (BARS) audits — developed by the Flight Safety Foundation (FSF) in conjunction with the onshore resource sector to provide a system of oversight for the contracted aviation sector.

3.63 CASA assessed its quality assurance practices in an internal audit, reporting in October 2019 that there was a:

Lack of internal management quality control and review requirements over surveillance activities, including consistent or regular (regime and intervals) oversight and monitoring of CASA's compliance with the CSM.

3.64 CASA accepted the recommendation to mandate the evidencing of internal management quality control and review processes, noting the implementation date as December 2021.

Internal review of CASA's approach to surveillance

3.65 CASA commissioned an internal review of its surveillance approach in March 2020. The objective was:

To conduct a review that will comprehensively examine CASA's surveillance philosophy, capabilities and practises and prepare recommendations for any reform. The review will consider how CASA uses its current resources and powers to deliver its statutory objectives and assess CASA's ability to perform as a capable and transparent regulator. The review may examine and provide options on how CASA could evolve its surveillance capabilities to support its strategic objectives and business needs.

- 3.66 The final draft of the review was reported to the CASA executive in June 2020 and the Executive indicated in September 2021 that the report was '...a great piece of work' that would be 'taken forward'. In February 2022, CASA advised the ANAO that the draft report had not been 'validated or endorsed by management' although CASA's records did not evidence why an internal review that it had commissioned had not been subject to appropriate management consideration and, as appropriate, action on the recommendations.
- 3.67 The report was not filed in CASA's electronic record management system or circulated more widely in CASA and was not considered by the OEG, despite the OEG having responsibility to 'provide strategic direction for the management of regulatory oversight' and to manage and administer decision making on regulatory oversight activities.

Recommendation no. 5

3.68 The Civil Aviation Safety Authority review its National Oversight Plan and National Surveillance Selection Process.

Civil Aviation Safety Authority response: Agreed.

3.69 In alignment with responses to Recommendations 1 and 2, CASA will continue formalising the NOP and reviewing the NSSP with a view to completing this by the end of 2022-23. Additionally, under the recent improvements to the ASC, the ASC now has oversight of the NOP and the setting of surveillance activity (including the NSSP) and will be monitoring the reviews.

4. Reporting to the board and government

Areas examined

The ANAO examined whether there was regular, timely and accurate reporting to the Board and Minister on CASA's surveillance activity.

Conclusion

CASA has regularly reported to its Board and the government on surveillance activities, however, reporting needs to be complete and comprehensive. There has been a reduction in the level of detail in surveillance reporting over time. Recent reporting does not accurately reflect some of the issues CASA has identified.

Areas for improvement

The ANAO made two recommendations aimed at improving the completeness and comprehensiveness of reporting to the Board and the Minister to increase transparency related to surveillance activities.

The ANAO also suggests that all CASA official email communication be through government designated email systems.

- 4.1 The *Civil Aviation Act 1988* provides that the Civil Aviation Safety Authority (CASA) Board is responsible for deciding the objectives, strategies, and policies to be followed; ensuring CASA performs its functions in a proper, efficient and effective manner; and that CASA complies with directions given by the Minister under the Act.
- 4.2 To assess whether CASA is regularly reporting on its surveillance performance, the ANAO examined whether there was timely and accurate reporting on surveillance activity to the Board and Minister.

Has there been regular reporting to the Board on surveillance activities?

While there has been regular reporting to the Board, reporting has not been complete and comprehensive on performance issues related to surveillance activities. CASA does not report on the effectiveness of surveillance and does not include sufficient information in its reporting to the Board, including on authorisation holder performance indicator (AHPI) assessments overdue. CASA's reporting on incident and accident data requires improvement as it relies on a lagged indicator.

- 4.3 Under the *Public Governance, Performance and Accountability Act 2013* (PGPA Act), the Board is the accountable authority in CASA (as a Corporate Commonwealth Entity) and has responsibilities to:
- properly govern the entity;
- establish and maintain appropriate systems relating to risk management and oversight and internal controls;
- encourage officials to cooperate with others to achieve common objectives;
- take into account the effects of imposing requirements on others; and

- keep the minister and the Finance Minister informed.³³
- 4.4 The CASA Board members are appointed on a part-time basis for up to three years by the Minister for Infrastructure, Transport and Regional Development. The Director of Aviation Safety (DAS) (who is also an ex-officio member of the Board) (see paragraph 1.2) manages CASA subject to Board directions and in accordance with policies determined by the Board.³⁴
- 4.5 The CASA executive regularly reports to its Board against a standard agenda at bi-monthly Board meetings (generally six meetings annually). In addition to keeping the CASA Board informed on the management of issues relating to service delivery, aviation safety management and regulation, staffing capacity and capability and stakeholder engagement, several reserved matters are approved by the Board including:

a suite of Board policies³⁵, strategic plans and reports which define and support their responsibility as the accountable authority, to meet their broader performance and direction setting obligations including strategic risk and financial management and corporate planning.

or endorsed, including on:

material changes in organisational direction pertaining to DAS/CEO/Executive Directives, strategic plans and reports which are deemed to have a significant impact on CASA's stakeholders and /or reputation. Where there is no material change, the Board may be provided with progress updates.

4.6 To support the Board to meet performance and direction setting obligations, the CASA executive reports on performance in delivering one portfolio outcome to:

Maximise aviation safety through a regulatory regime, detailed technical material on safety standards, comprehensive aviation industry oversight, risk analysis, industry consultation, education, and training.³⁶

and the delivery of one corporate goal specific to surveillance, to:

Maintain and enhance a fair, effective and efficient aviation safety regulation system.³⁷

4.7 The CASA executive reports to the Board on three key performance indicators (KPIs) against CASA's portfolio outcome and one KPI against CASA's corporate outcome specific to surveillance, outlined in Table 4.1.

Department of Finance: 'Duties of Accountable Authorities (RMG 200)'. Available from https://www.finance.gov.au/government/managing-commonwealth-resources/managing-risk-internal-accountability/duties/duties/duties-accountable-authorities-rmg-200 [accessed 21 January 2022].

³⁴ Part VIIA (73), Civil Aviation Act 1988.

The policies and strategies prepared by the Director Aviation Safety and recommended to the Board include: Risk Management Policy; Financial Management Policy; Work Health and Safety Policy; Fraud Control and Integrity Policy; Treasury Policy; CASA Protective Security Policy; and ICC Complaints Handling Policy.

³⁶ CASA annual reports from 2017–18 to 2020–21 available from https://www.casa.gov.au/resources-and-education/publications-and-resources [accessed 21 January 2022].

Other corporate goals CASA is responsible for delivering are: collaborative engagement with the wider aviation community to promote and support a positive safety culture; and continuous improvement of organisational performance. Further information on corporate goals available from https://www.casa.gov.au/resources-and-education/publications-and-resources [accessed 21 January 2022].

Table 4.1: Key performance indicators

Portfolio

Number of accidents per hours flown by industry sector

Number of incidents per hours flown by industry sector

Surveillance determined via a National Oversight Plan consisting of scheduled and response events informed by risk

Corporate

CASA's compliance monitoring approaches are standardised and coordinated relative to the aviation sector

Source: CASA 2021-22 Corporate Plan.

- 4.8 The ANAO assessed whether CASA's performance reporting to the Board was appropriate and found that performance indicators for measuring against CASA's portfolio outcome were only partly reliable or complete.³⁸
- 4.9 CASA does not reliably report against its KPIs relevant to surveillance. CASA financial year reporting³⁹ against KPIs on incident and accident data requires improvement because the key performance indicator relies on the availability of data which is published by the Bureau of Infrastructure, Transport and Regional Economics (BITRE) on a calendar year basis. In April 2021, the CASA Board were provided with a briefing from the CASA executive indicating that BITRE data used to calculate the accident and incident rates was deficient '...as "hours flown" data [is] often estimated leading to a weakness in the veracity of any calculated statistics'.
- 4.10 CASA annual reporting is focussed on trends rather than its identified KPIs on the number of incidents/accidents per hours flown. The DAS, in reporting to the Board in June 2021, acknowledged the need for a lead indicator and improvement in analysis and reporting with a CASA action item to:

Improve Accident Trend Data analysis of sector specific and/or aircraft specific matters to bring to the Board's attention. A lead indicator is required that highlights emerging issues.

4.11 The CASA executive does not report to the Board against performance indicators to measure the effectiveness of its surveillance approach for its planned, targeted or response surveillance activities. Rather, it reports on the percentage of planned surveillance achieved in a year. While CASA's method of calculating this outcome has changed over time, CASA does not provide this information in its reporting which impedes robust analysis of the data. There is limited information

Department of Finance, Quick Reference Guide – RMG 131 Developing good performance information was the basis for the ANAO's assessment. The ANAO considered whether performance indicators for measuring against CASA's portfolio outcome were: reliable — performance measures should be supported by clearly identified data sources and methodology. Data sources should provide data that is reliable and able to be verified. The methodologies used to assess performance should be able to produce data that is reliable, be applied consistently, and be able to be substantiated; and complete – entities must keep records that properly record and explain the entity's non-financial performance. The ability of an entity to measure and assess its performance depends on accurate and complete records of data. Available from https://www.finance.gov.au/government/managing-commonwealth-resources/developing-good-performance-information-rmg-131#-2-developing-performance-measures-[accessed 22 March 2022].

While CASA executive management provide regular updates to the Board on the number and some detail on the accidents and incidents that have occurred since the last Board meeting, it doesn't provide regular analysis.

provided on the methodology it adopts in its calculation of surveillance event outcomes by CASA in its reporting.

- 4.12 There is minimal detail reported to the Board on the NSSP. The NSSP report does not provide information to the Board on AHPIs overdue, despite the AHPI being a key indicator used to assess risk (see paragraph 3.6 for further detail). The Board requested in April 2021 that NSSP reporting should be more granular. As at January 2022, surveillance reporting to the Board is not more granular and there is no reporting on overdue AHPI's.
- 4.13 The primary CASA oversight body for aviation safety, the Aviation Safety Committee (ASC) commenced reporting to the CASA Board in June 2021 (see paragraphs 2.15 and 3.52 to 3.56 for further detail on the ASC) and CASA has indicated that '...the Aviation Safety Scorecard is a recent initiative that includes reporting on the AHPI assessments which now also goes to the Board'.
- 4.14 CASA's internal audit of its performance framework in October 2021 found 'CASA's approach to developing, analysing and reporting CASA's performance through its performance measures could be improved to ensure full compliance with the PGPA Act and PGPA Rule'. Specifically:
 - The performance reporting terminology used in CASA's Corporate Plan is not consistent with PGPA Rule and RMG requirements
 - The methodology used in, and the structure of, CASA's Corporate Plan makes it difficult to identify what performance measures CASA uses to determine whether its Purpose is being achieved, and what targets are applicable to these measures
 - Aspects of CASA's presentation of performance information in the Annual Performance Statement could be clarified to support readers' understanding of CASA's performance
 - Although CASA's performance measures broadly align with best practice, CASA's performance measures could be more effective in demonstrating whether CASA's is achieving its Purpose
 - CASA's performance measures could be documented more comprehensively and completely
 - Internal guidance for performance reporting material should be updated to more accurately reflect CASA's legislative obligations.
- 4.15 CASA agreed to all three recommendations to address these issues.
- 4.16 The ANAO found that reporting to the Board is not always as transparent as would be expected and does not reflect some of the performance issues and delays CASA has identified with its surveillance activity. 40

⁴⁰ An independent review by the Department of Infrastructure, Transport, Regional Development and Communications in June 2021 reported a similar finding.

Recommendation no. 6

4.17 The Civil Aviation Safety Authority improve the completeness and comprehensiveness of its reporting to the Board to increase transparency related to its surveillance activities.

Civil Aviation Safety Authority response: Agreed.

4.18 CASA is committed to continuing to improve reporting to ensure a more complete and comprehensive report is provided to the Board in relation to its surveillance activities. CASA will review its current reporting structure and make improvements to its reporting by the end of 2022.

Use of non-government email services for official Australian Government business

- 4.19 Email communication is a widely used and accepted form of communication within the Australian Government. It provides evidence of the conduct of government business and is an important reservoir of information assets.
- 4.20 Retention of records outside of government designated email systems reduces transparency and contravenes various government policies related to protective security (Protective Security Policy Framework and the Australian Government Information Security Manual). As a Corporate Commonwealth entity, CASA is not obliged to comply with these policies, but it is considered good practice.
- 4.21 The ANAO examined the use of non-government email services for official Australian Government business and found that CASA routinely communicates, for the purpose of reporting, with all Board members through their private email addresses.
- 4.22 The ANAO suggests that all CASA official email communication be through government designated email systems.

Has CASA appropriately reported to the Minister on surveillance activities?

CASA reporting to the Minister does not reflect some of the performance issues and delays CASA has identified with surveillance activities.

- 4.23 CASA is required to report to the Minister, consistent with the *Regulator Performance Guide July 2021*⁴¹ and the Minister's Statement of Expectations requires reporting on a quarterly basis.⁴²
- 4.24 The CASA Board Chair writes to the Minister generally at the beginning of each quarter providing a progress dashboard for the previous quarter on CASA's delivery against the Minister's Statement of Expectation and the CASA Corporate Plan.
- 4.25 The ANAO reviewed the regularity of the CASA quarterly performance reports over the period from 2017–18 to 2020–21. CASA provided all mandated reports to the Minister over this period, although the Minister requested more timely reporting in feedback to CASA for one of the reports.

⁴¹ Available from https://deregulation.pmc.gov.au/sites/default/files/regulator-performance-guide.pdf [accessed 24 January 2022].

⁴² Available from https://www.legislation.gov.au/Details/F2021L00929 [accessed 24 January 2022].

- 4.26 CASA's quarterly reporting on surveillance to the Minister is aligned with the reports provided to the CASA Board. There has been a marked reduction in the level of detail in surveillance reporting over time with recent reporting not accurately reflecting some of the performance issues and delays CASA has identified that increases risk to surveillance activity, including:
- while CASA has implemented its Learning and Management System, it has not established an effective monitoring system for key skills training (for instance, flying currency and training);
- the delay in establishing the EAP system; and
- decommissioning Sky Sentinel (which has been identified as being deficient in providing appropriate data for monitoring and reporting purposes).

Recommendation no. 7

4.27 The Civil Aviation Safety Authority improve the completeness and comprehensiveness of its reporting to the Minister to increase transparency related to its surveillance activities.

Civil Aviation Safety Authority response: Agreed.

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4.28 CASA is committed to continuing to improve reporting to ensure a more complete and comprehensive report is provided to the Minister in relation to its surveillance activities. CASA will review its current reporting structure and make improvements to its reporting by the end of 2022.

Grant Hehir Auditor-General Canberra ACT 19 May 2022

Appendices

Appendix 1 Entity response



CHIEF EXECUTIVE OFFICER and DIRECTOR OF AVIATION SAFETY

CASA Ref: F21/44514-6

Mr Grant Hehir Auditor-General for Australia Australian National Audit Office GPO Box 707 CANBERRA ACT 2601

Section 19 draft report on the Civil Aviation Safety Authority's planning and conduct of surveillance activities

Dear Mr Hehir

Thank you for your email of 30 March 2022 requesting a letter of reply to the draft audit report on the Civil Aviation Safety Authority's (CASA) Planning and Conduct of Surveillance Activities provided to CASA under section 19 of the *Auditor-General Act 1997* (the s19 report).

CASA welcomes any constructive review and external scrutiny of its processes and procedures and acknowledges that the s19 report identifies a number of areas of improvement for CASA as set out in the seven recommendations as well as in some of the observations made throughout the report.

CASA agrees with the seven recommendations and is committed to addressing them consistent with our commitment to continually improve how we plan and conduct our surveillance activities.

Consistent with concerns identified by the Australian National Audit Office (ANAO), CASA is pleased to advise that CASA has already introduced a more data driven approach to monitoring of aviation safety through the Aviation Safety Committee (ASC). The ASC, that I now chair in my capacity as the Director of Aviation Safety, will have oversight of the National Oversight Plan (NOP) and the setting of surveillance activity, amongst other things. Direct reporting from the ASC is now received by the Board at each of its meetings.

While CASA fully supports the draft report's recommendations, there are instances where CASA considers additional context could clarify the basis on which a conclusion has been reached and also avoid potentially incorrect conclusions being drawn by the reader. More detail on those areas is included below and we would be happy to discuss further if it would assist the ANAO before finalising the report.

CASA is mindful of the potential implications of Australia's standing in the global aviation environment. The statements that 'CASA's surveillance approach largely complies with Australia's international obligations' and 'CASA's surveillance approach largely complies with Australia's obligations related to surveillance under the Chicago Convention' are in contrast to the independent assessments conducted by the International Civil Aviation Organization (ICAO). ICAO most recently concluded (in 2017) that Australia's effective implementation of ICAO standards and recommended practices related to surveillance obligations was 96.25%. It also concluded that Australia's overall effective implementation was 94.98% resulting in a world standing of 6th, ahead of countries including the United States of America, the United Kingdom and New Zealand.

CASA appreciates that the ANAO uses different audit methodologies to ICAO and recognises that the ANAO's assessment and ICAO's assessments would not be expected to align. That said, CASA does not consider the ANAO's findings in any way invalidate the outcome of ICAO's 2017 assessment.

CASA notes the ANAO's statement that 'CASA's documented risk policy lacks clarity and does not consider risk likelihood' is related to our approach to prioritising authorisation holders for the purpose of developing the annual surveillance schedule not CASA's overall approach to risk management. While CASA acknowledges that improvements could be made in our risk documentation relating to the development of the surveillance schedule, we do note that CASA's overall approach to risk management is consistent with the Commonwealth's risk management better practice guidance and ISO 31000:2018 (Risk Management), which includes consideration of likelihood.

While CASA appreciates the analysis undertaken by the ANAO in relation to surveillance activity since 1 July 2018, CASA questions the suggestion that trends can be identified. Given the changes to the way we plan and conduct surveillance under the new national model as well as the dramatic impact of the pandemic over the years covered by the audit, it is difficult to conclude that year on year changes represent an ongoing trend.

Finally, as we have advised the ANAO throughout the audit, we consider the resources and training provided to staff ensures our staff are well placed to undertake surveillance activities.

Please find attached CASA's short summary (Attachment A) and response to the recommendations (Attachment B) for the ANAO's consideration.

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For future reference, for the purposes of the Public Governance, Performance and Accountability Act 2013 the Board is CASA's accountable authority. Therefore, correspondence relating to ANAO performance audits would be more appropriately addressed to the Chair of the Board, Air Chief Marshal (Retd) Mark Binskin AC.

CASA looks forward to the publication of the report. If you require clarification of CASA's response, please direct those enquiries to myself or Mr Rob Walker, Executive Manager Regulatory Oversight Division.

Yours sincerely

Ms Pip Spence PSM

Chief Executive Officer and Director of Aviation Safety

(May 2022

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Appendix 2 Improvements observed by the ANAO

- 1. The existence of independent external audit, and the accompanying potential for scrutiny improves performance. Improvements in administrative and management practices usually occur: in anticipation of ANAO audit activity; during an audit engagement; as interim findings are made; and/or after the audit has been completed and formal findings are communicated.
- 2. The Joint Committee of Public Accounts and Audit (JCPAA) has encouraged the ANAO to consider ways in which the ANAO could capture and describe some of these impacts. The ANAO's 2021–22 Corporate Plan states that the ANAO's annual performance statements will provide a narrative that will consider, amongst other matters, analysis of key improvements made by entities during a performance audit process based on information included in tabled performance audit reports.
- 3. Performance audits involve close engagement between the ANAO and the audited entity as well as other stakeholders involved in the program or activity being audited. Throughout the audit engagement, the ANAO outlines to the entity the preliminary audit findings, conclusions and potential audit recommendations. This ensures that final recommendations are appropriately targeted and encourages entities to take early remedial action on any identified matters during the course of an audit. Remedial actions entities may take during the audit include:
- strengthening governance arrangements;
- introducing or revising policies, strategies, guidelines or administrative processes; and
- initiating reviews or investigations.
- 4. In this context, the below actions were observed by the ANAO during the course of the audit. It is not clear whether these actions and/or the timing of these actions were planned in response to proposed or actual audit activity. The ANAO has not sought to obtain assurance over the source of these actions or whether they have been appropriately implemented.
- CASA issued an update to the surveillance manual in January 2022 (see paragraph 2.18).
- CASA's Board agreed to update its conflict of interest policy to explicitly prohibit the trading of aviation shares (see paragraph 2.74).
- CASA has recently improved its conflict of interest declaration arrangements by revising annual training for staff and has proposed to amend documentation for staff performance discussions about updating conflict of interest declarations (see paragraph 2.74).
- CASA's 2020–21 annual report (page 187) included a correction of an error relating to staffing (see paragraph 2.84).
- Recent work by CASA to address issues related to succession planning include a project to identify 'critical roles' (which commenced in October 2021) and to revise CASA's 'job family framework' (which commenced in November 2021) (see paragraph 2.88). The latter project was identified in CASA's 2020–2023 workforce plan as an activity to be undertaken in 2020–21.

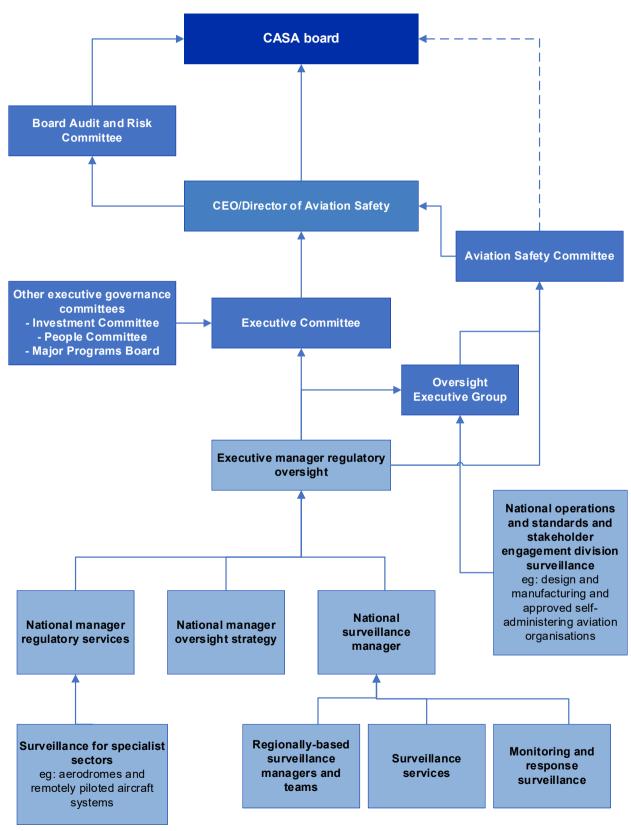
Appendix 3 Australia's aviation safety regulatory framework

Legislation/regulatory arrangements	Summary		
Civil Aviation Act 1988	Establishes CASA as the aviation safety regulator and sets out CASA's governance arrangements		
Airspace Act 2007	Confers an additional responsibility on CASA in relation to the administration and regulation of airspace		
Civil Aviation Regulations 1988 Civil Aviation Safety Regulations 1998	Provides the general safety regulatory controls in relation to aviation activities. Sets out the safety standards that are required in relation to airworthiness of aircraft, licences and ratings of operating crew and maintenance personnel, air traffic control, rules of the air, dangerous goods and many other safety issues		
Airspace Regulations 2007	Enable CASA to perform the functions and exercise the powers in connection with the administration and regulation of Australian administered airspace		
Air Navigation Regulations 2016	Regulate a range of licence and approval conditions, on operators of international air services		
Civil Aviation Orders	Set out CASA's directions and instructions in matters of complex detail. They contain technical detail and requirements that complement the requirements in the relevant Civil Aviation Regulation (CAR)		
Manual of Standards	Comprise specifications made by CASA pursuant to the relevant Civil Aviation Safety Regulation (CASR), of uniform application, determined to be necessary for the safety of air navigation		
Airworthiness Directives	Address unsafe conditions on aircraft and aeronautical equipment		
Australian Technical Standard Orders	Contain minimum performance standards for specified articles (for example, materials, parts, processes and appliances) used on civil aircraft		

Note: On 2 December 2021, new flight operations rules came into effect. These changes included a structural rearrangement of the regulatory framework by incorporating selected Manual of Standards into the Civil Aviation Safety Regulations 1998 and amendments to certain Civil Aviation Orders and the Civil Aviation Regulations 1988.

Source: Civil Aviation Act 1988 available at https://www.legislation.gov.au/Details/C2021C00060 [accessed 28 April 2022]; Airspace Act 2007 available at https://www.legislation.gov.au/Details/C2016C00178 [accessed 28 April 2022]; Civil Aviation Regulations 1988 available at https://www.legislation.gov.au/Details/F2021C01179 April 2022]; Civil Aviation Safety Regulations 1998 https://www.legislation.gov.au/Details/F2022C00427 [accessed 28 April 2022]; Airspace Regulations 2007 available at https://www.legislation.gov.au/Details/F2019C00278 [accessed 28 April 2022]; Air Navigation Regulations 2016 available at https://www.legislation.gov.au/Details/F2018C00201 [accessed 28 April 2022]; The Civil Aviation Orders are available at https://www.casa.gov.au/rules-and-regulations/current-rules [accessed 28 April 2022]; The Manuals of standards are available at https://www.casa.gov.au/rules-andregulations/current-rules/manual-standards [accessed 28 April 2022]; Airworthiness Directives are available at https://www.casa.gov.au/aircraft/airworthiness/airworthiness-directives [accessed 28 April 2022]; Australian Technical Standard Orders are in schedules to the Part 21 Manual of Standards Instrument 2016 available at https://www.legislation.gov.au/Details/F2017C01160 [accessed 28 April 2022].

Appendix 4 Key elements in the CASA surveillance governance framework



Source: ANAO analysis of CASA annual reports; CASA internal documentation.

Appendix 5 CASA's surveillance policies and procedures for surveillance activities

Element	Component	Purpose	Publicly available?
Key policies	Surveillance manual	Sets out the processes to be followed by CASA officers when conducting surveillance on civil aviation authorisation holders. ^a	Yes
		 Includes 20 annexes covering standards and protocols when undertaking surveillance events and instructions for conducting surveillance in specific sectors. 	
	National Surveillance Selection Process manual	Establishes the design framework to develop the NSSP schedule including prioritisation of authorisation holders.	No
	Enforcement manual	Sets out policies and procedures for using enforcement processes.	Yes
Sector/ issue-based guidance	Temporary management instructions	May be issued from time to time to instruct staff about processes to be followed in lieu of updating relevant manuals or for a time-limited period.	Not all are publicly available
	Sector-specific manuals	Provides information on work arrangements and processes to support surveillance activities in specific sectors. For example: Foreign aircraft ramp inspection manual, Industry delegates management manual.	Not all are publicly available
	Notice to inspector	Formal instruction or notification to inspectors about changes to technical requirements or processes.	No
Procedures/ tools	Standard surveillance forms	May include checklists and worksheets required to be completed and documented to perform surveillance tasks.	No
	Handbooks/ surveillance documentation within IT systems	Provides guidance to inspectorate in undertaking surveillance activities.	No
	Work instructions	Processes to standardise work: for example, Surveillance Report and Findings Work Instructions.	No
Supporting procedures/ policies	Corporate policies	Provide requirements and guidance on corporate arrangements that interact with surveillance activities such as information management and travel policy directives and the conflict of interest policy.	No

Note a: The manual also sets out the processes to be followed when conducting surveillance on persons or organisations who are not authorisation holders, namely: Non-Air Operator's Certificate holders for dangerous goods and approved self-administering aviation organisations.

Source: The surveillance manual and its 19 annexes available at https://www.casa.gov.au/search-centre/manuals-and-handbooks/surveillance-manual [accessed 28 April 2022]; The enforcement manual is available at https://www.casa.gov.au/sites/default/files/2021-09/enforcement-manual.pdf [accessed 28 April 2022]; CASA internal documents.

Appendix 6 European Aviation Processing system implementation

- 1. CASA's project management framework includes project governance arrangements that require the development of project management plans, the maintenance of risk registers and regular reporting governance committees including the Major Programs Board.
- 2. Sky Sentinel is CASA's key IT system to manage its surveillance activities. It is a bespoke IT system, implemented in 2012, that is used by surveillance staff to plan, conduct, and report on surveillance activities and to update AH information through the authorisation holder performance indicator (AHPI) tool (see paragraph 3.9). Not all information required by CASA surveillance staff to undertake proposed surveillance activities is held in Sky Sentinel, with regulatory activity information held on the EAP system and other IT systems such as the Electronic Document Records Management System holding information relevant to surveillance.
- 3. The need to use multiple systems to develop, manage and record surveillance activity that are not integrated reduces the efficiency of surveillance activities and limits the broader use of surveillance and regulatory data to inform surveillance activities, impeding effective surveillance of AHs.
- 4. CASA is progressively implementing functionality within the EAP system to guide and record surveillance activities which, when complete, will see the decommissioning of Sky Sentinel and other systems. The implementation of surveillance functionality has been delayed, with the original anticipated delivery in 2019–20 not achieved and now not anticipated to be implemented across all surveillance activities until 2022–23 (See Figure A.1 for a timeline on key events in the development of surveillance capacity in the EAP system).
- 5. A management-initiated review (MIR) of CASA's management of the EAP project in mid-2020 noted that:

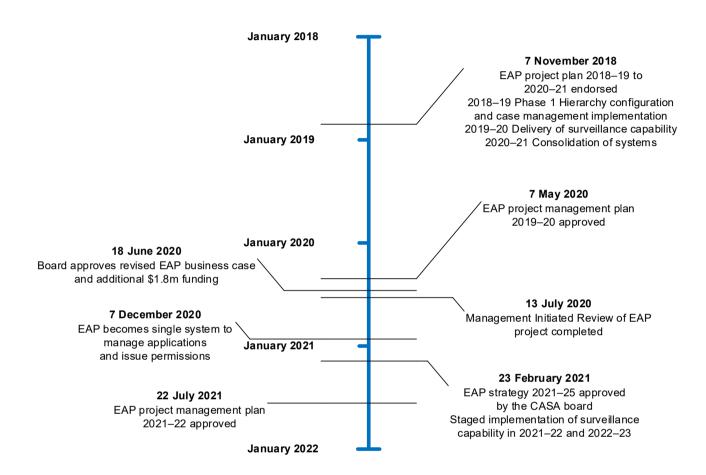
To date, the EAP project has significantly under-delivered. There has been partial realisation of anticipated business benefits associated with the implementation of EAP. There has been a long history of erratic cycles of approaches to the roll-out of components of EAP and the gap between what was required of EAP for the business to be fully effective and what has been delivered is significant.

...The MIR identified several factors contributing to the project not meeting the scope and timeframes within the 2018 [project management plan]. These factors are well known to management and include:

- the EAP project is more complex than originally scoped
- costing assumptions were not well understood or defined
- poor articulation in the 2018 project plan (a business case was not developed) of the costs associated with the project
- inefficient alignment of project and business requirements
- the significant additional work identified and the inability of the project to accommodate lessons from the initial project of work across the first two years of the project.
- 6. While CASA has identified key risks to the EAP project in the most recent business case and approved project plan, there is no consideration of risks associated with further delays in the project. These include consideration of the risks associated with continuing to operate legacy IT

systems, the decommissioning of Sky Sentinel and the impact of delays to using a tool that provides for the allocation of staff to surveillance events based on their assessed competency. Figure A.1 shows the key events in the development of surveillance capacity in the European Aviation Processing system.

Figure A.1 Key events in the development of surveillance capacity in the European Aviation Processing system



Source: ANAO analysis of CASA documents.

Appendix 7 National Surveillance Selection Process activities, by group and event type

	2018–19	2019–20	2020–21	2021–22
Group A prioritisation	441	418	184	215
Group B prioritisation	580	573	410	615
Post authorisation review	11	65	63	65
AOC-D subsequent issue desktop review	N/A	152	248	226
AOC subsequent issue level 1 or on-site surveillance event	N/A	12	42	11
Total NSSP events scheduled	1,032	1,220	947	1,155

Source: ANAO analysis of CASA documentation.