

# ATSB Annual Report

2022-23



**Australian Government** 

Australian Transport Safety Bureau

### **Publication details**

Published by the Australian Transport Safety Bureau

ISBN: 978-1-74251-000-2

ISSN: 1838-2967

© Commonwealth of Australia 2023



With the exception of the Coat of Arms, the ATSB logo, photos and graphics in which a third party has copyright, this work is licensed under the Creative Commons Attribution 3.0 Australia license. To view a copy of this license visit creativecommons.org/licenses/by/3.0/au

The Australian Transport Safety Bureau asserts the right to be recognised as the author of the original material in the following manner:

Specific acknowledgements for the use of data, photographs and other materials included throughout this report. Where the source of any material is not specifically named, ATSB is the originator.

### Contact us

If you have any enquiries about any aspect of the report or any questions about the creative commons license, please contact:

Australian Transport Safety Bureau GPO Box 321 Canberra ACT 2601

Email: atsbinfo@atsb.gov.au

A copy of this report is available on the ATSB website: www.atsb.gov.au

### **Printing**

CanPrint

# LETTER OF TRANSMITTAL



**ATSB** 

29 September 2023

The Hon Catherine King MP
Minister for Infrastructure, Transport, Regional Development and Local Government
Parliament House
CANBERRA ACT 2600

### Dear Minister

I am pleased to present the Annual Report of the Australian Transport Safety Bureau (ATSB), reporting on our operations for the year ended 30 June 2023.

This annual report has been prepared in accordance with the requirements for non-corporate Commonwealth entities under section 46 of the *Public Governance, Performance and Accountability Act 2013* (PGPA Act) and summarises the ATSB's performance for the year.

The report includes the ATSB's financial statements as required by section 42 of the PGPA Act and an audit report on those statements in accordance with section 43 of the same Act.

In addition to fulfilling the requirements of the PGPA Act, the report satisfies section 63A of the *Transport Safety Investigation Act 2003* (TSI Act).

I also certify that I am satisfied that the ATSB has prepared risk assessment and fraud control plans and has in place appropriate fraud prevention, detection, investigation, reporting and data collection procedures and processes that meet the specific needs of the ATSB and comply with the Commonwealth Fraud Control Framework.

Yours sincerely,

Angus Mitchell

Chief Commissioner and Chief Executive Officer Australian Transport Safety Bureau

12 Moore Street Canberra ACT 2601

Australia

PO Box 321 Canberra (+61) 02 6122 1677 angus.mitchell@atsb.gov.au www.atsb.gov.au @atsbgovau

# Contents

Letter of transmittal	iii
List of tables	vi
List of figures	viii
Introduction	1
SECTION 1 – CHIEF COMMISSIONER'S REVIEW 2022–23	
Chief Commissioner's Review 2022–23	
Chief Commissioner's Review 2022–23	3
SECTION 2 – AGENCY OVERVIEW	
Agency overview	
Agency overview	6
Organisational Structure	16
Commission and Executive Management Team	17
Outcome and program structure	20
How the ATSB reports	21
SECTION 3 – REPORT ON PERFORMANCE	
Report on performance	
Report on performance	24
Independent 'no-blame' investigation of transport accidents and other safety occurrences	33
Safety data recording, analysis and research	35
Influencing safety action	40
Financial performance update	52
SECTION 4 – SIGNIFICANT SAFETY INVESTIGATIONS	
Aviation	53
Rail	57
Marine	59
SECTION 5 – FORMAL SAFETY ISSUES AND ACTIONS	60
Formal safety issues and actions	60
Safety issues identified through ATSB investigations	61
KPI status of safety issues identified in 2022–23	61
Responses to safety issues identified in 2022–23	62
Safety actions	76
Safety recommendations closed in 2022–23	77
Safety recommendations released in 2022–23	85
Safety advisory notices released in 2022–23	89

SECTION 6 – FINANCIAL STATEMENTS	91
Financial Statements	92
SECTION 7 – MANAGEMENT AND ACCOUNTABILITY	120
Management and accountability	120
SECTION 8 – APPENDICES	127
Appendix A: Other mandatory information	127
Appendix B: Entity resource statement 2022–23	133
Appendix C: Executive remuneration	134
Appendix D: Management of human resources	135
Appendix E: Australian Public Sector (APS) classification and gender	137
Appendix F: Employment type by full-time and part-time status	139
Appendix G: Employment type by location	140
Appendix H: Indigenous employment	140
Appendix I: Employment arrangements of SES and non-SES employees	141
Appendix J: Salary ranges by classification level	141
Appendix K: Performance pay by classification level	142
Appendix L: Accountable Authority	142
Appendix M: Significant non-compliance with the finance law	142
Appendix N: Audit committee 2022–23	143
Appendix O: Reportable consultancy contracts	143
Appendix P: Reportable non-consultancy contracts	144
Appendix Q: Additional information about organisations receiving amounts under reportable consultancy contracts or reportable non-consultancy contracts	144
Appendix R: Aids to access	145
Appendix S: Report on financial performance summary	146
Appendix T: Financial statements summary	147
Appendix U: APS Net Zero 2030 emissions reporting	149
Appendix V: Glossary	151
List of requirements	156
Index	162

# List of tables

Table 1: Results against key performance criteria	25
Table 2: ATSB performance against KPIs	27
Table 3: Summary of financial performance and position	52
Table 4: Number of safety issues identified in 2022–23	61
Table 5: Status of other safety issues identified in 2022–23	61
Table 6: Aviation – safety issues identified in 2022–23	62
Table 7: Marine – safety issues identified 2022–23	68
Table 8: Rail – Safety issues identified in 2022–23	70
Table 9: Number of safety actions released in 2022–23	76
Table 10: Aviation – safety recommendations closed in 2022–23	77
Table 11: Aviation – safety recommendations released in 2022–23	85
Table 12: Marine – safety recommendations released in 2022–23	87
Table 13: Rail – safety recommendations released in 2022–23	88
Table 14: Aviation – safety advisory notices released in 2022–23	89
Table 15: ATSB staffing profile at 30 June 2023	123
Table 16: ATSB salary rates at 30 June 2023	124
Table 17: Freedom of information activity	130
Table 18: Entity resource statement 2022–23	133
Table 19: Expenses for outcome	134
Table 20: Information about remuneration for key management personnel	134
Table 21: Information about remuneration for other highly paid staff	135
Table 22: All ongoing employees current report period (2022–23)	135
Table 23: All non-ongoing employees previous report period (2021–22)	136
Table 24: All non-ongoing employees current report period (2022–23)	136
Table 25: All ongoing employees previous report period (2021–22)	136
Table 26: Australian Public Service Act ongoing employees current report period (2022–23)	137
Table 27: Australian Public Service Act non-ongoing employees current report period (2022–23)	137
Table 28: Australian Public Service Act ongoing employees previous report period (2021–22)	138
Table 29: Australian Public Service Act non-ongoing employees previous report period (2021–22)	138
Table 30: Australian Public Service Act employees by full-time and part-time status current report period (2022–23)	139

Table 31: Australian Public Service Act employees by full-time and part-time status previous report period (2021–22)	139
Table 32: Australian Public Service Act employment type by location current report period (2022–23)	140
Table 33: Australian Public Service Act employment type by location previous report period (2021–22)	140
Table 34: Australian Public Service Act Indigenous employment current report period (2022–23)	140
Table 35: Australian Public Service Act Indigenous employment previous report period (2021–22)	141
Table 36: Australian Public Service Act employment arrangements current report period (2022–23)	141
Table 37: Australian Public Service Act employment salary ranges by classification level (minimum/maximum) current report period (2022–23)	141
Table 38: Australian Public Service Act employment arrangements current report period (2022–23)	142
Table 39: Significant non-compliance with the finance law	142
Table 40: Audit committee 2022–23	143
Table 41: Expenditure on reportable consultancy contracts current report period (2022–23)	143
Table 42: Expenditure on reportable non-consultancy contracts current report period (2022–23)	144
Table 43: Organisations receiving a share of reportable consultancy contract expenditure current report period 2022–23	144
Table 44: Organisations receiving a share of reportable non-consultancy contract expenditure current report period 2022–23	145
Table 45: Aids to access details current report period (2022–23)	145
Table 46: Entity resource statement subset summary current report period 2022–23	146
Table 47: Statement of Comprehensive income for the period ended 30 June 2023	147
Table 48: Statement of financial position as at 30 June 2023	147
Table 49: Statement of changes in equity for the current report period 2022–23	148
Table 50: Cash flow statement for period (2022–23)	148
Table 51: Current assets and liabilities	148
Table 52: Commonwealth lessees – Departmental leases under AASB 16 (2022–23)	149
Table 53: Regulatory charging summary note	149
Table 54: APS Net Zero 2030 emissions reporting	149

# List of figures

Figure 1: Cloud conditions 2 minutes prior to departure of VH-PRW from the paddock	53
Figure 2: The main wreckage of VH-CYO at the base of a large tree that was struck	54
Figure 3: Image looking uphill at a similar height and position to VH-OIS prior to the accident	55
Figure 4: Accident site overview showing the wreckage trail	56
Figure 5: Derailment site in Devonport, Tasmania	57
Figure 6: Aerial photograph of the wreckage and the collision pointpoint	58
Figure 7: Bulk carrier Goliath, immediately before the collision with the tugs (Source: TasPorts)	59

# Introduction

The Australian Transport Safety Bureau 2022–23 Annual Report outlines performance against the outcome and program structure in the Infrastructure, Transport, Regional Development and Communications Portfolio Budget Statements 2022–23.

## **Guide to the report**

Section 1	Chief Commissioner's review 2022–23
Section 2	Agency overview
Section 3	Report on performance
Section 4	Significant safety investigations
Section 5	Formal safety issues and actions
Section 6	Financial statements
Section 7	Management and accountability
Section 8	Appendices

### Information about this report

Information about this report is available from:

The Annual Report Coordinator Telephone: 1800 020 616 Email: atsbinfo@atsb.gov.au

### Other sources of information

Annual reports are available in printed form from a number of libraries around Australia under the Commonwealth Library Deposit and Free Issue Schemes. A list of participating libraries can be found on the Digital Transformation Agency website at www.dta.gov.au. This report is available from the ATSB website at www.atsb.gov.au and the Transparency Portal website at www.transparency.gov.au.

Before making decisions on the basis of information contained in this report, you are advised to contact the ATSB. This report was up to date at the time of publication, but details may change over time due to legislative, policy and other developments.

# SECTION 1 – CHIEF COMMISSIONER'S REVIEW 2022–23

# **Chief Commissioner's Review 2022–23**

I am proud to present the ATSB's annual report for 2022–23, a year in which we continued to work towards our mission of improving transport safety for the greatest public benefit through our independent investigations and influencing safety action. This was supported through the development of our Strategic Plan.

We initiated the development of our new Strategic Plan to better position the agency to make the most effective use of our resources. The plan provides a roadmap for the ATSB in response to the Minister's Statement of Expectations for the period 2023 to 2025. A copy of the strategic plan in placemat format is available on the ATSB website at <a href="https://www.atsb.gov.au">www.atsb.gov.au</a>. It includes our goals, which are to:

- » influence positive transport safety outcomes through independently identifying and sharing safety concerns and fostering safety awareness, knowledge, and action
- » position the ATSB to be Australia's national transport safety investigator, maximising safety outcomes across transport sectors through growth and innovation
- » be an enduring and adaptable organisation that delivers on its outcome across changing environments by investing in its people, systems, and partnerships.

There are supporting strategies for these goals as well as a number of actions which are being progressed through the ATSB's annual plan. The ATSB will continue to review and update progress against the plan.

During 2022–23, the ATSB completed and published 59 industry-significant investigation reports into transport accidents and incidents that provided the relevant transport modes with wide-ranging safety learnings. Among the higher profile investigations concluded during the year were:

- » The collision with terrain of a Lockheed C-130 large air tanker during the 2019/20 Australian bushfire season. This investigation highlighted multiple key safety lessons relating to the tasking and operation of large air tankers an operation becoming more prevalent in Australian firefighting.
- » The collision of the bulk carrier Goliath with 2 tugs at Devonport, Tasmania, with our investigation highlighting the importance of bridge resource management.
- » An empty ore train's collision with stationary wagons at a bauxite loading station north of Weipa, Queensland. This investigation made findings around survivability aspects in how the locomotive was manufactured.

We also completed a significant safety study into the aerodrome design standards and the Bulla Road Precinct development at Essendon Fields Airport.

Those 59 investigations published in 2022–23 identified no fewer than 58 safety issues – factors that if unaddressed have the potential to adversely affect the safety of future operations.

Pleasingly, 68% of safety issues identified in 2022–23 were adequately addressed through safety action.

Against safety issues not addressed, the ATSB made 18 formal safety recommendations to the owners of those safety issues.

And once again I am pleased to confirm that no changes to published investigation findings were required in 2022–23, evidence of the ATSB central commitment that all published investigations are factually accurate, defendable and evidence-based.

In addition to occurrence investigations, we published 15 occurrence briefs, which are short reports that allow us to share safety learnings from a transport safety occurrence.

The ATSB also received and processed 120 notifications under the REPCON confidential reporting scheme in 2022–23, of which 49 were assessed and classified as meeting the REPCON criteria. During the year, 33 REPCON reports were completed, of which 7 resulted in safety action being taken by stakeholders.

During 2022–23 we initiated 64 new aviation occurrence investigations, 4 new marine occurrence investigations, and 7 rail occurrence investigations.

Those new investigations include high profile accidents such as the mid-air collision between 2 Airbus EC130 helicopters over the Broadwater at the Gold Coast on 2 January 2023, the collision with terrain of a Boeing 737 large air tanker on 6 February 2023, and the propulsion failure of the bulk carrier Portland Bay off Port Kembla, NSW on 4 July 2022.

Also, during the course of 2022–23, updated and streamlined Transport Safety Investigation Regulations took effect. The TSI Regulations set out the ATSB's safety occurrence reporting scheme and prescribe what occurrences must be reported to the ATSB, the timeframes those reports must be made in, the 'responsible persons' who are required to make a report, and the particulars to be included in a report.

Finally, we launched our revised SafetyWatch initiative. SafetyWatch highlights the broad safety concerns that come from ATSB investigation findings and occurrence data reported by industry. As such, we encourage the transport industry to give heightened attention to the following priority areas where more can be done to improve safety:

- » improving the management of fatigue
- » reducing the collision risk around non-towered airports
- » reducing passenger injuries in commercial ballooning operations
- » improving risk management associated with change
- » encouraging the use of available technology to enhance safety
- » reducing the severity of injuries in accidents involving small aircraft.

In closing the year in review, I would like to acknowledge former ATSB Commissioner Chris Manning. Commissioner Manning completed his term in June 2023. Since being appointed as the first aviation commissioner in 2015, those who have interacted with Commissioner Manning would know he brought his significant industry expertise and credibility to the agency to influence the ATSB's standing. He had the strongly held belief that the ATSB not only conduct investigations to the world's best-practice standards, but equally that we shine a light on areas that require improvement and work to ensure our reports ultimately have an impact on the industry we seek to influence.

In July 2023, Mr Peter Wilson was appointed as the new aviation commissioner. Commissioner Wilson has an impressive aviation resume, commencing his professional piloting career with Qantas in 1985. Over the following 20 years, Commissioner Wilson held a number of key senior management appointments, including Senior Check Captain Boeing 767, General Manager of Boeing 767 Operations and General Manager of Airbus A330 Operations. He also held the senior executive appointments as Qantas Chief Pilot and Chief Operating Officer. Together with the other Commissioners, we are looking forward to working with Commissioner Wilson as he brings his experience to bear in supporting the agency to fulfil its transport safety mission.

### **Outlook**

Between the implementation of our Strategic Plan and our continual focus on efficiency and effectiveness, I believe the ATSB is being well positioned to meet the challenges of the future as we contribute to improving safety in a transport industry facing the challenges of advances in technology, new service delivery models, evolving regulatory standards and varying financial conditions.

We look forward to providing input into the Government's Review of Operations and Financial Sustainability of Australia's Transport Safety and Investigatory Bodies announced in the 2023–24 Budget, and will be ready to implement actions arising from the Government's Aviation White Paper and reviews that may affect the extent of the ATSB's modal jurisdiction.

I am confident that the ATSB is well positioned to meet the future expectations of the Government, industry and the travelling public.



Jy 23.

Angus Mitchell

Chief Commissioner and CEO

## **SECTION 2 – AGENCY OVERVIEW**

# **Agency overview**

The ATSB is Australia's national transport safety investigation agency. Its primary function is to improve aviation, rail and marine safety. It does this by receiving information about accidents and other safety occurrences, analysing data, and investigating occurrences and safety issues in order to identify and communicate factors that affect, or might affect, transport safety.

The ATSB is part of the Australian Government's Infrastructure, Transport, Regional Development, Communications and the Arts portfolio. Within the portfolio are other important transport agencies, with roles focused on delivering an efficient, sustainable, competitive, safe and secure transport system for all transport users, through regulation, financial assistance and safety investigations. These include:

- » Civil Aviation Safety Authority (CASA)
- » Airservices Australia
- » Australian Maritime Safety Authority (AMSA)
- » National Transport Commission.

### **Purpose**

The ATSB is an independent statutory agency of the Australian Government. It is governed by a Commission and is entirely separate from transport regulators, policy makers and service providers. At the same time, it is required to cooperate with others who have a role in maintaining and improving transport safety. The ATSB purpose is defined by its mission statement:

» Improve transport safety for the greatest public benefit through our independent investigations and influencing safety action.

The mission statement reflects the ATSB outcome and functions to improve the safety of aviation, rail, and interstate and overseas shipping through:

- » the independent investigation of transport accidents and other safety occurrences
- » safety data recording, analysis and research
- » influencing safety action.

The ATSB performs its functions in accordance with the provisions of the *Transport Safety Investigation Act 2003* (TSI Act) and, where applicable, relevant international agreements. The TSI Act makes it clear that the ATSB cannot apportion blame, assist in determining liability or, as a general rule, assist in court proceedings. Its sole focus remains the prevention of future accidents and the improvement of transport safety.

The TSI Act also sets out the independence of the ATSB, in the interests of avoiding conflicts of interest and external interference in its role in transport safety investigations, safety data recording, analysis and research, and influencing safety action.

The ATSB maintains a national information dataset of all safety-related occurrences in aviation and accidents, and significant safety occurrences in the rail and marine sectors. The information it holds is essential to its capacity to analyse broad safety trends and to inform its investigation and safety education work.

The ATSB participates in overseas investigations involving Australian-registered aircraft and ships. ATSB has an active international program of cooperation with its overseas counterparts, with a particular focus on Papua New Guinea (PNG) and Indonesia.

The ATSB has a specific mandate to report publicly on its analysis and investigations, and to conduct public education programs to improve transport safety.

### The ATSB role

While independent, the ATSB is accountable to Parliament through the Minister for Infrastructure, Transport, Regional Development and Local Government. Consistent with the Minister's Statement of Expectations, the ATSB gives primacy to transport safety investigations that have the potential to deliver the greatest public benefit. The ATSB does this through:

- » receiving and assessing reports on transport safety matters, including notifications of safety occurrences and confidential reporting
- » independently conducting 'no-blame' investigation of transport accidents and other safety occurrences
- » conducting research into transport statistics and technical issues
- » identifying factors that contribute to accidents and other safety occurrences that affect, or have the potential to affect, transport safety
- » encouraging safety action in response to safety factors by acknowledging action taken by operators, and by issuing safety recommendations and advisory notices
- » raising awareness of safety issues by reporting publicly on investigations and conducting educational programs
- » assisting Australia to meet its international regulatory and safety obligations, and conducting an active program of regional engagement with other transport safety agencies.

### The ATSB objectives

In fulfilling its role of improving transport safety and cooperating with others, the ATSB:

- » focuses its resources in the areas that are most likely to result in safety improvements
- » harnesses the expertise and information necessary to perform its safety role
- » conducts impartial, systemic and timely investigations
- » identifies safety issues clearly and objectively without attributing blame or liability
- » ensures the significance of safety issues are clearly understood by all concerned
- » promotes effective safety action.

### **Cooperation with the transport industry**

The ATSB works cooperatively with the aviation, rail and marine industries, as well as with transport regulators and governments at state, national and international levels, to improve safety standards for all Australians.

The ATSB relies on its ability to build trust and cooperate with the transport industry and the community. The TSI Act requires the ATSB to cooperate with government agencies, private organisations and individuals with transport safety functions and responsibilities, or that may be affected by ATSB transport

safety activities. The ATSB also cooperates with equivalent national bodies in other countries and international organisations with responsibilities for worldwide transport safety standards.

The ATSB actively targets communications to ensure that transport industry stakeholders understand the importance of no-blame investigations. In order to cultivate a strong reporting culture within the transport industry, the ATSB promotes an appropriate level of confidentiality and protection for sensitive safety information provided during the course of an investigation.

### **Mandatory occurrence reporting**

The TSI Act requires any responsible person who has knowledge of any accident or serious incident (or any immediately reportable matter) to report it as soon as it is reasonably practicable. Immediately reportable matters also require a written notification within 72 hours, as do safety incidents (or routine reportable matters).

While the terms of this requirement may seem broad, the *Transport Safety Investigation Regulations* 2021 (TSI Regulations) provide a list of persons who, by the nature of their qualifications, experience or professional association, would be likely to have knowledge of an immediate or routine reportable matter for their mode of transport.

In addition, responsible persons are not required to report a transport safety matter if they believe, on reasonable grounds, that another responsible person has already reported, or is in the process of reporting, that matter.

The ATSB maintains a 24-hour service to receive notifications, including a toll-free telephone number (for immediately reportable matters in all modes). In aviation, a secure online form for written notifications is available on the ATSB website. In rail, all immediately notifiable matters are reported to the Office of the National Rail Safety Regulator (ONRSR), which then report to the ATSB. The written notifications are provided to the ATSB via reporting to ONRSR. In marine, both immediately reportable and routine reportable matters are reported to the ATSB via AMSA.

Generally, the ATSB safety reporting team receives more than 17,000 notifications of safety occurrences per year. These are spread over aviation, marine and rail. Inevitably, there are duplicate notifications and many of the notifications submitted are about matters not required to be reported under the TSI Act. Nevertheless, each one is reviewed and recorded.

The ATSB safety reporting team received 8,764 aviation notifications, 1,622 marine notifications and 756 rail notifications in the form of telephone calls, emails and website contact, relating to events in 2022–23. From those, the team has identified 3,924 aviation and 87 marine accidents, serious incidents and incidents for the year. In rail, ONRSR was responsible for processing all notifications from industry into occurrences in the Australian national rail occurrence database shared with the ATSB.

While not all reported occurrences are investigated, the details of each occurrence are retained within the ATSB occurrence database. These records are a valuable resource, providing a detailed portrait of transport safety in Australia. The searchable public version of the aviation occurrence database is available on the ATSB website at <a href="https://www.atsb.gov.au">www.atsb.gov.au</a> and contains data from July 2003 onwards. The online database is used by industry, academics, the media and regulators to search and research past events.

2022-2023 - ATSB Annual Report

\_

<sup>&</sup>lt;sup>12</sup> Due to delays with the introduction of the ATSB Investigation Management System (AIMS), the count of aviation notifications, and the count of aviation accidents, serious incidents and incidents, will be understated.

### **Aviation**

The ATSB investigates accidents and incidents involving civil aircraft in Australia and Australian-registered aircraft overseas. It does so in a manner consistent with the Convention on International Civil Aviation (Chicago Convention 1944) Aircraft Accident and Incident Investigation (Annex 13). The ATSB also assists with overseas agency investigations involving Australian-registered aircraft and may assist with foreign aircraft if an overseas investigation authority seeks assistance and the ATSB has suitable resources available. The ATSB may also have observer status in important overseas investigations. This provides valuable opportunities to learn from overseas organisations and to benchmark knowledge and procedures against counterpart organisations.

The ATSB cooperates with organisations that are best placed to improve safety, such as CASA, Airservices Australia and the Defence Flight Safety Bureau (DFSB), as well as aircraft manufacturers and operators. The ATSB also works collaboratively with the Department of Infrastructure, Transport, Regional Development, Communications and the Arts and other safety agencies to assist the Australian Government in implementing transport safety initiatives.



ATSB investigators examine the wreckage of a 737 large air tanker

### **Marine**

The ATSB investigates accidents and incidents involving Australian-registered ships anywhere in the world, and foreign ships in Australian waters or en route to Australian ports.

The ATSB works cooperatively with international regulatory authorities, AMSA and other transport safety investigation agencies, as well as ship owners and operators.

Marine investigations are conducted in a manner consistent with the International Maritime Organization's (IMO) Casualty Investigation Code.

The ATSB publishes and distributes a range of marine transport safety reports and safety educational material to the international maritime community, the IMO, educational institutions, and maritime administrators in Australia and overseas.

From 1 July 2018, the AMSA role as a regulator extended to include service delivery for all domestic commercial vessels (DCVs) as part of the Council of Australian Governments' 2011 national maritime reforms. The national reforms do not include funding for the ATSB to conduct DCV investigations, so the ATSB marine jurisdiction continues to be limited to interstate and overseas shipping.



An ATSB investigator examines a vessel's damaged propeller

### Rail

Subject to funding and resource sharing arrangements with the States and Territories, the ATSB is the national rail safety investigator for all states and territories in Australia.

This role includes collecting occurrence information, and investigating rail transport safety matters on the metropolitan, regional and freight networks.

The ATSB works cooperatively with organisations such as ONRSR and rail operators – all of whom share a responsibility to improve safety. The ATSB also has collaboration agreements with the NSW Office of Transport Safety Investigations (OTSI) and Victorian Chief Investigator Transport Safety (CITS) state safety investigation organisations.

The ATSB does not have current funding agreements with all states and territories.



ATSB investigators inspect a train's wheel bogey

### **Specialist investigation capabilities**

### Material failure analysis

The ATSB maintains in-house capabilities for examining any physical evidence relating to transport safety investigations. The group of engineering specialists comprises experts across multidisciplinary engineering fields to conduct forensic analysis of components and structures from aviation, rail and marine occurrences at the ATSB engineering facility in Canberra. The experts collaborate with other ATSB investigators, external stakeholders and subject matter experts from similar agencies around the world to provide detailed insight into the often complex set of technical factors that contribute to transport safety occurrences.

### **Data recovery and performance**

The ATSB maintains a centre of excellence for aviation, marine and rail 'black box' data recovery and analysis. Flight data recorders, cockpit voice recorders, quick access recorders, ground proximity warning systems, voyage data loggers and train data loggers can all be downloaded and analysed at the ATSB.

The data from other electronics installed in aircraft, such as GPS, mobile phones and digital cameras, can also be recovered using in-house chip recovery expertise.

### **Human factors**

The ATSB has investigators with qualifications and specialist expertise in the capabilities and limitations of human performance in relation to the design, manufacture, operation and maintenance of products and systems. Human factors are a core component of every ATSB safety investigation, and this area includes the examination of elements such as decision-making, focus of attention, the role of workload and fatigue management.

### Licensed aircraft maintenance engineers

The ATSB employs a number of investigators with a background as licensed aircraft maintenance engineers to undertake the technical work necessary for investigations into aviation accidents and incidents. These investigators apply their extensive industry knowledge of systems of maintenance, airworthiness control, maintenance, repair, and overhaul of aircraft structures and systems to identify any airworthiness-related factors that contributed to an occurrence or are a safety issue.

### Other transport specialists

ATSB investigators come from a variety of backgrounds and have a range of specialist skills, which are combined to ensure investigations are considered from multiple angles. In addition to those mentioned above, specialists on staff at the ATSB include:

- » pilots
- » aeronautical, mechanical and civil engineers
- » ship captains and officers
- » ship engineers
- » train drivers
- » rail signal and system experts
- » data scientists.

### Site survey

The strength of the ATSB investigation analysis, and its findings, rests on the ability to collect as much data as possible about and from an accident. In addition to the expertise of its investigators, the ATSB incorporates technology to collect and process information about accident sites. This technology includes laser scanning and remotely piloted aircraft systems (RPAS) combined with high accuracy differential GPS data to produce a range of outputs including high accuracy accident site maps, 3-dimensional models of accident sites and vehicles, and videos to support both the investigation team and safety messaging and stakeholder engagement material.

Since 2010, the ATSB has used FARO Focus 3D laser scanning equipment to capture 3D views of accident sites in detail. During this year, the ATSB expanded this capability with the FARO Freestyle 2 handheld scanner. This device has allowed the ATSB to accurately model the internal structure of accident vehicles and develop more complete vehicle models to assist investigators in visualising and assessing vehicle damage and conducting analysis on vehicle structure.

Since 2017, the ATSB RPAS program has complemented laser scanning, allowing the capture of larger areas and angles that would not otherwise have been possible without a helicopter. The ATSB has continued to support investigations across all 3 modes under the agency's remotely piloted aircraft operator's certificate (ReOC), issued by CASA. The agency continues to expand its capability with RPAS pilots conducting marine RPAS operations training on the Spirit of Tasmania II in late-2022, and the implementation of training and procedures for night flying and testing capabilities to conduct accident site mapping at night under artificial lights.

To support both RPAS and laser scanning technologies, the ATSB makes use of a highly accurate differential GPS data unit, allowing personnel to record the location and dimensions of wreckage, ground scars and key points on the accident site more precisely. This data can also more accurately position images and models captured on an accident site.

As new technologies, software and equipment become available, the ATSB seeks to embrace their use to provide investigators with the best available tools.



ATSB produced a 3D model of the 737 large air tanker accident site using the capability of its RPAS

### Range of investigation and other products

The ATSB produces a final report for all its investigations. Reports communicate important safety issues, safety actions and information, and provide transparency into the ATSB investigation process.

The main products are occurrence investigations, occurrence briefs, safety studies, and statistical and educational reports. The ATSB also produces an up to date online searchable aviation occurrence database and summaries of concerns raised via the REPCON (confidential reporting) system and their resulting safety actions.

### **Occurrence investigations**

Occurrence investigations typically examine a single accident or incident in detail. The sequence of events and factual background information are documented, and findings are presented along with a safety analysis to explain those findings. These investigations may identify safety issues – ongoing systemic risks to safety – and the safety actions taken by organisations to address these safety issues. The ATSB may also issue formal safety recommendations.

### **Safety studies**

Safety studies typically investigate multiple occurrences of a similar nature, or a potential or emerging safety issue. Conducted as an investigation under the TSI Act, they aim to uncover safety issues through the analysis of occurrence and other data.

### **Occurrence briefs**

Occurrence briefs are concise reports that detail the facts surrounding a transport safety occurrence, as received in the initial notification, and any follow-up enquiries. They provide an opportunity to share safety messages in the absence of an investigation. Occurrence briefs are not conducted under the TSI Act.

### **Investigation levels**

The ATSB response to reported safety matters is classified by the depth of the investigation into contributing safety factors. This generally also reflects the level of resources and/or time they require, as well as their complexity. The following safety investigation levels were used by the ATSB for occurrence investigations and safety studies in 2022–23. Each level presented below (in order) builds on the previous level.

### **Short investigations**

Short investigations are limited-scope, and can be office-based or field-based investigations conducted under the TSI Act. Investigation activities generally include sourcing photos and documentation of any transport vehicle damage and/or the accident site, interviews with involved parties, the collection of documents, such as procedures, and internal investigations by manufacturers and operators. Occurrences investigated are normally simple and usually for common accidents and incidents. A short summary report of up to 8 pages will be produced, which includes a description of the sequence of events, generally limited to contextual factual information, a short analysis and findings.

Findings include safety factors (events and conditions that increase risk) which are generally limited to those relating to the occurrence. Any proactive safety actions taken by industry will also be reported. Short investigations usually require only one ATSB staff member.

### **Defined investigations**

Defined investigations may involve in-the-field activity or may be conducted as an office-based investigation. They require numerous ATSB resources and result in an agreed-scope product with a limited set of findings and a defined-size report. Evidence collected for defined investigations can also include recorded information, multiple interviews, analysis of similar occurrences, and a review of procedures and other risk controls related to the occurrence or set of occurrences. Occurrences investigated are generally less complex accidents and incidents.

Investigation reports are typically about 20 pages, with an expanded analysis to support the broader set of findings that may also include safety factors not directly contributing to the occurrence. Defined investigations may also identify safety issues (safety factors with an ongoing risk) relating to ineffective or missing risk controls. Identified safety issues are documented in the investigation report, along with proactive safety action taken by industry and ATSB safety recommendations.

### **Systemic investigations**

Systemic investigations generally involve in-the-field activity, and a range of ATSB and possibly external resources. They are less confined in scope and will involve a significant effort collecting evidence across many areas. The breadth of the investigation will often cover multiple organisations. Occurrences and sets of occurrences investigated normally involve very complex systems and processes. In addition to investigating failed and missing risk controls, systemic investigations also investigate the organisational processes, systems, cultures and other factors that relate to those risk controls, including from the operator, regulator, and certifying and standards authorities. Systemic investigations result in substantial reports, often with several safety issues identified.

### **Major investigations**

Major investigations are reserved for very significant accidents and are likely to involve significant ATSB and external resources and additional one-off government funding. They result in a comprehensive report.

### **Confidential reporting**

The ATSB operates the voluntary and confidential reporting scheme (REPCON) for the aviation, rail and marine industries. Any person within these industries, or member of the travelling public, may submit a REPCON report of a reportable safety concern. The scheme is designed to capture safety concerns, including unsafe practices, procedures and risk controls within an organisation or affected part of the industry.

Each reported safety concern is assessed and de-identified by the ATSB by removing all personal details concerning the reporter and any individual named in the report. This de-identified text is passed back to the reporter, who must authorise the content before the REPCON can proceed. The de-identified text is then forwarded to the relevant organisation that is best placed to address the safety concern. The organisation's response will then be forwarded to the relevant regulator for further action, as deemed necessary.

The aim of the REPCON scheme is to encourage safety action to address the reported safety concerns. This can include variations to standards, orders, practices and procedures, or an education campaign. The ATSB may use the de-identified version of the reported safety concern to issue an information brief or alert bulletin to whichever person or organisation is best placed to take safety action in response to the safety concern. The ATSB publishes the outcome of each REPCON on its website.

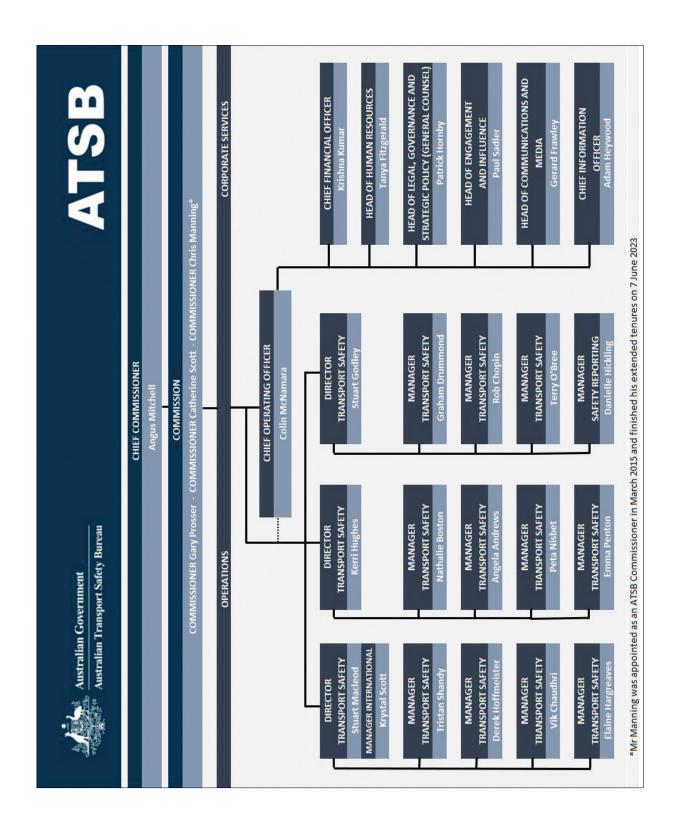
### **International cooperation**

The ATSB is committed to close engagement with its international counterpart agencies and relevant multilateral organisations. In line with Australian Government policy, the ATSB places a specific emphasis on engagement with countries in the Asia Pacific region, particularly with Indonesia and PNG.

The ATSB is actively involved in the work of the International Civil Aviation Organization (ICAO), specifically the ICAO Accident Investigation Panel (AIGP) and the Asia Pacific (APAC) Accident Investigation Group (AIG) along with the IMO. The ATSB is also an active member of the International Transportation Safety Association (ITSA).

The ATSB continues to make its expertise and resources widely available in support of transport safety. Every year, the ATSB cooperates with international state aviation investigation agencies, in accordance with clause 5.18 of Annex 13 to the Convention on International Civil Aviation, by appointing accredited representatives to their investigations that involve an Australian-registered aircraft, an Australian operator, or an Australian manufacturer.

# **Organisational Structure**



# **Commission and Executive Management Team**



# **Chief Commissioner and Chief Executive Officer**

### **Mr Angus Mitchell**

Angus Mitchell has extensive experience in organisational leadership and management, maritime operations and safety investigation.

He joined the ATSB from Maritime Safety Queensland, where as General Manager, he oversaw the safe and efficient movement of vessels into and out of Queensland's 21 ports, and was responsible for compliance activities and safety investigations for Australia's largest recreational maritime fleet.

During his tenure with Maritime Safety Queensland, Mr Mitchell was recognised with the 2020 Australian Industry and Shipping Award for his role in managing international shipping throughout the COVID-19 pandemic, and supporting the welfare and safety of international seafarers.

Prior to leading Maritime Safety Queensland, Mr Mitchell was the Executive Director of NSW Maritime, where he oversaw Australia's largest state's primary maritime regulatory, investigative and compliance agency. He has also served as Deputy Harbour Master – Operations for Sydney Ports, where he was responsible for managing day-to-day port operations for both Sydney Harbour and Port Botany.

Mr Mitchell served as an officer in the Royal Australian Navy for 17 years, undertaking a number of operational and Joint Operations Command roles both domestically and in overseas theatres. Mr Mitchell is an Indonesian linguist and commenced his 5-year term as ATSB Chief Commissioner and Chief Executive Officer on 2 September 2021.



### **Commissioner**

### **Mr Chris Manning**

Chris Manning has over 40 years' experience in the aviation industry. Beginning his aviation career in the early 1970s, Mr Manning was a Qantas cadet pilot from 1970 until 1972. He then became an air traffic controller from 1973 until 1975 before returning to Qantas as a pilot.

During his Qantas career, Mr Manning gained his command on the Boeing 767 in 1989, and was a check and training captain throughout the 1990s. From 2003 until his retirement from the airline in 2008 he held the position of Chief Pilot and Group General Manager Flight Operations. He also held the position of president of the Australian and International Pilots' Association from 1999 until 2002.

Since retiring from flying, Mr Manning has been a Chair of The Australian Aviation Associations' Forum, is a Director of AMDA (organisers of the Avalon Airshow), a founding Director of the Australian Aviation Hall of Fame, Chair of Airport Coordination Australia (term finished in September 2022), and a Director of the Historical Aircraft Restoration Society Foundation. Mr Manning was appointed as an ATSB Commissioner in March 2015 and finished his extended tenures on 7 June 2023.



### **Commissioner**

### **Mr Gary Prosser**

Gary Prosser has over 40 years' experience in the maritime industry, coming from a seagoing career and serving on a wide variety of Australian ships in both the international and domestic trades. He was part of the inaugural intake to the Australian Maritime College (AMC) in 1980 and went on to lecture at the college.

For a number of years, Mr Prosser managed offshore supply vessel operations in Bass Strait prior to moving to Tasmania where he headed the Polar Division of P&O Australia managing Antarctic and Marine Science Vessels for the Australian Antarctic Division and the CSIRO.

Initially joining AMSA in 1997, Mr Prosser had a variety of senior management roles with the authority and was appointed Deputy Chief Executive Officer in 2007.

In 2009, Mr Prosser was elected as Secretary General of IALA, headquartered in Paris, prior to returning to AMSA in 2015 and retiring in 2019.

In addition to his maritime qualifications, Mr Prosser has a Bachelor of Education degree and is a member of the Australian Institute of Company Directors.

Mr Prosser was appointed as an ATSB Commissioner in October 2019.



### **Commissioner**

### **Ms Catherine Scott**

Catherine Scott has extensive experience in rail safety, aviation and road transport, finance and risk management, and board directorships.

From 2012 to 2020, Ms Scott served as a non-executive director of ONRSR, and was previously Deputy Chair and Chair of the Committee of VLine Passenger Pty Ltd.

In her earlier professional career, she held senior positions in the investment banking and finance industries, including 5 years as a senior executive at Australian Airlines (which subsequently merged with Qantas Airways) as Treasurer Capital Markets.

Ms Scott also currently serves as a non-executive board member and Chair of the Finance, Risk and Audit Committee of the National Heavy Vehicle Regulator.

Ms Scott has held a board membership with VicWater, and has been Chairperson, Deputy Chair and Audit Committee Chair of the Goulburn Valley Region Water Corporation. She has served as a non-executive director, Deputy Chair and Chair of the Audit and Risk Committee at VicForests.

A Fellow of the Australian Institute of Company Directors, Ms Scott holds Bachelor of Science (Honours) and Bachelor of Commerce degrees from the University of Melbourne.

Ms Scott was appointed as an ATSB Commissioner in September 2020.



### **Chief Operating Officer**

### Mr Colin McNamara

Colin McNamara joined the Australian Public Service in 2004. Prior to this, he served as a General Service Officer in the Australian Army and was awarded the Australian Active Service Medal in 1999.

Prior to his appointment as the ATSB Chief Operating Officer, Mr McNamara managed a range of corporate functional areas including human resources, governance, finance, communications, ICT business services and major projects. Mr McNamara continues to play a critical role in contributing to the strategic direction of the ATSB, and in achieving relevant objectives of the Australian Government.

Mr McNamara holds a range of professional qualifications in personnel management and is a professional member of the Australian Human Resources Institute.

Mr McNamara has recently gained a graduate qualification in Transport Safety Investigation through RMIT University.

# **Outcome and program structure**

### **Outcome**

The ATSB has one outcome – Improved transport safety in Australia including through:

- » independent 'no blame' investigation of transport accidents and other safety occurrences
- » safety data recording, analysis and research
- » influencing safety action.

### **Program 1.1 objective**

The ATSB will work actively with the aviation, marine and rail industries, transport regulators and governments at a local, state, national and international level to improve transport safety standards for the greatest public benefit. Investigations and related activities seek to raise awareness of identified safety issues and to encourage stakeholders to implement actions to improve future safety.

There are 3 core objectives which arise from the ATSB functions under the TSI Act:

### 1. Independent 'no-blame' investigation of transport accidents and other safety occurrences

Independent investigations that are selective and systemic, and which focus on future safety rather than on blame, increase stakeholder awareness and action on safety issues, and foster industry and public confidence in the transport system.

### 2. Safety data recording, analysis and research

Timely receipt and assessment of transport accident and other safety occurrence notifications allows the ATSB to identify and refer safety issues at the earliest opportunity. The maintenance and analysis of a body of safety information (including transport safety data, safety study and occurrence investigation reports) enables stakeholders and researchers to gain a better understanding of safety trends and safety issues.

### 3. Influencing safety action

Awareness and understanding of transport safety issues is increased through a range of activities, including consultation, education, and the dissemination of occurrence investigation and safety study findings and recommendations. These contribute to the national and international body of safety knowledge and foster action for the improvement of safety systems and operations.

# **How the ATSB reports**

Section 63A of the TSI Act requires that:

The annual report prepared by the Chief Executive Officer and given to the Minister under section 46 of the *Public Governance, Performance and Accountability Act 2013* (PGPA Act) for a period must include the following:

- » prescribed particulars of transport safety matters investigated by the ATSB during the period
- » a description of investigations conducted by the ATSB during the period that the Chief Commissioner considers raise significant issues in transport safety.

The ATSB observes and complies with Resource Management Guide No 135—Annual report for non-corporate Commonwealth entities issued by the Department of Finance.

This annual report details ATSB performance against the program objectives, deliverables and key performance indicators (KPIs) published in the *Infrastructure*, *Regional Development and Communications Portfolio Budget Statements 2022–23*. The ATSB annual report also includes audited financial statements in accordance with the PGPA Act.

### **Priorities for investigation**

The ATSB focuses on transport safety as the highest priority. In 2022–23, the ATSB gave priority to transport safety investigations that have the potential to deliver the best safety outcomes for the travelling public. A Statement of Expectations from the Minister for Infrastructure, Transport and Regional Development and Local Government, provided to the ATSB, set the direction for the ATSB to give priority to transport safety investigations that have the highest risk or potential to deliver the greatest public benefit through systemic improvements to transport safety. The evolution in the ATSB mission from focusing on the travelling public to driving safety that is for the greatest public benefit is necessary to reflect the contribution the ATSB makes to preventing loss of life, as well as avoiding significant local, state and national economic costs that can be associated with an accident. The ATSB is not resourced to investigate every single accident or incident that is reported but allocates priorities within the transport modes to ensure that investigation effort achieves the best outcomes for safety improvement. The ATSB recognises that there is often more to be learned from serious incidents and patterns of incidents, and gives focus to these investigations, as well as specific accident investigations.

### Three ways to action

The TSI Act requires specified people and organisations to report to the ATSB on a range of safety occurrences (called 'reportable matters'). Reportable matters are defined in the TSI Regulations. In principle, the ATSB can investigate any of these reportable matters, or any 'transport safety matter' as defined in section 23 of the TSI Act. In practice, they are actioned in one of 3 ways to contribute to ATSB functions:

1. A reported occurrence that suggests a safety issue may exist will be investigated (occurrence investigation), and may involve an on-site component. A transport safety matter identified across a number of occurrences in ATSB data or through investigative analysis that suggests a safety issue may exist can also be investigated as a safety study. Investigations may lead to the identification/confirmation of the safety issue and will set out the case for safety action to be taken in response.

- 2. A reported occurrence with significant consequences or risk where there is no suggestion of a systemic underlying safety issue may benefit from a short investigation or a factual occurrence brief report for safety education and promotion, and enable a richer dataset for future safety analysis, to identify safety issues or trends (such as inclusion in a safety study).
- 3. Basic details of an occurrence, based primarily on the details provided in the initial occurrence notification, will be recorded in the ATSB occurrence database to be used in future safety analysis to identify safety issues and trends (including safety studies), and in aviation, will be available in the online searchable occurrence database.

### **Aviation broad hierarchy**

The ATSB allocates its investigation resources to be consistent with the following broad hierarchy of aviation operation types:

- 1. Passenger transport operations and medical transport operations (including positioning flights):
  - » air transport operations (scheduled or non-scheduled), balloon transport operations, mining fly-in-fly-out operations, scenic flights/joy flights, parachuting operations, future advanced air mobility passenger carrying operations, and aerial work operations that carry passengers who are not crew members
  - » flights formerly known as air ambulance operations, Royal Flying Doctor Service flights and patient transport/transfer services using aircraft operated by state and territory ambulance services.
- 2. Non-passenger commercial aircraft operations (including positioning flights):
  - » aerial work operations such as surveying, spotting, surveillance, agricultural operations, aerial photography; search and rescue operations; flying training activities
  - » cargo transport operation
  - » large (greater than 150 kg) or medium (25–150 kg) RPAS or RPAS which is type certificated.
- 3. Recreational flying, 'private' general aviation, and flights where the pilot shares equally in costs with passengers (cost sharing).
- 4. Higher-risk personal recreation/sports aviation/experimental aircraft operations.
- 5. Small and very small RPA, uncrewed balloons.

The ATSB endeavours to investigate all fatal accidents involving VH-registered powered aircraft subject to the potential transport safety learnings and resource availability.

### Marine broad hierarchy

The ATSB allocates its investigative resources to be consistent with the following broad hierarchy of marine operation types:

- 1. Passenger operations
- 2. Freight and other commercial operations
- 3. Non-commercial operations.

### **Rail broad hierarchy**

The ATSB allocates its investigative resources to be consistent with the following hierarchy of rail operation types:

- 1. Mainline operations that impact on passenger services
- 2. Freight and other commercial operations
- 3. Non-commercial operations.

### **Level of response**

The level of investigative response is determined by resource availability and factors such as those detailed below. These factors (expressed in no particular order) may vary in the degree to which they influence ATSB decisions to investigate and respond. Factors include:

- » the anticipated safety value of an investigation, including the likelihood of furthering the understanding of the scope and impact of any safety system failures
- » the likelihood of safety action arising from the investigation, particularly of national or global significance
- » the existence and extent of fatalities/serious injuries and/or structural damage to transport vehicles or other infrastructure
- » the unique value an ATSB investigation will provide over any other investigation by industry, regulators or police
- » the obligations or recommendations under international conventions and codes
- » the nature and extent of public interest in particular, the potential impact on public confidence in the safety of the transport system
- » the existence of supporting evidence, or requirements, to conduct a special investigation based on trends
- » the relevance to identified and targeted safety programs
- » the extent of resources available, and projected to be available, in the event of conflicting priorities
- » the risks associated with not investigating including consideration of whether, in the absence of an ATSB investigation, a credible safety investigation by another party is likely
- » the timeliness of notification
- » the training benefit for ATSB investigators.

# **SECTION 3 – REPORT ON PERFORMANCE**

# **Report on performance**

This section reviews ATSB results against the performance criteria set out in the *Portfolio Budget Statements 2022–23* and the *ATSB Corporate Plan 2022–23*. Its effectiveness in achieving planned outcomes during 2022–23 is also reviewed here.

### **Annual performance statement**

I, as the accountable authority of the Australian Transport Safety Bureau, present the annual performance statement of the Australian Transport Safety Bureau for the year ended 30 June 2023, as required under paragraph 39(1)(a) of the *Public Governance, Performance and Accountability Act 2013* (PGPA Act). In my opinion, this annual performance statement is based on properly maintained records, accurately reflects the performance of the entity, and complies with subsection 39(2) of the PGPA Act.

**Angus Mitchell** 

**Chief Executive Officer** 

29 September 2023

### Results against key performance criteria

Table 1: Results against key performance criteria

### Purpose

As set out in the Portfolio Budget Statements 2022-23 the ATSB's purpose is defined by its mission statement:

Improve transport safety for the greatest public benefit through our independent investigations and influencing safety action.

In reference to the public benefit:

- » The ATSB focuses on the public interest where the safety of passengers and workers on an aircraft, train or ship is concerned.
- » The ATSB focuses on the public interest when it comes to the significant costs that can result from an accident, particularly where there is significant damage to public infrastructure or an impact on the national economy.

Performance Criterion	Target for 2022-23	Result	Table
Number of safety issues that are addressed through	65% of safety issues addressed in the last financial year	d in the last 2022–23 adequately addressed	
safety action.	85% of safety issues addressed in the previous financial year	85% of safety issues identified in 2021–22 adequately addressed through safety action	2
Number of systemic, defined, and safety study investigations completed by ATSB that identify safety issues.	65% of investigations identify a safety issue	84% of systemic, defined, and safety study investigations completed in 2022–23 identified safety issues	2
Percentage of all investigations that identify at least one safety issue not already identified by others.	Percentage of all investigations identify at least one safety issue not identified by others	72% of systemic, defined, and safety study investigations completed in 2022–23 had safety issues not identified by others	2
On an average annual basis, the ATSB will be conducting around twice the number of investigations as it has available investigators.	Projecting 90 active investigations	An average of 96 active investigations	2
	Short: 7 months	10.4 months	2
Median time to complete investigations.	Defined: 14 months	15.9 months	2
	Systemic: 20 months	38.5 months	2
Number of changes to ATSB published investigation findings over the previous financial year.	Zero	Zero	2

### Performance at a glance

The ATSB commenced 75 new occurrence investigations during 2022–23 while continuing to improve safety through the completion of 59 occurrence investigations and one safety study. Of note, the ATSB commenced investigations into 2 very high profile accidents during the year which involved considerable resources during the on-site phase of the investigation. These were:

- » Mid-air collision involving Eurocopter EC130B4, VH-XH9, and Eurocopter EC130B4, VH-XKQ, near Main Beach, Gold Coast, Queensland, on 2 January 2023.
- » Collision with terrain involving Boeing Company 737-3H4, N619SW, Fitzgerald River National Park, Western Australia, on 6 February 2023.

A number of systemic investigations into large accidents were completed in 2022–23, including:

- » Collision with terrain of the C-130 firefighting aircraft near Cooma, New South Wales, in January 2020.
- » Train derailment near Wallan, Victoria, in February 2020.
- » Runaway and derailment of TasRail freight train number 604, Devonport, Tasmania, on 21 September 2018.
- » Controlled flight into terrain of a Cessna 402 aircraft at Lockhart River, New South Wales, in March 2020.
- » Collision with loading rake and derailment of empty ore train R1006, at Andoom (near Weipa), Queensland, on 22 September 2019.

The ATSB also completed a significant safety study:

» Aerodrome design standards and the Bulla Road Precinct development at Essendon Fields Airport.

The ATSB continued efforts to progress a number of other higher profile large accident investigations during the year. These investigations included:

- » Collision with terrain involving Airbus Helicopters EC130 T2, VH-XWD, near Mount Disappointment, Victoria, on 31 March 2022.
- » Engine room fire on board MPV Everest, Southern Ocean, on 5 April 2021.
- » Collision with terrain involving Robinson R44, VH-IDW, King River, Northern Territory, on 28 February 2022.

The investigations above drew heavily on ATSB resources over 2022–23. Some legacy investigations, completed this year, drew heavily on resources in previous financial years. The effort expended, which was an investment in the quality of the outcomes, has affected timeliness targets. The 2023–24 Portfolio Budget Statements announced that the ATSB will receive an increase in funding for the 12-month period to provide for approximately 15 ASL and improvements to the ATSB investigation management system. Over time, the additional resources and capital investment will enhance ATSB operational capability and efficiency, improving performance outcomes.

### **Key results**

Table 2 summarises ATSB performance against key indicators published in the *Portfolio Budget Statements* 2022–23.

Table 2: ATSB performance against KPIs

#### **Outcome**

Improve transport safety for the greatest public benefit through independent investigations and influencing safety

### **Performance Criterion**

Number of safety issues that are addressed through safety action.

Target	Result	Achieved
65% of safety issues addressed in the last financial year	68% of safety issues identified in 2022–23 adequately addressed through safety action	•
85% of safety issues addressed in the previous financial year	85% of safety issues identified in 2021–22 adequately addressed through safety action	~

D	e	ta	iil

Year	Number identified	Number addressed	Per cent addressed
2022–23	58	39.5	68%
2021–22	56	47.5	85%
2020–21	59	45.5	77%
2019–20	46	36.5	79%
Analysis			

To be effective against the ATSB purpose, safety action needs to be taken once safety issues are identified by ATSB investigations. This performance criterion measures the effectiveness of the ATSB to influence entities to address identified safety issues and therefore improve transport safety.

#### Safety issues:

- » can reasonably be regarded as having the potential to adversely affect the safety of future operations
- » are characteristic of an organisation or a system, rather than a characteristic of a specific individual, or characteristic of an operational environment at a specific point in time.

Some safety issues will take time to be actioned by stakeholders. We expect that some safety issues not actioned in the year they are identified will be addressed the ensuing year. There also needs to be some tolerance for a minority of safety issues identified not being actioned. The ATSB does not have powers to force operators, manufacturers and regulators to take action – the ATSB relies on its ability to influence.

Further details of the safety issues identified and actioned in Section 5 - Formal safety issues and actions.

**Data source:** The ATSB investigation management system.

**Methodology:** Includes safety issues published in the financial year from occurrence and safety study investigations by the ATSB, and rail occurrence investigations conducted on behalf of the ATSB by OTSI NSW and CITS Victoria. The figures do not include safety issues which have been closed (no longer relevant). The number of safety issues addressed calculation includes safety issues that have been adequately addressed (count of 1), and partially addressed (count of 0.5). Previous annual reports did not include the half count of partially addressed safety issues, so numbers quoted here will be slightly higher than previously published.

Reference: 2022–23 Portfolio Budget Statements, page 247; 2022–23 Corporate Plan, page 13.

### Outcome

Identify safety issues additional to those identified by industry and government safety agencies for the greatest public benefit through ATSB occurrence investigations and safety studies.

### **Performance Criterion**

### Number of systemic and defined investigations completed by ATSB that identify safety issues.

Target	Result		Achieved
65% of investigations identify a safety issue	84% of systemic and defined investigations completed in 2022–23 identified safety issues		V
Detail			
Investigation type	Year	Number completed	Number with safety issues
Defined investigations			
All modes	2022–23	19	15
	2021–22	24	10
	2020–21	32	16
	2019–20	34	10
Systemic investigations			
All modes	2022–23	6	6
	2021–22	8	8
	2020–21	7	7
	2019–20	13	6

### Analysis

To be effective against the ATSB purpose, the ATSB needs to demonstrate value through the identification of safety issues. This performance criterion measures the effectiveness of the ATSB in identifying safety issues so that others can act and therefore improve transport safety.

Safety issues can be identified in both occurrence investigations and safety studies when they are conducted at a defined or systemic level. Short investigations have a limited scope that do not include the investigation of safety issues. Defined investigations are likely to include safety issues, and systemic investigation will very likely identify several safety issues.

Improvements to investigation management processes in 2020–21 has resulted in a significant increase in the proportion of defined and systemic investigations which identify a safety issue compared with the level achieved prior to the improvements. While this has been maintained for 2022–23, the ATSB will strive to increase the proportion of investigations identifying safety issues through careful scoping of investigations to ensure we are distributing most resources towards those that discover safety issues that lead to safety action to improve transport safety.

Investigations published in the 2022–23 financial year with identified safety issues are summarised in **Section 4** – **Significant safety investigations.** 

Further details of all the safety issues identified in 2022–23 are included in **Section 5 – Formal safety issues and safety actions.** 

**Data source:** The ATSB investigation management system.

**Methodology:** Includes occurrence and safety study\* investigations conducted by ATSB at the defined and systemic levels. The figures do not include rail investigations conducted on behalf of the ATSB by OTSI NSW and CITS Victoria, nor assistance to investigations conducted by an external party. Note, previous ATSB annual reports reported 'complex investigations' to refer to the combination of 'defined' and 'systemic' investigations.

\* safety study investigations were previously referred to as research investigations conducted under the TSI Act.

Reference: 2022-23 Portfolio Budget Statements, page 246; 2022-23 Corporate Plan, page 13.

#### Outcome

Identify safety issues additional to those identified by industry and government safety agencies for the greatest public benefit through ATSB occurrence investigations and safety studies.

#### **Performance Criterion**

Percentage of defined and systemic investigations that identify at least one safety issue not already identified by others.

Target	Result	Achieved
A percentage of all investigations that identify at least one safety issue not identified by others	72% of systemic and defined investigations completed in 2022–23 identified safety issues not identified by others	V

#### **Analysis**

To be effective against the ATSB purpose, the ATSB needs to demonstrate value and relevance through the identification of safety issues not already identified by others. As an independent agency, the ATSB can investigate where others cannot. This performance criterion measures the effectiveness of the ATSB in identifying systemic safety issues across transport systems so that others can act and therefore improve transport safety.

As described above, 21 of the 25 defined and systemic investigations completed in 2022–23 identified at least one safety issue. Of those 21 investigations, 18 had at least one safety issue that was identified by the ATSB before the safety issue owner. This suggests that ATSB investigations finding safety issues are adding value to transport safety beyond what others in the industry can do for themselves.

**Data source:** The ATSB investigation management system.

**Methodology:** Includes occurrence and safety study\* investigations conducted by ATSB at the defined and systemic levels. The figures do not include rail investigations conducted on behalf of the ATSB by OTSI NSW and CITS Victoria, nor assistance to investigations conducted by an external party. Analysis of investigations counts those containing at least one safety issue that was confirmed as being identified first by the ATSB.

 $^st$  safety study investigations were previously referred to as research investigations conducted under the TSI Act.

Reference: 2022–23 Portfolio Budget Statements, page 246; 2022–23 Corporate Plan, page 13.

#### Outcome

Efficiently use resources to conduct investigations through selective investigation processes and project management discipline.

#### **Performance Criterion**

On an average annual basis, the ATSB will be conducting around twice the number of investigations as it has available investigators.

Target	Result	Achieved	
Projecting 90 active investigations	An average of 96 active investigations	·	



#### **Analysis**

To be efficient against the ATSB purpose, the ATSB needs to ensure that limited resources are prioritised to investigations with the broadest safety effect on transport systems. This performance criterion measures the efficiency of the ATSB in balancing investigation demand (the number of investigations commenced each year) and capacity (resources available to complete investigations).

The target is consistent with resourcing and investigation output expectations for similar investigation agencies internationally.

The ATSB workload over previous reporting periods, with investigation numbers well in excess of 2 investigations per investigator, resulted in demand greater than capacity, leading to a large volume of older investigations. There has been a focus on completing older investigations to achieve an average of around 2 active investigations per investigator.

The reduction in investigators available in the last 6 months reflects the revised ATSB structure, which came into effect in February 2023, where some investigators were moved into manager roles.

Data source: The ATSB investigation management system and workforce planning records.

**Methodology:** Includes ATSB occurrence and safety study investigations. Excludes all investigations that are assistance to an investigation conducted by an external party. Also excludes educational, data, occurrence briefs and other published projects done by investigators. The number of active investigations is calculated for each day of the year and then averaged across the financial year. This is divided by the number of available ATSB investigators, calculated per month. Investigators may be unavailable due to extended leave, training or diversion to enabling projects.

Reference: 2022-23 Portfolio Budget Statements, page 246; 2022-23 Corporate Plan, page 14.

#### Outcome

ATSB safety-related information is shared in a timely manner for the benefit of those needing awareness of relevant hazards, risks and trends or taking safety action, through publishing information in accordance with committed timeframes.

#### **Performance Criterion**

#### Median time to complete ATSB investigations.

Target		Result	Achieved		
Short investigations	7 months	10.4 months	X		
Defined investigations	14 months	15.9 months	X		
Systemic investigations	20 months	38.5 months	X		
Detail					
Investigation type	Year	ATSB investigations completed	Median time to complete investigations (in months)		
Short investigations					
All modes	2022–23	34	10.4		
	2021–22	28	8.2		
	2020–21	23	11.4		
	2019–20	22	12.9		
Defined investigations					
All modes	2022–23	19	15.9		
	2021–22	24	19.8		
	2020–21	32	20.7		
	2019–20	34	22.1		
Systemic investigations					
All modes	2022–23	6	38.5		
	2021–22	8	38.3		
	2020–21	7	36.9		
	2019–20	13	33.1		

#### **Analysis**

This performance criterion focuses on the timeliness of the final ATSB investigation products. Where there is relevant confirmed information available earlier than the final report, the ATSB also strives to publish preliminary and interim investigation reports (not measured in this KPI). Timely sharing of safety information is important for our stakeholders with responsibility for managing risk.

The median time taken to complete defined investigations has steadily decreased over the last four reporting periods and is approaching the target of 14 months. Of the larger investigations, defined level reflect the majority of investigations completed by the ATSB each year.

However, over 2022-23, the median time taken for short investigations was longer than the downward 4 year trend toward the 7 month target, but was still lower than 2020-21 and 2019-20 medians. As the median time for short investigations has been consistently above target since the removal of the dedicated short investigation team, the ATSB has reintroduced a short investigation team in February 2023. Along with providing an opportunity for training for newer investigators, the team will focus on increasing the production of these short investigations and reducing the time taken to publish.

Systemic investigations have continued to be significantly above target over the past 4 years. While this somewhat reflects large and complex investigations, many of which have been completed in the past two years, it also reflects a stricter definition of systemic investigation over the past few years. Very large investigations take many resources and prolonged effort that affects the timeliness of all investigations. The ATSB will continue to commit to restricting to two active investigations per investigator available on average to help manage timeliness, but has also instigated tighter control over the allocation of investigator resources to systemic investigations to ensure timeliness is improved in future years.

**Data source:** The ATSB investigation management system.

**Methodology:** Includes occurrence and safety study\* investigations conducted by ATSB. The figures do not include rail investigations conducted on behalf of the ATSB by OTSI NSW and CITS Victoria, nor assistance to investigations conducted by an external party. Calculation of median time (from decision to investigate to publication).

\* safety study investigations were previously referred to as research investigations conducted under the TSI Act.

Reference: 2022–23 Portfolio Budget Statements, page 246; 2022–23 Corporate Plan, page 14.

#### Outcome

Investigations of transport occurrences, safety studies are defendable, to ensure industry and government confidence in ATSB work, through the use of evidence-based and systemic investigation processes.

#### **Performance Criterion**

Number of changes to the TSI Act published investigation findings over the previous financial year.

Target		Result	Achieved	
Zero		Zero	V	
Detail				
Investigation type	Year	TSI Act investigations completed	Number of changes to published findings	
Short investigations				
All modes	2022–23	34	0	
	2021–22	30	0	
	2020–21	25	0	
	2019–20	26	0	
Defined investigations				
All modes	2022–23	20	0	
	2021–22	26	0	
	2020–21	38	0	
	2019–20	37	0	
Systemic investigations				
All modes	2022–23	8	0	
	2021–22	10	0	
	2020–21	9	0	
	2019–20	19	0	

#### Analysis

The ATSB is committed to ensuring that all published investigations are factually accurate, defendable and evidence-based, with the accuracy of the public record for all investigation findings continuing to be maintained. Accuracy of investigation findings remain integral to ensuring industry and government confidence in ATSB safety information in order to take action to improve transport safety.

**Data source:** The ATSB investigation management system

**Methodology:** Includes occurrence and safety study\* investigations conducted by ATSB and rail investigations conducted on behalf of the ATSB by OTSI NSW and CITS Victoria. Analysis includes the review of any changes to findings after the final investigation report was published during the previous financial years.

st safety study investigations were previously referred to as research investigations conducted under the TSI Act.

Reference: 2022-23 Portfolio Budget Statements, page 246; 2022-23 Corporate Plan, page 14.

# Independent 'no-blame' investigation of transport accidents and other safety occurrences

This section describes ATSB performance relating to its role as the independent 'no-blame' transport safety investigator, as published on page 8 of the ATSB Corporate Plan 2022–23.

#### **Aviation investigations**

In 2022–23, the ATSB initiated 64 occurrence investigations. In addition, 3 accredited representative investigations, and 4 external investigations were commenced.

During this reporting period, the ATSB completed 50 aviation occurrence investigations: 4 systemic, 14 defined and 32 short investigations. In addition, the ATSB completed one systemic safety study, 6 external investigations and one accredited representative investigation. The ATSB also completed 15 aviation occurrence briefs.



Chief Commissioner Angus Mitchell, pictured inspecting the accident site of 2 sightseeing helicopters following a mid-air collision on the Gold Coast on 2 January 2023

### **Marine investigations**

In 2022–23, the ATSB commenced 4 marine occurrence investigations.

During this reporting period, the ATSB completed 4 defined and one short occurrence investigation.

#### **Rail investigations**

In 2022–23, the ATSB commenced 7 rail occurrence investigations. In addition, CITS initiated 3 investigations, and OTSI initiated 2 investigations.

During this reporting period, the ATSB completed 2 systemic, one defined and 2 short occurrence investigations. CITS completed one systemic investigation, and OTSI completed one systemic, 2 defined and one short investigation.

#### Preparedness for a major accident

Being prepared to respond quickly and effectively to a major aviation, rail or marine accident is a key function of the ATSB. To maintain preparedness, the ATSB actively participates in practical exercises to test the effectiveness of response arrangements. During 2022–23, the ATSB participated in exercises run by Canberra Airport, Gold Coast Airport, Brisbane Airport, Moorabbin Airport and Sydney Airport. The ATSB also has a *Major Investigation Preparedness Plan* (MIPP) that includes a comprehensive suite of procedures and information. The MIPP and preparedness activities ensure that the ATSB is ready to respond effectively to a major transport accident.



ATSB investigators participated in Sydney Airport's Aerodrome Emergency Exercise on 2 November 2022

### Safety data recording, analysis and research

This section describes ATSB performance relating to its role in safety data recording, analysis and research, as published on page 8 of the ATSB Corporate Plan 2022–23.

#### Safety analysis and research

In February 2023, the ATSB established a safety analysis and research team. The team brought together skills and expertise from across the ATSB to provided focussed attention to safety research.

The ATSB commenced 3 data and statistics products in 2022–23. These were:

- » Downwash incidents at hospital helicopter landing sites.
- » Australian aviation wildlife strike statistics 2013–2022.
- » Aviation occurrence statistics 2013–2022.

Two large ongoing safety issue investigations were also managed:

- » Review of level crossing collisions involving trains and heavy road vehicles in Australia (RS-2021-001).
- » Review of aviation safety aspects of aerial firefighting in Australia (AS-2021-015).

The ATSB continued a data analysis capability expansion program in 2022–23 by:

- » providing data to the Bureau of Infrastructure and Transport Research Economics for a shared multi-agency aviation data platform
- » providing bulk birdstrike data to ICAO
- » rebuilding external data reports for industry based on the new AIMS
- » building and enhancing Bi reports into AIMS to allow easy access to data by all ATSB staff
- » publishing an aviation occurrence searchable database on the ATSB website.

Occurrence data held by the ATSB continued to support active aviation occurrence investigations. During 2022–23, data analysis helped to inform investigation decision making, determine the investigation scope, inform investigation conclusions and safety issue risk assessments, and document past occurrences of similar incidents.

#### **Data recovery and performance**

The ATSB data recovery and vehicle performance specialists maintain support and readiness for the recovery, download and analysis of recorded data from a variety of damaged and undamaged sources across the aviation, rail and marine transport modes.

Over this reporting period, the ATSB continued to support external agencies by providing assistance to:

- » Recreational Aviation Australia to download GPS devices
- » the Transport Accident Investigation Commission New Zealand to recover and analyse data from a cockpit voice recorder (CVR) and flight data recorder (FDR)
- » the Ministry of Transport, Thailand Aircraft Accident and Incident Investigation Commission to recover and analyse data from a CVR and FDR

» the Indonesian National Transportation Safety Committee with analysis of recorded marine and aviation data.

In addition, data recovery and performance specialists provided technical input across a variety of investigations. A selection of tasks included:

- » Recovery, download and analysis of the extensive fire damaged CVR and FDR from the Boeing 737 large air tanker accident (AO-2023-008).
- » Download and analysis of fire and accident damaged iPad, vehicle and engine multifunction display and Appareo camera from Airbus Helicopters EC130 accident near Mount Disappointment, Victoria (AO-2022-016).
- » Download and analysis of a Voyage Data Recorder (VDR) and portable pilot units in relation to ongoing investigation into the near-miss grounding of Rosco Poplar, off Bond Reef, Hydrographers Passage, Queensland (MO-2022-005).
- » Conversion of data and analysis in relation to ongoing investigation of derailment of freight train and subsequent collision with coal train, near Marmor, Queensland (RO-2023-001).
- » Performance analysis of touch and go compared to standing start take-offs in support of the investigation into collision with terrain involving an Aquila AT01, at Coombing Park Airstrip, NSW (AO-2020-059).



ATSB investigators examining fire damaged recorder from the Boeing 737 large air tanker accident

#### **Material failure analysis**

The ATSB has expertise and specialised facilities to enable the detailed examination of physical evidence, allowing for significant insights into the causes of factors of transport safety occurrences. During 2022–23, transport safety investigators with engineering specialist backgrounds provided technical input and analysis across a variety of investigations. A selection of tasks included:

- » Examination of a failed aft flap programming roller cartridge from a Boeing 737 that resulted in flap asymmetry (AO-2022-029).
- » Examination of main landing gear that failed from a Ayres Corporation S2R-T15, near Trangie, NSW (AO-2022-042).
- » Analysis of the engine and related systems and airframe components from the ongoing investigation into the collision with terrain involving a Mooney M20J, near Luskintyre Airfiled, NSW (AO-2022-049).
- » Tear-down and examination of the engine and electrically actuated propeller motor from the collision with terrain involving Glasair Super II FT near Wedderburn Airport, NSW (AO-2022-068).
- » Examination of the restraint system from a Eurocopter EC135 accident that occurred at the Gold Coast, Queensland (AO-2023-001).
- » Examination and analysis of the right forward pylon support link from the ongoing investigation into the forced landing of a Bell 206L, 100 km south-west of Deniliquin Aerodrome, NSW (AO-2023-002).
- » Examination and analysis of the fractured wagon axle from the ongoing investigation into the derailment of freight train 82P7 and subsequent collision with coal train 9F02, near Marmor, Queensland (RO-2023-001).



ATSB investigations lab, Canberra

#### Reporting

The ATSB target for assessing, classifying and publishing summaries of accidents and incidents is:

- » one day for occurrences being investigated (all modes)
- » 10 days for summaries of other incidents (aviation).

In 2022–23, 47% of aviation occurrence notifications were processed and ready for publication within 10 working days.

In 2022–23, the ATSB completed 14 occurrence briefs (all aviation occurrences). None of the briefs were completed within one month.

#### **Confidential reporting**

In 2022–23, the ATSB confidential reporting scheme (REPCON) received 120 notifications (of which 49 were classified as REPCONs). Of these 120 notifications, 87 concerned aviation (30 REPCONs), 31 concerned rail (17 REPCONs) and 2 concerned marine (2 REPCONs).

Of the 33 REPCON reports completed in 2022–23, 7 (21%) resulted in safety action by stakeholders.

The following summaries provide examples of safety concerns that were raised, along with the safety action taken after the concerns were reported through REPCON. Some information has been redacted to preserve confidentiality.

#### **Aviation REPCON example**

The ATSB received a large number of REPCON reports from air traffic controllers this financial year. Fifteen of those reports came from the Sydney Terminal Control Unit (TCU). By way of comparison, REPCON received one report relating to Sydney in the past 5 years.

The majority of the concerns raised had previously been addressed in REPCONs RA2022-00053 and RA2022-00045; however, 3 separate reporters raised a concern regarding the absence of a flow controller and traffic manager, and the subsequent downgrading of the risk assessment for that shift.

The reporters collectively stated that on 5 December 2022, the situation arose where there was no flow controller after 20:30 due to being unable to replace a vacant shift that existed. There was also no evening traffic manager due to sickness. The reporters stated that the absence of these positions was an unsafe scenario, but what made this specific shift particularly concerning, was the highly probable chance of thunderstorms in the Sydney basin.

One reporter stated that the absence of a traffic manager during thunderstorms is a chaotic situation, but to also have no flow controller makes the situation unimaginable.

The reporters stated that a risk assessment was created by the incoming traffic manager, who correctly assessed the risk as 'high', as this 'really is the most dangerous situation that we could possibly experience in the Terminal Control Area (TMA)'. Another controller relayed the seriousness of the situation to the senior manager located in Melbourne. The reporters stated that the risk assessment was subsequently reviewed in Melbourne, by managers that have no ratings or experience in air traffic control in Sydney, and the risk assessment was downgraded to a 'low' rating.

The reporters collectively claimed that some of the ideas were to have a shift manager in Brisbane or Melbourne interact with the Maestro system to affect a runway change should it be required when there was no flow controller. One reporter stated that 'this is a system people outside of Sydney have no training for and no idea of the implications of trying to do this without the understanding of what they're doing and the chaos that results. This is a situational tool that saves controllers during adverse weather occurrences, and if not done correctly will lead to incidents, or worse'.

Another reporter stated that 'the fact that this was considered an option shows the complete lack of understanding of what occurs in the real-world environment and highlights the unqualified nature of the individuals signing off these risk assessments'.

The reporters sought an urgent review of:

- » the air traffic control service that can be provided at Sydney based on the current staffing structure
- » the procedures, including risk assessments, associated with reduced staffing levels in the Sydney TCU; in particular, the absence of flow controllers and traffic managers.

In response to the REPCON, CASA conducted a surveillance event at the Sydney TCU and identified a number of safety observations and safety findings related to the reports within this REPCON. One finding raised was against Civil Aviation Safety Regulation (CASR) 172.115 in relation to supervisory personnel, which remains open.

Additionally, CASA has undertaken associated surveillance. This identified the potential for issues with compliance with CASR 172.110 in relation to the obligation to have a sufficient number of suitably qualified and trained personnel to provide Air Traffic Services for each service it is approved to provide. CASA continues to work with the service provider on its planned actions to rectify non-compliance with CASR 172.115.

#### **Rail REPCON example**

The reporter raised a concern regarding the absence of a whistle board for over 2 months. The board is required to alert drivers that they need to activate the whistle at that point, to comply with level crossing safety standards. The reporter stated the concern had been reported many times to management; however, the board is yet to be replaced.

In response to the REPCON report, the operator advised that the initial report was made in April 2022 by a driver who reported the missing board to network control, and this information was subsequently passed on to the operator's infrastructure structures section. It is not clear that this information was provided through the Fault Centre system.

A driver subsequently verbally reported the issue to [Location] manager in May 2022. The manager reported the missing whistle board via the fault centre, at which time it was given a fault number and issued an appropriate priority level to be fixed.

A replacement whistle board was installed by the infrastructure structures team a week after receiving the fault.

Further work is continuing to ensure that personnel are aware that the correct means of reporting such faults is via the fault reporting centre, at which point a fault number and appropriate action priority will be provided for follow up.

Communications will be provided to personnel to ensure they are aware that safety issues should be reported through the appropriate channels so that hazard identification, risk analysis and follow up action can be completed.

The ATSB shared the above information with the ONRSR in June 2022, with no additional comments and the report was finalised in July 2022.

### Influencing safety action

This section describes ATSB performance relating to its role in influencing safety action, as published on page 9 of the ATSB Corporate Plan 2022–23.

#### **Industry engagement and events**

The ATSB works to build awareness of its functions and enhance its reputation through its communication and stakeholder engagement activities. This is vital to ensure the industry is receptive to safety messaging and that the ATSB meets its aim of fostering public awareness of transport safety. The ATSB continues its strong record of engagement with industry through:

- » participation in consultative forums with industry and other safety agencies
- » representation at conferences and events
- » bilateral engagement with operators, associations and other stakeholders
- » active involvement in safety education forums.

The ATSB regularly participates in national and international conferences and industry events where doing so presents an opportunity to share safety messages and engage with relevant stakeholders.

#### **Australian International Airshow 2023**

The ATSB had a presence at the Australian International Airshow at Avalon Airport, Victoria in early 2023, engaging with the aviation industry with thanks to the CASA and RMIT University.

Joining CASA staff across the 4 trade days of the airshow – the largest aviation event in Australia – the ATSB was on hand to talk about our investigations, and to jointly promote aviation safety with our portfolio colleagues, to a record number of delegates and visitors to the airshow.



ATSB and CASA staff with the Minister for Infrastructure, Transport, Regional Development and Local Government, Catherine King MP (fourth from left)

The airshow also afforded the ATSB the opportunity to support our partnership with RMIT University. The ATSB spoke with those interested in the transport safety investigator course, as well as answering questions about some of our active investigations. The ATSB had a display of artifacts at the RMIT display booth, and in their external pavilion.



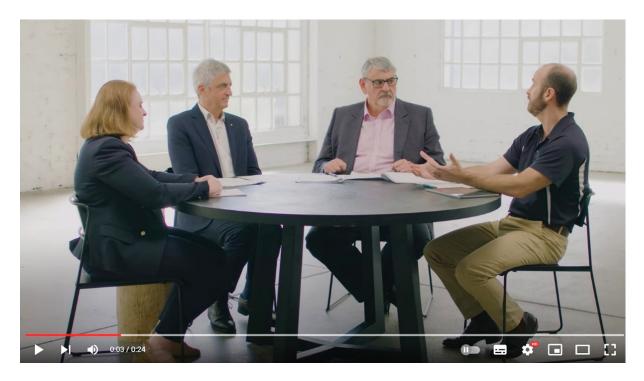
ATSB and RMIT University staff at the Australian International Airshow in February/March 2023

#### **CASA AvSafety forums and videos**

The ATSB continued to be a regular participant at the CASA aviation safety forums held around the country.

In joining with CASA, Airservices Australia, Bureau of Meteorology, and Department of Defence, the ATSB presented to a wide range of aviation industry participants at its FlySafe forums and AvSafety seminars held in 2022–23. During these events, the ATSB continued its focus on encouraging fitment and use of Automatic Dependent Surveillance Broadcast (ADS-B) transmitting, receiving and display devices in all general and recreational aviation aircraft, while also referencing the Australian Government's ADS-B rebate scheme.

The ATSB also continued to assist CASA in the production of its <u>AvSafety investigation video series</u>. The ATSB appeared in 2 educational videos to promote aviation safety when operating in controlled airspace, as well as raising awareness about runway incursions.



ATSB Senior Transport Safety Investigator, Chris Jonach (far right), speaks during the recording of a CASA AvSafety investigation video

#### **Rail safety conferences**

Beyond business as usual activities, the ATSB continued to influence rail safety in 2022–23 through attendance and presentations at stakeholder and industry events.

Key external engagements with the rail industry included ATSB presentations at the:

- » TrackSAFE National Level Crossing Safety Forum
- » Rail Industry Safety and Standards Board (RISSB) Rail Safety Conference
- » Heavy Haul Rail 2023 conference.

Senior members of the ATSB also attended the Australasian Railways Association (ARA) AusRail conference to engage with a wide range of rail stakeholders.



ATSB Senior Transport Safety Investigator, Jeff Stone, giving a presentation at the RISSB Rail Safety Conference in May 2023

#### Other industry engagement

The ATSB continued to harness video conferencing and other digital technology to continue its engagement with industry at conferences and forums, where practicable.

In 2022–23, the ATSB participated in 44 external industry engagement events, including:

- » Australian Aerial Application Association Conference
- » Australian Association for Unmanned Systems' RPAS in Australian Skies Conference
- » Australian International Airshow
- » Australasia Marine Pilots Institute Annual Conference
- » Australasian Railways Association AusRail Conference and Exhibition
- » Heavy Haul Rail Conference
- » International Transportation Safety Association Annual Conference
- » International Confidential Reporting Forum
- » LifeFlight Queensland Safety Day
- » Ports Australia Working Group
- » Ports Australia Risk and Resilience Conference
- » Qantas Safety Conference
- » Rail Industry Safety and Standards Board Rail Safety Conference

- » Rail Industry Safety and Standards Board SPAD Symposium
- » Royal Federation of Aero Clubs of Australia Conference
- » SafeSkies Conference
- » Sport Aviation Safety Forum
- » TrackSafe National Level Crossing Safety Forum.

The ATSB also hosted a number of industry visitors to its office in Canberra throughout the year, providing an opportunity for representatives from the aviation, marine and rail sectors to meet key staff, and tour the technical facilities and media studio.

#### **SafetyWatch**

The ATSB launched its revised SafetyWatch initiative during 2022–23.

SafetyWatch highlights the broad safety concerns that come from ATSB investigation findings and occurrence data reported by industry.

The ATSB encourages the transport industry to give heightened attention to the following priority areas (where more can be done to improve safety):

- » improving the management of fatigue
- » reducing the collision risk around non-towered airports
- » reducing passenger injuries in commercial ballooning operations
- » improving risk management associated with change
- » encouraging the use of available technology to enhance safety
- » reducing the severity of injuries in accidents involving small aircraft.

Throughout the year, the ATSB undertook a range of communication activities (website news stories, social media and general media) to raise awareness of these issues within the transport industry.

#### Social media

The ATSB continued to make effective use of its social media platforms to engage with the transport industry, the media and the travelling public during 2022–23. The ATSB continued to focus on measuring and analysing the overall number of engagements with its published content, with a significant focus on producing and publishing video content.

As of 30 June 2023, ATSB social media followers included:

- » Facebook: 26,673 (an increase of 16% on 2021–22)
- » LinkedIn: 19,462 (an increase of 17% on 2021–22)
- » Instagram: 2,388 (an increase of 8% on 2021–22)
- » Twitter: 9,478 (an increase of 2% on 2021–22)
- » YouTube: 2,396 (an increase of 53% on 2021–22).

#### **Traditional media**

The ATSB undertakes proactive and responsive media activities in conjunction with media outlets to inform the transport industry and travelling public of its investigations and safety messaging. During the year, the ATSB worked closely with local, state, national and international media to promote community and industry awareness of its transport safety messages.

Proactive media management activities include media conferences, interviews, media statements, pitches to journalists, opinion pieces and the distribution of pre-recorded content.

The fatal mid-air collision involving 2 sightseeing helicopters around 3 pm local time on 2 January 2023 on Queensland's Gold Coast attracted a significant amount of media interest in the ATSB. Tragically, the pilot and 3 passengers were killed in the accident, which was witnessed – and captured on video – by many people.

The ATSB media team deployed with Chief Commissioner Angus Mitchell from Canberra in the immediate hours after the accident to preposition for engaging with the media the following day. Beginning at 6:45 am local time, Chief Commissioner Mitchell first appeared on Channel 7's *Sunrise* program to talk about the deployment, while calling for witnesses who had video footage. Shortly after, Commissioner Mitchell spoke with ABC Radio and other commercial radio stations before appearing live on Channel 9's *TODAY Show*, and then *Sky News*.

This media activity preceded a joint media conference with Queensland Police Service near the accident site. The media conference was attended by camera operators and journalists from all major television, radio and print/web outlets and was the largest media gathering for an ATSB occurrence since the Sydney Seaplanes accident on New Year's Day in 2018.



Chief Commissioner Angus Mitchell speaks with Sky News the morning after the mid-air collision involving 2 sightseeing helicopters on the Gold Coast, which occurred on 2 January 2023

Throughout the year, the ATSB utilised its in-house media studio facility to produce and distribute pre-recorded audio, video and video overlay content for distribution to national radio and television news outlets.

On 29 August 2022, the ATSB held a media conference at its Canberra headquarters to support the publishing of its final report into the collision with terrain involving Lockheed EC130Q, N134CG, 50 km north-east of Cooma-Snowy Mountains Airport (near Peak View) NSW on 23 January 2020 (AO-2020-007).

Preceding the media conference, the ATSB conducted an off-camera technical briefing for journalists to gain a full appreciation on all aspects of the systemic investigation, before interviewing Chief Commissioner Mitchell on camera. This technical briefing helped to ensure media reporting on the investigation was factually accurate.



Chief Commissioner Angus Mitchell speaks with media at ATSB Canberra headquarters about the final report into the C-130 large air tanker accident

#### **Communication and education**

As Australia's national transport safety investigator, the ATSB is committed to communicating the safety lessons from its investigation findings, research activities and occurrence reports. This information has valuable safety messages which can help improve transport safety and, ultimately, save lives.

In 2022–23, the ATSB continued to embrace the use of digital content to highlight its safety messaging for the benefit of industry and the travelling public. During the year, the ATSB successfully recruited 2 new positions focused on digital content creation – namely the production of animations and videos – as survey data showed professionally produced video content is a preferred method for engagement and learning.

The ATSB produced 5 new educational videos during the reporting period, which were published on its YouTube channel. The most viewed new video highlighted the primary findings from the collision with terrain of a Boeing 737 large air tanker during firefighting operations in Western Australia. The video, titled 'Coulson 737 large air tanker preliminary report' has been viewed more than 226,000 times on YouTube. This particular video largely contributed to the significant increase in followers of our YouTube channel.

During the year, the ATSB highlighted the importance of bridge resource management through the publishing of a <u>video</u> to support the release of the final report into a bulk carrier's collision with 2 tugs in Devonport, Tasmania in 2022 (MO-2022-002). The video used 2D and 3D animations with great affect to detail how the collision occurred, while explaining how the ship's steering system operated. The video has been viewed more than 2,000 times across all our social media platforms.



A screen capture showing the animation of the ship's steering system

In May 2023, the ATSB published its final report into the collision with terrain involving Aquila AT01, registered VH-OIS, which occurred at the Coombing Park Airstrip, 27 km south of Orange, NSW on 4 November 2020 (AO-2020-059). To further amplify the report's safety messaging, the ATSB produced a <u>safety education video</u> featuring the investigator-in-charge of the investigation.

Appearing on camera, the investigator-in-charge used annotated still imagery and charts to describe to viewers how the accident occurred, while reiterating the important safety messaging aimed at flight training organisations, flight instructors and student pilots. In addition to using animation, the video also included footage from the accident scene with ATSB investigators at work.



ATSB Senior Transport Safety Investigator, Dr David Wilson, talking about the Coombing Park Airstrip investigation in a safety promotional video on YouTube

In response to a number of notable nose-over accidents involving Van's Aircraft types fitted with a tricycle undercarriage, the ATSB produced a <u>safety education video</u> to make owners and operators of these aircraft aware of the manufacturer's service letter, which encourages the installation of a new nose gear and engine mount system. This was one of the first videos the ATSB produced to promote safety messaging outside of supporting a specific ATSB investigation.

A link to the video, which included some confronting GoPro video footage of an accident occurring after a hard and bounced landing leading to the failure of the nose gear, was emailed directly to around 200 Van's Aircraft owners.



The ATSB promoted safety messaging about the failure of Van Aircraft nose gear

The ATSB continued to promote the benefits of fitting and using ADS-B transmitting, receiving and display devices in all general and recreational aviation aircraft during 2022–23. The agency also found several opportunities to continue promoting its 'Don't Push It, DON'T GO – Know Your Limits Before Flight' safety messaging, which was originally launched in December 2019.

The ATSB was involved in supporting the TrackSAFE Foundation's <u>Rail Safety Week</u> campaign in August 2022 to support passengers, rail workers and road users to remain aware of their surroundings and to avoid distractions.

The <u>atsb.gov.au</u> website continues to be the principal communication channel for the ATSB. In 2022–23, the ATSB website supported 1,902,763 page views and 1,600,317 user sessions.

The ATSB continually evolves its website to meet audience needs and to accommodate for new and emerging technologies. As a central element of the ATSB response to the Australian Government 'digital first' agenda, in November 2022 the ATSB successfully transferred its website to the GovCMS content management system website platform. Following this, a project of initial enhancement work was completed in June 2023 to improve navigation and searching on the website, while improving the phone and tablet device user experience.

#### Online aviation database

The ATSB National Aviation Occurrence Database contains de-identified information on aviation accidents and incidents in a searchable format. The database has been designed to fulfil searches for information involving the most common requests received by the ATSB, including date range, aircraft and operation type, injury level, occurrence category and type, location, and airspace type and class. Users are able to search aviation occurrence statistics from the ATSB website at <a href="https://www.atsb.gov.au/avdata">www.atsb.gov.au/avdata</a>.

In 2022–23, the National Aviation Occurrence Database had 5,117 page views.

#### Partnership with the RMIT University

The ATSB has been partnering with RMIT University since 2019. Through this partnership the ATSB has sponsored training in transport accident investigation being provided to industry bodies in Australia and throughout the Asia-Pacific region. Both Australian and international students have completed the graduate certificate this year, including staff from the ATSB.

In 2023, after experiencing some delays due to the pandemic, the ATSB turned its attention to creating a pathway to higher education by drafting a diploma in transport safety investigation. The pilot program will be ready for delivery in 2024.

#### **Regional cooperation**

The ATSB has a program of regional engagement, underpinned by the ATSB reputation as a world-leading transport safety investigation agency. This content addresses the deliverable to produce a report on the transport safety contribution of this engagement.

In support of the Australian Government transport safety agenda in the Asia-Pacific region, the ATSB takes a leading role in the ICAO Asia Pacific Accident Investigation Group and the Marine Accident Investigators Forum in Asia. Australia was elected as the Chair of the ICAO Asia Pacific AIG at its 10th meeting in Bangkok, Thailand in November 2022.

The ATSB places a specific emphasis on engagement with Indonesia, through the ongoing involvement in the Australian Government Indonesia Transport Safety Assistance Package (ITSAP), and with PNG consistent with the Memorandum of Understanding on Cooperation in the Transport Sector.

#### Indonesia

Under the ITSAP program, funded by the Department of Foreign Affairs and Trade, the ATSB aims to provide capability development to the National Transportation Safety Committee (NTSC), the Indonesian agency responsible for the investigation of aviation, rail, marine and land transport accidents and incidents.

During 2022–23, the ATSB delivered the following capability development activities with the NTSC:

- » provision of NTSC investigator training (including training on the download of aviation and marine recording devices), critical incident stress management, and disseminating investigation reports to influence improvements in transport safety
- » professional development, including sponsoring NTSC investigators to complete the Graduate Certificate in Transport Safety Investigation at RMIT, as well as attendance at the annual meeting of International Society of Air Safety Investigators.



ATSB and NTSC representatives in Jakarta in March 2023 for the delivery of aviation recorder training

#### **Papua New Guinea**

The ATSB and the PNG Accident Investigation Commission (AIC) continued to progress discussions on areas of cooperation within the Transport Safety Investigation Annex to the Memorandum of Understanding on Cooperation in the Transport Sector between the Government of Australia and the Government of Papua New Guinea.

#### **International Civil Aviation Organization**

In 2022–23, ATSB staff continued to be involved in ICAO meetings and working groups. This included membership of the Accident Investigation Panel, which met at the European ICAO office in Montreal, Canada during May 2023. The panel meets annually to advance the contents of Annex 13 and associated guidance material for the benefit of all ICAO member states.



Dr Stuart Godley from the ATSB (left) and Director Chow Wah Chong from Singapore's Transport Safety Investigation Bureau (right) were elected as the Chair and Vice Chair, respectively, at the 10th meeting of the Asia Pacific Regional Accident Investigation Group

#### **International Maritime Organization**

In April 2023, the ATSB participated in Australia's audit by the IMO related to demonstrating the ATSB's contribution towards Australia meeting its international maritime obligations.



In April 2023, the ATSB participated in Australia's audit by the IMO.

### Financial performance update

This section should be read in conjunction with the ATSB audited financial statements for 2022–23 that appear in **Section 6** of this report.

The ATSB operates as a separate non-corporate Commonwealth entity, having been established on 1 July 2009. The main assets of the ATSB were transferred from the (then) Department of Infrastructure and Regional Development, and include plant and equipment, specialised technical assets and intangible software assets.

The ATSB recorded a deficit after income tax on continuing operations of \$2.84 million (2021–22: \$0.66 million) as reported within the Statement of Comprehensive Income. The operating deficit was \$1.42 million (2021–22: \$0.51 million) as reported within Note 3.2 Net Cash Appropriation Arrangements of the financial statements. This includes adjustments for depreciation, amortisation, principal repayments for leased assets and changes in the asset revaluation reserve. The ATSB new capital requirements are detailed in its Departmental Capital Budget published in the 2022–23 Portfolio Budget Statements. Over time, ATSB estimated capital injections fall short of the deficits associated with the non-funding of depreciation and amortisation. Without adequate capital injections by the government, this presents a challenge to the ATSB in maintaining its underlying equity and asset capability going forward.

The government no longer provides appropriation funding to cover non-cash expenses of depreciation and amortisation to non-corporate Commonwealth entities. In the absence of revenue for depreciation and amortisation, the ATSB and other non-corporate entities are more likely to deliver a negative operating result or deficit, and these will accumulate. Offsetting this build-up of retained deficits requires a commitment by the government to provide annual capital injections to meet new capital requirements.

Table 3: Summary of financial performance and position

	2022–23 \$M	2021–22 \$M
Revenue from government	20.7	20.9
Own-source income	4.0	4.2
Total income	24.7	25.1
Employee expenses	16.8	16.0
Supplier expenses	8.1	7.3
Depreciation and amortisation	2.5	2.3
Finance costs	0.1	0.1
Total expenses	27.5	25.7

		2022–23 \$M	2021–22 \$M
Operating surplus/(deficit)		(2.8)	(0.6)
Financial assets	А	8.2	9.4
Non-financial assets	В	14.0	14.7
Liabilities	С	14.5	14.7
Net Assets – A + B – C		7.7	9.4

# SECTION 4 – SIGNIFICANT SAFETY INVESTIGATIONS

## Significant safety investigations

The following is a summary of some of the significant safety investigations that were completed and published during 2022–23 across aviation, marine and rail.

#### **Aviation**

# VFR into IMC and collision with terrain involving Bell Helicopter 206L-4, VH-PRW 33 km north-west of Adaminaby, New South Wales, on 3 April 2022 (AO-2022-017)

Weather-related accidents remain one of the most significant causes of fatal accidents in general aviation. The ATSB reiterated this concern with the release of the final report from the investigation on 23 November 2022.

One of 7 helicopters taking part in a flying tour, a Bell 206L-4 LongRanger, registered VH-PRW, departed with a pilot and passenger on board, for a visual flight rules (VFR) flight from a private property at Majura, near Canberra, to Mangalore, Victoria. The pilot encountered poor weather conditions and landed in a paddock alongside Long Plain Road in the Brindabella region, west of Canberra. However, about 3 hours later, the helicopter departed at low level in overcast conditions with low cloud and light rain.

Recorded data showed that the helicopter commenced a rapid climb and shortly after, entered a steep left descending turn which continued until it impacted terrain at an elevation of 4,501 ft. A search was initiated the next day with the accident site located later that evening. The helicopter was destroyed, and both occupants were fatally injured. The pilot held a private pilot licence (helicopter) and did not hold an instrument rating, and the helicopter was not approved for instrument flight.

This investigation report was the second the ATSB has released in a month into an accident where a VFR pilot likely encountered low visibility conditions, before becoming spatially disorientated leading to a loss of control of their aircraft.

In 2018, following the final report release into another fatal helicopter accident involving VFR into Instrument Meteorological Conditions (IMC) conditions, the ATSB, in conjunction with CASA and the Australian Helicopter Industry Association launched the 'Don't Push it, LAND IT – when it's not right in flight' safety campaign, encouraging helicopter pilots to conduct a precautionary landing rather than push on into abnormal situations.



Figure 1: Cloud conditions 2 minutes prior to departure of VH-PRW from the paddock

## Collision with terrain involving Cessna A150M, VH-CYO 5 km west-south-west of Peachester, Queensland, on 23 June 2021 (AO-2021-025)

All aircraft types do not spin and recover in the same way. Know your aeroplane type, what recovery techniques will work and what recovery techniques will not work. This was the key message from the final report and associated Safety Advisory Notice published on 10 August 2022.

On 23 June 2021, while conducting spin entry and recovery training from 5,800 ft above ground level, the Cessna A150M Aerobat, registered VH-CYO, did not fully recover from a spin to the left before impacting terrain. An instructor and student aerobatic pilot on board were fatally injured.

The aerobatics instructor was experienced in conducting spins, primarily in the Pitts Special aircraft type. However, it was likely that they had no experience in spinning a Cessna A150 Aerobat or any similar variant. The instructor's theoretical spin training provided to the aerobatic student pilot (and another student at the same time) did not include instruction on the recovery technique as prescribed in the Aerobat pilot's operating handbook (POH).

Further, the ATSB established that it was likely the instructor intended to practice 2 spin recovery techniques (Mueller/Beggs and PARE). The technique broadly known as the Mueller/Beggs recovery method, has been shown to not recover a Cessna A150 Aerobat established in a spin to the left. However, the PARE method was similar to Aerobat POH method, with less emphasis on the brisk full forward movement of the control yoke.



Figure 2: The main wreckage of VH-CYO at the base of a large tree that was struck

# Collision with terrain involving Aquila AT01, VH-OIS, Coombing Park Airstrip, 27 km south of Orange, New South Wales, on 4 November 2020 (AO-2020-059)

Rising terrain in the direction of take-off meant an airstrip being used for a touch-and-go training exercise was unsuitable as it exceeded the climb performance of the aircraft, our final report released on 4 May 2023 found.

Two pilots, an instructor and student, were fatally injured when their single-engine 2-seat Aquila AT01 aircraft collided with an embankment after a touch-and-go at Coombing Park airstrip in central west New South Wales on 4 November 2020.

As the aircraft climbed through 200 ft above the lift-off point, a climbing left turn was conducted before flying straight again in the direction of a small dam, beyond which was a less-wooded area. The aircraft then passed over the small dam and collided with an embankment on the far side of the dam.

The investigation found that pre-flight planning was likely not performed to identify if the airstrip was suitable for flight training operations. The report also identified that all operators should be aware that aerodromes meeting the recommendations in the now-obsolete CASA guidance publication CAAP 92-1(1) are not assured that an aircraft will be able to successfully climb away after take-off more than 900 metres past the runway end. The new performance-based recommendations of AC 91-02 now require operators to consider obstacle clearance beyond 900 metres.

The report also highlighted to flight training operators they should note there are no standards for Aeroplane Landing Areas (ALA), even those listed in the En-Route Supplement Australia (ERSA) as uncertified aerodromes. The published data, including obstacle information, for these uncertified aerodromes are potentially incomplete or inaccurate. This means that for take-off from ALAs, the new guidance requires pilots and operators to know the climb gradient needed to clear all obstacles by a safe margin until the aeroplane reaches the minimum height for flight.



Figure 3: Image looking uphill at a similar height and position to VH-OIS prior to the accident

# Collision with terrain involving Lockheed EC130Q, N134CG, 50 km north-east of Cooma-Snowy Mountains Airport (near Peak View), New South Wales, on 23 January 2020 (AO-2020-007)

A Lockheed C-130 large air tanker that impacted the ground following an aerial firefighting retardant drop likely aerodynamically stalled when flying in hazardous conditions that included windshear and an increasing tailwind, our investigation released on 29 August 2022 identified.

All 3 crew on board were fatally injured when the aircraft impacted slightly rising terrain while conducting a climbing left turn away from the drop site at the Good Good fire-ground near Peak View, north of Cooma, in the NSW Snowy Mountains region, on 23 January 2020.

On the morning of the accident, the NSW Rural Fire Service (RFS) State Operations Centre had tasked 2 large air tankers, a Boeing 737 and the C-130, to conduct retardant drops at Adaminaby. The 737 departed first, and after conducting a drop at Adaminaby, its crew reported that weather conditions precluded them from returning to the fire-ground. The investigation noted that the RFS continued the C-130's tasking to Adaminaby despite an awareness of the extreme environmental conditions and that all other fire control aircraft were not operating in the area at the time.

The ATSB recognises the critical importance of aerial firefighting, where aircraft are flown at low altitudes and low airspeeds, often in challenging conditions, in the management and suppression of bushfires in Australia. These operations necessarily take place in a high-risk environment, which requires a continued focus on risk mitigation, a responsibility that, in the Australian operating context, is shared between the tasking agency and the aircraft operator.

As part of this investigation, the ATSB sought to understand the risk mitigations in place at the time of the accident, and has identified a number of safety issues that, if resolved through actions, will further mitigate risks for large air tanker aerial firefighting in the future.



Figure 4: Accident site overview showing the wreckage trail

#### Rail

# Runaway and derailment of TasRail freight train in Devonport, Tasmania, on 21 September 2018 (RO-2018-014)

At the conclusion of the investigation into a runaway and derailment in Devonport, Tasmania, the ATSB strongly advised operators and developers of complex rail systems to apply system safety methodologies so that they can have a high level of confidence in the overall safety of the system. The final report, published on 18 November 2022, details more than a dozen safety actions taken to address ATSB findings.

On 21 September 2018, a driver was using remote control equipment to position a TasRail train for cement loading at a siding in Railton, south of Devonport, when the train stopped responding to commands. After a series of uncommanded emergency brake applications and releases, the train began to roll away with no-one on board and began a 23-minute runaway through 10 active and 3 passive public level crossings, beneath a highway overpass, and through 5 sets of points, mostly at speeds greater than the maximum track speed.

TasRail's network control diverted the train away from public areas to a siding in Devonport Yard, where it collided with a concrete footing and surrounding fences. Fence debris struck 2 pedestrians nearby, resulting in minor injuries to both. Nobody else was injured.

The ATSB investigation found the remote control system, which is no longer in use, had several safety-related design and integration problems that were readily identifiable. The investigation identified 11 contributing factors for the accident and highlighted 10 distinct safety issues. Pleasingly, more than a dozen safety actions were taken to address these issues, by the operator, the remote control equipment manufacturer, the rail standards board and the regulator. All the identified safety issues either have been addressed, or are being addressed.



Figure 5: Derailment site in Devonport, Tasmania

# Collision with rake of wagons and derailment of ore train R1006, Andoom (near Weipa), Queensland, on 22 September 2019 (RO-2019-017)

Our final report, released on 25 May 2023, into an empty ore train's collision with stationary wagons has led to the operator and Australia's rail standards board taking a number of safety actions.

A driver was unable to slow a bulk ore train as it approached a bauxite loading station north of Weipa, resulting in a collision with a rake of stationary wagons on 22 September 2019. The locomotive and 4 wagons from the stationary rake derailed in the collision. The modular driver's cabin separated from the main body of the locomotive and was substantially damaged, and the driver was initially trapped inside, but fortunately sustained only minor injuries.

The final report, released at the conclusion of the systemic-level investigation into the accident, details 10 safety factors, which either contributed to the accident, or increased risk. These include 3 safety issues, which have now been addressed by the operator, the Rail Industry Safety and Standards Board (RISSB), and the locomotive's design owner.



Figure 6: Aerial photograph of the wreckage and the collision point

#### Marine

# Collision involving the bulk carrier *Goliath* and tugs *York Cove* and *Campbell Cove*, Devonport, Tasmania, on 28 January 2022 (MO-2022-002)

The ATSB's investigation released on 22 March 2023 into a bulk carrier's collision with 2 tugs in Tasmania highlights the importance of bridge resource management and the design of bridge systems to reduce the risks of human error.

On 28 January 2022, the Australian-flagged bulk carrier *Goliath* was turning in the swing basin to berth at the Port of Devonport, Tasmania, when it collided with 2 moored tugs, which subsequently sunk. Fortunately, there were no personnel on board the tugs at the time. *Goliath* sustained minor damage.

The investigation found that during this transfer of manoeuvring controls, the correct steering mode was not selected. Subsequently, the master's manoeuvring orders, issued in the belief the ship was in joystick steering mode, had the unintended effect of increasing the ship's speed as it closed on the tugs.

The investigation found that neither the master nor the second mate on *Goliath* had undertaken the required bridge resource management (BRM) training, that BRM on board was not effectively implemented, and effective BRM was not evident during the incident. This was found to be a contributing factor to this incident – a safety issue which has now been addressed by the ship's operator.

Since the incident, the operator arranged for all deck officers serving on board *Goliath* to attend BRM training ashore and has added BRM training to its fleet crew training schedule. Additionally, the final report notes the ship operator had modified Goliath's joystick panels to incorporate a positive visual indication that joystick steering mode was selected.



Figure 7: Bulk carrier Goliath, immediately before the collision with the tugs (Source: TasPorts)

# SECTION 5 – FORMAL SAFETY ISSUES AND ACTIONS

### Formal safety issues and actions

ATSB investigations primarily improve transport safety by identifying and addressing safety issues. Safety issues are events or conditions that increase safety risk and:

- » can reasonably be regarded as having the potential to adversely affect the safety of future operations
- » are characteristics of an organisation or a system, rather than of a specific individual, or operational environment at a specific point in time.

Safety issues will usually refer to an organisation's risk controls, or to a variety of internal and external organisational influences that impact the effectiveness of its risk controls. They are factors for which an organisation has some level of control and responsibility and, if not addressed, will increase the risk of future accidents.

The ATSB prefers to encourage stakeholders to take proactive safety action to address safety issues identified in its reports. Nevertheless, the ATSB may use its powers under the TSI Act to make a formal safety recommendation either during or at the end of an investigation – depending on the level of risk associated with a safety issue and the extent of corrective action already taken.

When safety recommendations are issued, they clearly describe the safety issue of concern, but they do not provide instructions or opinions on a preferred corrective action. Like equivalent overseas organisations, the ATSB has no power to enforce the implementation of its recommendations. It is a matter for the organisation to which an ATSB recommendation is directed to assess the costs and benefits of any means of addressing a safety issue, and act appropriately.

When the ATSB issues a safety recommendation to a person, organisation or agency, they must provide a written response within 90 days. That response must indicate whether they accept the recommendation, any reasons for not accepting part or all of the recommendation, and details of any proposed safety action to give effect to the recommendation.

The ATSB can also issue a safety advisory notice (SAN) suggesting that an organisation, or an industry sector, consider a safety issue and take appropriate action. There is no requirement for a formal response to a SAN.

Safety issues are broadly classified in terms of their level of risk:

- » Critical safety issue associated with an intolerable level of risk and generally leading to the immediate issue of a safety recommendation unless corrective safety action has already been taken.
- » Other safety issue associated with a risk level regarded as unacceptable unless it is kept as low as reasonably practicable. Where there is a reasonable expectation that safety action could be taken in response to reduce risk, the ATSB will issue a safety recommendation to the appropriate agency when proactive safety action is not forthcoming.

All ATSB safety issues and associated safety actions, along with the most recent status, are published on the ATSB website for all investigation reports released since July 2010.

## Safety issues identified through ATSB investigations

All safety issues are risk assessed by the ATSB. In 2022–23, the ATSB (and OTSI NSW and CITS Victoria on behalf of the ATSB) identified the following number of safety issues.

Table 4: Number of safety issues identified in 2022–23

Safety issue risk	Aviation	Marine	Rail	Total
Critical	0	0	0	0
Other	25	7	30	62
Total	25	7	30	62

Safety action is sought to address any safety issues when proactive safety action is not forthcoming. Once safety action has been undertaken, the ATSB conducts another risk assessment of the safety issue. When the post-action risk assessment results in either an acceptable level of risk or a risk as low as reasonably practicable, the safety issue status is categorised as 'adequately addressed'.

The Portfolio Budget Statements 2022–23 specify, as 2 of the ATSB KPIs, that:

- » 65% of safety issues are addressed in the last financial year
- » 85% of safety issues are addressed in the previous financial year.

### KPI status of safety issues identified in 2022-23

There were no critical safety issues identified through ATSB investigations in 2022–23.

The breakdown of other safety issues, by transport mode, is summarised in Table 5

Table 5: Status of other safety issues identified in 2022–23

Safety issue risk	Aviation	Marine	Rail	Total
Adequately addressed	14	5	19	61%
Partially addressed	1	1	1	5%
Not addressed	0	0	0	0%
No longer relevant	1	0	3	6%
Safety action still pending	9	1	7	27%
Total	25	7	30	100%

## Responses to safety issues identified in 2022–23

The tables in this section document each safety issue identified in 2022–23 and its current status assigned by the ATSB, along with the justification for that status.

#### **Aviation**

*Table 6: Aviation – safety issues identified in 2022–23* 

Safety issue	Status	Status justification		
AO-2022-003 Hard landing involving Kavanagh Balloons B-350, VH-BSW, 2 km south of Lilydale Airport, Victoria, on 31 December 2021				
AO-2022-003-SI-01: The maximum number of passengers that the balloon operator allowed to be carried meant that there was insufficient room in the basket for them to adopt the landing position specified in the operator's procedures to reduce the risk of injury.	Closed – Adequately addressed	The ATSB is satisfied that the safety action undertaken by the operator has resolved this safety issue.		
Safety issue	Status	Status justification		
AO-2020-007 Collision with terrain involv Mountains Airport (near Peak View), New		OQ, N134CG, 50 km north-east of Cooma-Snowy January 2020		
AO-2020-007-SI-01: The NSW RFS did not have a policy or procedures in place to manage task rejections, nor to communicate this information internally or to other pilots working in the same area of operation.	Closed – Adequately addressed	The ATSB notes the introduction of a task rejection procedure and associated supporting documents. This incorporates an obligation on the Incident Management Team and/or State Air Desk to ensure all aircraft and operators assigned to an incident are advised of the dispatch/task rejection and rationale as soon as possible, as well as the inclusion of the rejection details in their online system. Provision of this information will allow pilots to incorporate this information into their decision making. The ATSB is satisfied that these changes to the procedures and guidance have reduced the risk associated with this safety issue.		
AO-2020-007-SI-02: The NSW RFS had limited large air tanker policies and procedures for aerial supervision requirements and no procedures for deployment without aerial supervision.	Closed – Adequately addressed	The ATSB notes the publication of aerial supervision requirements in the Operating Guidelines for Air Tanker Operations (2023), including circumstances under which large air tankers may be tasked without a bird dog or air attack supervisor. Further, formalisation of the large airtanker coordinator role and the introduction of an aviation safety officer will further enhance and better inform the use of aviation assets in firefighting. These, combined with the task rejection notifications, will assist NSW RFS frontline staff in managing ongoing tasking decisions. The ATSB is satisfied these actions combined have reduced the risk associated with this safety issue.		
AO-2020-007-SI-03: Coulson Aviation did not provide a pre-flight risk assessment for their fire-fighting large air tanker crews. This would provide predefined criteria to ensure consistent and objective decision making with accepting or rejecting tasks, including factors relating to crew, environment, aircraft and external pressures.	Open – Safety action pending	To be advised.		

AO-2020-007-SI-04: Coulson Aviation fleet of C-130 aircraft were not fitted with a windshear detection system, which increased the risk of a windshear encounter and/or delayed response to a windshear encounter during low level operations.	Open – Safety action pending	To be advised.
AO-2020-007-SI-05: Coulson Aviation's safety risk management processes did not adequately manage the risks associated with large air tanker operations. There were no operational risk assessments conducted or a risk register maintained. Further, as safety incident reports submitted were mainly related to maintenance issues, operational risks were less likely to be considered or monitored. Overall, this limited their ability to identify and implement mitigations to manage the risks associated with their aerial firefighting operations.	Open – Safety action pending	To be advised.
AO-2020-007-SI-06: Coulson Aviation did not include a windshear recovery procedure or scenario in their C 130 Airplane Flight Manual and annual simulator training, respectively, to ensure that crews consistently and correctly responded to a windshear encounter with minimal delay.	Closed – Adequately addressed	The ATSB notes the incorporation of the windshear recovery procedure, including consideration of load jettison, into the C-130H Airplane Flight Manual, and the commitment to undertake recurrent simulator based windshear training. The ATSB is satisfied that the dedicated windshear procedure and training combined will ensure crews have a shared mental model of the symptoms and recovery actions for a windshear encounter.
AO-2020-007-SI-07: The NSW RFS procedures allowed operators to determine when pilots were initial attack capable. However, they intended for the pilot in command to be certified by the United States Department of Agriculture Forest Service certification process.	Closed – Adequately addressed	The ATSB notes the changes to the Large Air Tanker guidelines (Operating Guidelines for Air Tanker Operations). The ATSB is satisfied that the revisions to the document remove the ambiguity and aligns the guidelines with the intent. This should ensure this risk control is implemented consistently by the RFS across multiple air tanker operators.
Safety issue	Status	Status justification
AO-2020-064 Loss of control and collisio Clare, South Australia, on 22 December 2		ing Robinson R44 II, registration VH-HOB, near
AO-2020-064-SI-01: Although the helicopter manufacturer's instructions for continuation in service for the clutch shaft forward yoke specified that the condition of the yoke was to be inspected to verify that no cracks, corrosion, or fretting was present, it did not provide specific instructions for the method to be employed. The visual inspection that was employed increased the risk that a crack in that area may not be detected.	Closed – Adequately addressed	The ATSB is satisfied that the amendments to the aircraft maintenance manual will result in yokes being removed from service before cracks on the forward face progress to failure. As such, the ATSB considered that the safety issue had been adequately addressed.

Safety issue	Status	Status justification
	in involving Cessna	404, VH-OZO, Lockhart River, Queensland, on 11
AO-2020-017-SI-01: Although the operator had specified a flight profile for straight-in approaches and stabilised approach criteria in its operations manual, and encouraged the use of stabilised approaches, there were limitations with the design of these procedures. In addition, there were limitations with other risk controls for minimising the risk of controlled flight into terrain (CFIT), including no procedures or guidance for the use of the terrain awareness function on the aircraft's GNS 430W GPS/navigational units, and limited monitoring of the conduct of line operations.	No longer relevant	Following the accident, the operator voluntarily ceased flight operations.
AO-2020-017-SI-02: The Australian requirements for installing a terrain avoidance and warning system (TAWS) were less than those of other comparable countries for some types of small aeroplanes conducting air transport operations, and the requirements were not consistent with ICAO standards and recommended practices. More specifically, although there was a TAWS requirement in Australia for turbine-engine aeroplanes carrying 10 or more passengers under the instrument flight rules:  *** ** ** ** ** ** ** ** ** ** ** ** *	Closed – Partially addressed	The ATSB is satisfied that the December 2021 regulatory requirements for piston-engine aeroplanes (with an MOPSC of 10 or more) to have a TAWS has addressed a key part of this safety issue. The regulatory requirements for turbine-engine aeroplanes with an Maximum Operational Passenger Seating Configuration (MOPSC) of 6–9 have not been addressed. Given the extent of the recent regulatory reform process, it is also unlikely they will be addressed in the near future.
AO-2020-017-SI-03: Although an applicable height of 1,000 ft for stabilised approach criteria in instrument meteorological conditions has been widely recommended by organisations such as the ICAO for over 20 years, CASA had not provided formal guidance information to Australian operators regarding the content of stabilised approach criteria.	Closed – Adequately addressed	The ATSB is satisfied that the inclusion of formal guidance material with the introduction of the new regulatory requirements has reduced the risk of this safety issue.

Safety issue	Status	Status justification
·	ırrence <u>involving Bo</u>	peing 737-800, VH-YFZ Gold Coast Airport,
Queensland, on 27 April 2022		
AO-2022-029-SI-01: Failure of the inboard programming roller cartridge was due to undetected fatigue cracking that occurred in an area that was not included in the detailed flap actuation system inspection.	Open – Safety action pending	Since 2017, there have been multiple occurrences involving fatigue cracks and failures at aft flap programming rollers. Boeing is currently reviewing inspections for the programming rollers and examining possible reasons why the failures started occurring after 2017. However, at this stage there has been no reported action that might address the risks posed by future programming roller/cartridge failures.
Safety issue	Status	Status justification
<u> </u>		FE, VH-YIO and Cessna Caravan 208, VH-YMV Ballina
AO-2021-038-SI-01: The surveillance flight information service (SFIS) had been implemented in an area with known surveillance coverage limitations, resulting in the SFIS controller having no displayed positional information for the Caravan until it reached an altitude of about 1,500 ft. Therefore, during the period of conflict between the Caravan and B737, the controller was solely reliant on radio communications for situation awareness, reducing their ability to provide appropriate traffic and avoidance advice.	Open – Safety action pending	To be advised.
Safety issue	Status	Status justification
<u> </u>		EBK, and Boeing 787, G-ZBKF near Sydney Airport,
New South Wales, on 28 September 2022		EDR, and Boeing 707, G-2DRF flear Sydney Airport,
AO-2022-047-SI-01: The DEENA 7 standard instrument departure has no designed positive separation method, making it susceptible to loss of separation occurrences.	Open – Safety action pending	To be advised.
Safety issue	Status	Status justification
AO-2021-052 Collision with terrain involves outh Wales, on 4 December 2021	ving Air Tractor AT-4	400, VH-ACQ 75 km west-south-west of Moree, New
AO-2021-052-SI-01: The aircraft was not fitted nor required to be fitted with a crash-resistant fuel system under the current standards or those in place at the time of manufacture. As a result, post-impact fire presents a significant risk of fire-related injuries and fatalities to aircraft occupants.	Open – Safety action pending	To be advised.
Safety issue	Status	Status justification
AO-2021-005 Cabin depressurisation inv South Australia, on 5 February 2021	olving Airbus A330	, VH-EBK 235 NM (435 km) south-west of Adelaide,
AO-2021-005-SI-02: The operator's training system did not adequately cover the unique requirements of the CAB PR EXCESS CAB ALT alert procedure, increasing the risk of an incorrect or delayed application of the required procedure.	Closed – Adequately addressed	The ATSB is satisfied that the proactive safety actions taken by Qantas provide a suitable training-based mitigation against the risk of an incorrect or delayed application of the CAB PR EXCESS CAB ALT alert procedure.

AO-2021-005-SI-04: The mitigations introduced by Airbus to counter the design limitation associated with the A330 cabin pressure control systems were ineffective, because:  » changes to the CAB PR EXCESS CAB ALT alert operational procedure did not ensure appropriate management of the fault the service bulletin had very limited uptake in the A330/340 global fleet.	Open – Safety action pending	To be advised.
Safety issue	Status	Status justification
AO-2021-048 Unforecast weather and fli Paraburdoo Airport, Western Australia, o		altitude involving Fokker Aircraft F100, VH-NHV 1
AO-2021-048-SI-01: Network Aviation did not provide their flight crew with a diversion decision-making procedure for the circumstances where their flights encountered unforecast weather below landing minima. This increased the risk that their flight crew would not anticipate and be adequately prepared for a diversion.	Closed – Adequately addressed	The ATSB notes that Network Aviation has introduced several diversion decision-making tools for their Fokker Aircraft F100 flight crew. They included an amendment to their flight plans to include an 'alternate summaries' section for all flights, the top of descent arrival brief procedure to include 'minimum divert fuel', and the introduction of an F100 Company Procedures Manual with pre-populated standard divert calculations for their F100 destinations. The ATSB is satisfied that the inclusion of these tools will address the safety issue.
AO-2021-048-SI-02: Network Aviation did not include the threat of unforecast weather below landing minima in their controlled flight into terrain risk assessments. This increased the risk that controls required to manage this threat would not be developed, monitored, and reviewed at a management level.	Closed – Adequately addressed	The ATSB notes that Network Aviation has taken action to update their controlled flight into terrain risk assessments to capture the threat of adverse weather, which addresses the safety issue.
Safety issue	Status	Status justification
AO-2020-059 Collision with terrain invol Orange, New South Wales, on 4 Novemb		I-OIS, Coombing Park Airstrip, 27 km south of
AO-2020-059-SI-01: The CASA sample operations manual used by the operator that allowed any aerodrome in the Enroute Supplement Australia to be used for flight training did not assure that these aerodromes were suitable for use.	Open – Safety action pending	To be advised.

AO-2020-059-SI-02: Recommendations in CASA guidance CAAP 92-1(1) requiring obstacle clearance out to 900 m may lead to circumstances where ALAs meet these requirements, however, aircraft are required to manoeuvre below a safe height or be unable to outclimb rising terrain after take-off more than 900 m past the runway end.

Closed – Adequately addressed On 2 December 2021, as part of a suite of changes to the Civil Aviation Safety Regulations 1998, CASA introduced regulations and guidance relating to obstacle clearance in the approach and take-off areas of ALAs. At this time, CAAP 92-1(1) was discontinued and was subsequently removed from the CASA website, being replaced by Advisory Circular AC 91-02. This guidance includes reference to a pilot needing to consider 'lateral transition areas' in deciding if an aerodrome is suitable for operations, in contrast to CAAP 92-1(1) that only recommended obstacle clearance assessments of the approach and take-off area 900 metres beyond the runway end. The Advisory Circular also included that a pilot should be aware of 'obstacles in the approach and climb-out flight paths'. Further, clause 24.02(1) of Part 91 of the Manual of Standards also introduced on 2 December 2021 included a new requirement that pilots ensure that the aeroplane has the performance to clear all obstacles by a safe margin until at the minimum height for flight. Therefore, these changes address the safety issue, requiring pilots to assess the terrain under the flight path after take-off more than 900 metres past the runway end.

#### Safety issue Status Status justification

# AO-2021-047 Cabin pressurisation issue involving Boeing B737-36E SF, ZK-FXK, near Darwin Airport, Northern Territory, on 4 November 2021

AO-2021-047-SI-01: The aircraft system to be used in the event of a main deck cargo smoke event on the operator's B737 fleet was being routinely used by the operator's engineering personnel in Darwin as a means to cool the flight deck. This practice had become normalised as a result of the perceived benefit of doing so, but there were insufficient risk controls in place to ensure that the aircraft would be returned to the correct configuration prior to departure.

Closed – Adequately addressed Airwork provided advice of proactive safety action to immediately cease the unauthorised practice and also improve its processes and documentation to prevent a reoccurrence. In conjunction with its other proactive safety actions, the ATSB considers this will be sufficient to address the safety issue.

#### Safety issue Status Status justification

# AO-2022-007 Touchdown off the runway surface involving Raytheon B200, VH-MVP, at Lord Howe Island Airport, New South Wales, on 18 February 2022

AO-2022-007-SI-01: The occurrence flight used a distance measuring equipment (DME) arrival to establish a visual approach in unsuitable visibility conditions. The investigation identified a number of similar approaches conducted by the operator in marginal visibility conditions. Using this approach method, rather than a straight in instrument approach, significantly reduced obstacle clearance assurance for both an approach and any potential missed approaches, and also increased the risk to both the operators and other aircraft through the use of a non-standard circuit procedure.

Open – Safety action pending

To be advised.

Safety issue	Status	Status justification		
Al-2018-010 Aerodrome design standard Melbourne, Victoria	Al-2018-010 Aerodrome design standards and the Bulla Road Precinct development at Essendon Fields Airport, Melbourne, Victoria			
Al-2018-010-SI-04: In 2004, the Department of Transport and Regional Services did not have an agreed assurance framework with CASA for assessing the safety information in draft major development plans. This increased the risk of plans being approved with incorrect dimensions for runway facilities and obstacle limitation surfaces.	Closed – Adequately addressed	The safety issue was raised for a point in time in 2004 and not reflective of contemporary practices. The ATSB is satisfied that the arrangement established by the Department will ensure that advice on the safety and operational aspects of an airport draft major development plan will be provided by CASA and Airservices Australia. This will reduce the potential for plans being approved with incorrect safety information affecting whether approvals are required under Part 12 of the Airports Act for buildings around an aerodrome.		

#### Marine

Table 7: Marine – safety issues identified 2022–23

Safety issue	Status	Status justification	
MO-2021-002 Fire on board BBC <i>Rhonetal</i> Port Hedland, Western Australia, on 25 March 2021			
MO-2021-002-SI-01: BBC Rhonetal's managers had not effectively implemented the shipboard safety management system procedures in place to prevent the fire. This was the tenth such fire on a company ship in the past 14 years, and the fourth investigated by the ATSB, identifying similar contributing factors.	Open – Safety action pending	To be advised.	
Safety issue	Status	Status justification	
MO-2020-002 Loss of containers overboa 24 May 2020	ard from APL <i>Englan</i>	d 46 NM south-east of Sydney, New South Wales, on	
MO-2022-002-SI-01: The insecure loading of high cube containers into bay 62 was contrary to the ship's cargo securing manual and not identifiable by the cargo computer software in use at the time. Consequently, forces generated during the heavy rolling resulted in dislodging of all containers above the cell guides and the loss of 16 overboard.	Closed – Adequately addressed	The safety action taken adequately addresses the issues associated with the loading and securing of high cube containers in bays with cell guides, including the guidance provided in the cargo securing manual.	
MO-2020-002-SI-02: A significant proportion of the fixed cargo securing devices on the deck of APL England were in poor condition. The heavy wastage of the devices significantly reduced their load carrying capacity and compromised the effective securing of cargo.	Closed – Partially addressed	The ATSB acknowledges the repairs that were undertaken to restore the integrity of the vessel's cargo securing devices. However, the ATSB also notes that, on departure from the shipyard, DNV-GL imposed a condition of class on the vessel in relation to the continued deteriorated condition of deck fittings. The condition noted that: 'Numerous corroded or thinned (components) were repairedbut still numerous corroded or thinned attached plates were not completely repaired due to time limited.'	
		As such, the safety issue is considered to have been partially addressed.	

MO-2020-002-SI-03: On board routine inspection and maintenance of fixed cargo securing devices on APL <i>England</i> was ineffective. Over an extended period of time, the significant proportion of the devices that were unfit for purpose were not identified and made good.	Closed – Adequately addressed	The safety action taken adequately addresses issues associated with management of the condition of deck fittings through routine inspection and maintenance arrangements.
Safety issue	Safety issue	Safety issue
MO-2022-002 Collision involving the bul Tasmania, on 28 January 2022	lk carrier <i>Goliath</i> and	d tugs York Cove and Campbell Cove, Devonport,
MO-2022-002-SI-01: Neither the master nor the second mate had undertaken required bridge resource management (BRM) training. This probably contributed to the ineffective implementation of BRM on board, which resulted in the single person errors that contributed to this accident not being detected.	Closed – Adequately addressed	The provision of BRM training to Goliath's deck officers should improve the effectiveness of BRM on board and reduce the risk of single person errors going undetected. In addition, the inclusion of the BRM training requirement in the fleet crew training schedule and the introduction of navigation audits to verify shipboard compliance with the BRM requirements of the safety management system should adequately address the safety issue.
MO-2022-002-SI-02: The illumination of the joystick steering panel's 'joystick on' light indicated which panel was selected (or last selected) for use and bore no relation to the steering mode selected. This increased risk as it was misleading and contrary to the understanding of the ship's officers who believed that the illumination of the light was only possible when the joystick steering mode was selected.	Closed – Adequately addressed	The modifications made to VecTwin joystick panels should significantly reduce the risk of manoeuvring controls being transferred to the wing with the incorrect steering mode selected. The positive visual indication of the selection of joystick steering mode and the associated procedural check introduced to incorporate this improvement should adequately address this safety issue.
Safety issue	Safety issue	Safety issue
MO-2021-001 Grounding of <i>Trinity Bay</i> , l	Harrington Shoal, Q	ueensland, on 19 January 2021
MO-2021-001-SI-01: An ongoing technical fault in the REEFVTS monitoring and surveillance system caused an abnormally high number of erroneous alerts and alarms. Consequently, REEFVTS operators were experiencing sustained periods of elevated workload, including that of the operator at the time of the <i>Trinity Bay's</i> grounding.	Closed – Adequately addressed	The implementation of the software update to reduce the incidence of false alarms in the REEFVTS surveillance and monitoring system and, the division of the REEFREP area into 2 separate areas with a separate vessel traffic service operator responsible for each, should serve to reduce their workload and adequately address this safety issue.

#### Rail

Table 8: Rail – Safety issues identified in 2022–23

Safety issue	Status	Status justification		
RO-2020-007 Collision of passenger train on 30 May 2020	RO-2020-007 Collision of passenger train 8185 with level crossing gates, Lydiard Street North, Ballarat, Victoria, on 30 May 2020			
RO-2020-007-SI-01: Safety controls were ineffective in mitigating against a train arriving at Ballarat Railway Station travelling at excessive speed and being unable to stop before colliding with the crossing gates closed against rail traffic.	Closed – Adequately addressed	The ATSB is satisfied that the action taken by V/Line has reduced the risk of this safety issue.		
RO-2020-007-SI-02: The location of sanding nozzles (for braking) behind the wheels of the lead bogie was inconsistent with design practice existing at the time of the collision and was probably a recurring factor in diminished sander effectiveness on VLocity trains.	Closed – Adequately addressed	The ATSB is satisfied that the action taken by V/Line has reduced the risk of this safety issue.		
RO-2020-007-SI-03: There was no suitable assessment of the performance of sanders on the VLocity 3-car set against defined acceptance criteria for improved braking performance in low adhesion conditions.	Open – Safety action pending	To be advised.		
RO-2020-007-SI-04: Maintenance of the VLocity sander units did not include testing of sand discharge flow rates (or some other process) to confirm performance. Without performance checks over time, deficiencies could not be identified and addressed.	Closed – Adequately addressed	V/Line have added sand flow tests to A type exams (approximately every 12 weeks)		
RO-2020-007-SI-05: The processes involved in train preparation did not ensure a required minimum amount of sand in sand boxes.	Closed – Partially addressed	The ATSB is satisfied that the action taken by V/Line will reduce the risk of this safety issue.		
RO-2020-007-SI-06: Loss of adhesion leading to increased stopping distance was not recognised as a risk source for any type of collision in V/Line's risk registers.	Closed – Adequately addressed	The ATSB is satisfied that the action taken by V/Line has reduced the risk of this safety issue.		

Safety issue	Status	Status justification
RO-2018-014 Runaway and derailment of	f TasRail freight trai	n in Devonport, Tasmania, on 21 September 2018
RO-2018-014-SI-01: There was limited practical guidance specifically for the Australian rail industry for the application of system safety assurance processes to the development of complex and safety-critical rail systems.	Closed – Adequately addressed	The standard and guidance developed by Rail Industry Safety Standards Board (RISSB) directly address the availability, relevance, and practicability concerns of the other standards and guidance previously generally available in Australia. Further, the fact sheets published by ONRSR show a greater regulator emphasis on these approaches in general. Although compliance with such standards is not yet mandatory, ATSB recognises that there are practical limits to how rapidly systems safety methodologies can be widely adopted.
RO-2018-014-SI-02: Although Air Digital Engineering (ADE) had safety as a design objective and safety elements were included in the remote control equipment, system safety assurance activities appropriate to its application were not conducted.	Closed – Adequately addressed	TasRail advised that it had withdrawn all remote-control technology and ADE advised that the generation 3 remote control equipment has not been offered to, or used by, any other rolling stock operators. ADE advised that it would re-evaluate the generation 3 remote control equipment under system safety design principles if it were to be used for future operations. Accordingly, the safety issue is no longer relevant.
RO-2018-014-SI-03: TasRail commissioned the manufacture of, and continued to use, redesigned safety-critical remote control equipment for operating a locomotive without systematic assurance of its safety, leading to excessive reliance on the manufacturer. This was because TasRail did not:   » fully engage with the development process from initial design through to commissioning, or understand the extent of design changes associated with the introduction of the generation 3 remote control equipment (which reduced the capability to prevent, identify and resolve design and integration problems)  » explicitly identify and impose safety requirements  » verify that the overall system met a specified level of safety.	No longer relevant	TasRail advised that it had withdrawn all remote-control technology. The withdrawal of all remote-control technology negates the need for safety action to directly address each aspect of the safety issue as the system in question is no longer in use.

RO-2018-014-SI-05: Although TasRail had a detailed change management process in place, and had documented that the project to develop the thirdgeneration remote control equipment was a significant change, the change management process had a limited capability to:  » assure pre-determined activities, approvals, and documentation were completed throughout progression of a change » identify the need for relevant safety assurance activities » assure the determination of whether a change had the potential to impact safety.	Closed – Adequately addressed	The ATSB is satisfied that TasRail's amended change management processes adequately addresses the safety issue.
RO-2018-014-SI-07: Although there were no previous accidents attributable to TasRail's use of remote control equipment over 19 years, TasRail did not identify or fully assess the safety implications of remotely controlled train operations, or those of TasRail's specific implementation. These included the:  » potential for remote control equipment to fail to an unsafe state without external risk controls  » suppression or absence of some safety functions of the TR class locomotive, including overspeed protection and some indications provided to drivers  » non-recording of key data parameters to facilitate effective fault and incident analysis  » increased risk of derailment as a result of motive power located only at the rear of the train.	No longer relevant	TasRail advised that it had withdrawn all remote-control technology. The withdrawal of all remote-control technology negates the need for safety action to directly address each aspect of the safety issue, including the need to record additional data parameters beyond those recorded by existing systems on the TR class locomotives. Accordingly, the safety issue is no longer relevant.
RO-2018-014-SI-11: The guidance provided by ONRSR about the requirement to submit a notification of change included limited detail about the extent or type of changes that necessitated a notification. In addition, with regard to 'a safety critical element of rolling stock', it did not provide detail with regard to the interpretation of 'safety critical' and the applicability to equipment that may not be inherently part of rolling stock (such as remote control equipment).	Open – Safety action pending	To be advised.

RO-2018-014-SI-13: TasRail's processes for ensuring immediate network control actions in response to emergencies (such as runaway and authority exceedance) fundamentally relied on the experience and knowledge of network control officers and did not include the provision of procedures, tools and checklists detailed enough to support the effective management of specific types of incidents that require a time-critical response.	Closed – Adequately addressed	The ATSB is satisfied that TasRail's emergency management checklists (for runaway, derailment, and overrun of limits authority) adequately address the safety issue.
RO-2018-014-SI-14: The TasRail cement loading facility at Railton had a downhill grade to the main line, and no devices to protect against a runaway.	Closed – Adequately addressed	The ATSB is satisfied that the installation of a radio- operated, self-restoring catch point at Railton has adequately addressed the safety issue.
RO-2018-014-SI-15: TasRail did not have a reliable process to systematically identify, track and analyse reported faults on its remotely controlled train or to identify their potential safety implications.	Closed – Adequately addressed	The ATSB is satisfied that TasRail's processes for fault tracking and analysis, including the assignment of responsibility to a specific manager, will adequately address the safety issue across TasRail's operations.
RO-2018-014-SI-16: The Air Digital Engineering generation 3 remote control equipment had several safety-related design and integration problems, which were readily identifiable. These included:  » unintended activation-and- release of emergency braking on the locomotive  » recovery from an emergency brake application and certain penalty states that was inconsistent with locomotive braking system timeout controls  » the potential to enter a persistent unsafe state during initialisation, which was unrecoverable without external intervention  » the absence of a means to detect and respond to an emergency brake application from a source external to the remote control equipment  » the vigilance and driver- commanded emergency stop functions being unavailable in the absence of an active radio communications link.	No longer relevant	TasRail advised that it had withdrawn all remote-control technology and ADE advised that the generation 3 remote control equipment has not been offered to, or used by, any other rolling stock operators. ADE advised that it would re-evaluate the generation 3 remote control equipment under system safety design principles if it were to be used for future operations. Accordingly, the safety issue is no longer relevant.

Safety issue	Status	Status justification
	e involving freight t	rain 8796 Rockhampton, Queensland, on 17
September 2021		
RO-2021-010-SI-01: Aurizon did not have measuring equipment available at its Stuart Yard to identify freight loads that were outside the permissible loading profile for transport via rail.	Closed – Adequately addressed	The ATSB is satisfied that the actions already undertaken by Aurizon, and currently being undertaken, will reduce the risk of this safety issue.
Safety issue	Status	Status justification
RO-2021-002 The ATSB is satisfied that the undertaken, will reduce the risk of this sa		ndertaken by Aurizon, and currently being
RO-2021-002-SI-01: Sydney Trains internal safety investigation identified similar incidents (i.e. where a freight train failed), that were not managed in accordance with the requirements of NTR 432, Protecting activities associated with in-service rail traffic. Recent ATSB investigations also identified examples where the requirements of NTR 432 and NPR 750 were not adequately applied.	Closed – Adequately addressed	The ATSB is satisfied that the safety action undertaken by the operator has resolved this safety issue.
RO-2021-002-SI-02: Sydney Trains assurance and audit processes for signal box management did not routinely detect non-conformances with NTR 432.	Closed – Adequately addressed	The ATSB is satisfied that the safety action undertaken by the operator has resolved this safety issue.
RO-2021-002-SI-03: Sydney Trains signaller refresher training, to keep signallers' skills and knowledge up to date, has not been in place since 2009.	Closed – Adequately addressed	The ATSB is satisfied that the safety action undertaken by the operator has resolved this safety issue.
Safety issue	Status	Status justification
RO-2021-008 Speed restriction not appli June 2021	ed, allowing train ST	T24 to overspeed, Harefield, New South Wales, on 29
RO-2021-008-SI-01: The eTAP roll out did not include an effective training regime, as the briefing was not targeted to the appropriate level of competence of the trainees. The Protection Officer involved was not trained or competent in the rules and procedures for Track Occupancy Authority (TOA) at the time of the eTAP briefing. There was no competence assessment for the use of the application for the Protection Officer involved.	Closed – Adequately addressed	The ATSB is satisfied that the actions already undertaken by ARTC, and currently being undertaken, will reduce the risk of this safety issue.
Australian Rail Track Corporation (ARTC) has developed a new eTAP training structure that consists of 3 separate training modules that are specifically relevant to a Protection Officer competency level. ARTC dispute the finding that no competency assessment was undertaken but could provide no evidence of one having been done for the Protection Officer concerned.		

	T .	
RO-2021-008-SI-04: The eTAP system, used at TOA fulfilment, did not include a key safeworking requirement contained in the ARTC Network Rule ANGE 204 for confirming and repeating back safety critical information.	Open – Safety action pending	Awaiting outcome of review.
ARTC will undertake a review of the relevant Rules and Procedures applicable to TOA Fulfilment being ANWT 304 and ANPR 701, including ANGE 204.		
Safety issue	Status	Status justification
<u> </u>	ons and derailment o	of ore train R1006, Andoom (near Weipa),
RO-2019-017-SI-02: The procedure for predeparture testing, as part of the coupling procedure, required 2 competent staff. There was no procedure in the operations manual to ensure that a competent and qualified person was present to assist the driver.	Closed – Adequately addressed	The ATSB is satisfied that the updated Railway Operational Procedural Manual will reduce the risk of this safety issue.
RO-2019-017-SI-03: The design of the modular cabin mount was not resilient to frontal impact forces in the event of a collision. This increased the risk of their failure and separation of the cabin, removing the effectiveness of protection afforded by the collision posts.	Closed – Adequately addressed	The ATSB is satisfied that the actions undertaken by Progress Rail, including strengthening of the modular cabin mounts, will reduce the risk of this safety issue.
RO-2019-017-SI-04: The RISSB did not provide design and/or performance standards on modular cabin resilience and retention for locomotive crashworthiness.	Closed – Adequately addressed	The ATSB is satisfied that the requirement to consider the retention of modular cabins in the Australian Standard will reduce the risk of this safety issue.
Safety issue	Status	Status justification
RO-2021-004 Derailment of freight train	4BM4, Nana Glen, N	lew South Wales, on 25 February 2021
RO-2021-004-SI-01: Neither ARTC or Pacific National (PN) provided guidance for train crew to respond to extreme wet weather events or floodwater in the rail corridor. There was no guidance for when trains should stop or report if there was water on the track formation, covering the ballast, sleepers or the rail.	Open – Safety action pending	To be advised.
RO-2021-004-SI-03: ARTC had not undertaken formal assessments to determine the need for or the locations of remote weather monitoring stations to detect extreme weather events that could affect the integrity of its rail infrastructure.	Open – Safety action pending	The ATSB acknowledges that some proactive safety action has been completed and anticipates that once all safety actions have been completed the safety issue should be addressed. ATSB will monitor progress on the implementation of ARTC safety actions.
RO-2021-004-SI-04: The weather alerts issued by the Early Warning Network (EWN) did not reliably reflect the data and frequency of ARTC's extreme weather monitoring procedure or the service agreement. This and the services ARTC believed were included in the service agreement likely impacted the expectations of ARTC users who relied on these warnings to inform their response.	Closed – Adequately addressed	The ATSB is satisfied that the safety actions taken by both ARTC and EWN addresses the safety issue.

RO-2021-004-SI-06: Although ARTC had procedures in place for monitoring and responding to extreme weather events, the process had significant limitations, including:  » the mechanism (email) for alerting operational personnel required to take action in response to amber alerts did not ensure that alerts were always identified or actioned in a timely manner  » the actions specified for amber and red alerts were insufficient to respond to escalating rainfall and flooding events, both forecast and actual.	Open – Safety action pending	To be advised.
RO-2021-004-SI-07: ARTC could not reliably determine the risk of flooding along the Telarah to Acacia Ridge corridor or the risks associated with inadequate capacity cross drainage systems.	Open – Safety action pending	To be advised.

# Safety actions

Table 9: Number of safety actions released in 2022–23

Safety issue risk	Aviation	Marine	Rail	Total
Proactive safety action <sup>3</sup>	17	7	27	51
Safety advisory notice	2	0	0	2
Safety recommendation	10	2	2	14
Total	29	9	29	67

# Safety recommendations closed in 2022–23

#### **Aviation**

Table 10: Aviation – safety recommendations closed in 2022–23

Investigation	AO-2014-032 In-flight upset, inadvertent pitch disconnect, and continued operation with serious damage involving ATR 72 aircraft, VH-FVR, 47 km west-south-west of Sydney Airport, New South Wales, on 20 February 2014
Safety issue	The aircraft manufacturer did not account for the transient elevator deflections that occur as a result of the system flexibility and control column input during a pitch disconnect event at all speeds within the flight envelope. As such, there is no assurance that the aircraft has sufficient strength to withstand the loads resulting from a pitch disconnect.
Number	AO-2014-032-SR-015
Organisation	European Aviation Safety Agency (EASA)
Recommendation	The ATSB recommends that EASA monitor and review ATR's engineering assessment of transient elevator deflections associated with a pitch disconnect to determine whether the aircraft can safely withstand the loads resulting from a pitch disconnect within the entire operational envelope. In the event that the analysis identifies that the aircraft does not have sufficient strength, it is further recommended that EASA take immediate action to ensure the ongoing safe operation of ATR42/72 aircraft.
Released	5 May 2017
Final action date	16 December 2022
Final action	EASA has reviewed the ATR assessment of transient elevator deflections associated with a pitch disconnect. It has been based on a study of the control cable elasticity, the results from a full-scale static test as well as a dedicated flight testing campaign, on top of other analysis. EASA agrees with ATR that the aircraft can safely withstand the loads resulting from a pitch disconnect within the entire operational envelope.
Investigation	AO-2020-012 Mid-air collision involving Piper PA-44-180 Seminole, VH-JQF and Beech D95A Travel Air, VH-AEM, 8 km south of Mangalore Airport, Victoria, on 19 February 2020
Safety issue	The En-Route Supplement Australia included a requirement to add 1,000 ft to the prescribed practice instrument approach 'altitude' at Mangalore Airport. The procedure did not detail whether this height was to be applied to the minimum descent altitude or to all approach altitudes, resulting in varied application and an increased risk of traffic conflicts.
Number	AO-2020-012-SR-06
Organisation	CASA
Recommendation	The ATSB recommends that CASA address the ambiguity in the En Route Supplement Australia requirement relating to practice instrument approach altitudes at Mangalore Airport to reduce the variation in application and risk of traffic conflicts.
Released	31 March 2022
Final action date	16 September 2022
Final action	The ATSB acknowledges the work completed by CASA to respond to this recommendation. The En-Route Supplement Australia, valid from 8 September 2022, contains updated local procedures at Mangalore as well as 3 other affected aerodromes (Ballarat, Busselton and Latrobe Valley). The ATSB also acknowledges that the new wording should reduce the risk of the safety issue. Therefore the safety recommendation is closed.

Investigation	AO-2020-010 Collision with water involving Textron Aviation Inc. (Cessna) 206, VH-AEE near Happy Valley, Fraser Island, Queensland on 29 January 2020
Safety issue	Cessna 206 aircraft that feature a rear double cargo door do not meet the aircraft certification basis for the design of cabin exits. Wing flap extensions beyond 10° will block the forward portion of the rear double cargo door, significantly hampering emergency egress. This has previously resulted in fatalities.
Number	AO-2020-010-SR-018
Organisation	CASA
Recommendation	The ATSB recommends CASA takes safety action to address the certification basis for the design of the cabin doors in the Cessna 206, as wing extension beyond 10° will block the forward portion of the rear double door, significantly hampering emergency egress.
Released	8 July 2021
Final action date	6 September 2022
Final action	CASA response: In response to AO-2020-010-SR-018, Safety Recommendation re C206 door configuration, CASA is not aware of any evidence to indicate that this aircraft does not meet the applicable certification standards as demonstrated by findings of compliance at the date of type certification by the Federal Aviation Administration (FAA). The certification basis of this aircraft requires the proper functioning of exits for passenger egress to be demonstrated by tests as part of type certification (CAR 3.387). The FAA, as the State of Design, has investigated passenger egress from the rear cabin door and has not mandated any airworthiness actions. With the release of report AO-2020-010, CASA has issued Airworthiness Bulletin AWB 52-006 to communicate similar airworthiness information to that contained in EASA SIB 2020-16, Emergency Egress Difficulty, and NZ CAA CAN 25-003, Cessna 206 Emergency Egress Difficulty. AWN 52-006 Issue 1 has now been published on CASA's website and a copy sent to all relevant subscribers. CASA will continue to monitor continued operational safety actions taken by the State of Design for the Textron Aviation C206 models and take appropriate actions. Supplemental Type Certificates (STCs) issued by FAA and Transport Canada are automatically accepted by CASA under CASR Part 21. Therefore, a registered operator in Australia can purchase and incorporate STCs approved by these authorities without further CASA approval if they elect to modify the forward door section of the rear cargo door configuration.
Investigation	AO-2020-010 Collision with water involving Textron Aviation Inc. (Cessna) 206, VH-AEE near Happy Valley, Fraser Island, Queensland, on 29 January 2020
Safety issue	Cessna 206 aircraft that feature a rear double cargo door do not meet the aircraft certification basis for the design of cabin exits. Wing flap extensions beyond 10° will block the forward portion of the rear double cargo door, significantly hampering emergency egress. This has previously resulted in fatalities.
Number	AO-2020-010-SR-019
Organisation	United States Federal Aviation Administration (FAA)
Recommendation	The United States FAA advised that they had no comment on any aspect of the draft report and did not provide detail of any safety action related to the identified safety issue. Consequently, the ATSB recommends that the FAA takes safety action to address the certification basis for the design of the cabin doors in the Cessna 206, as wing flap extension beyond 10° will block the forward portion of the rear double door, significantly hampering
	emergency egress.
Released	emergency egress.  8 July 2021

 $<sup>^{\</sup>scriptscriptstyle 3}$  Only includes proactive safety action taken by industry linked to an ATSB-identified safety issue.

#### FAA response:

As previously mentioned, the FAA's Aircraft Certification Service reviewed the ATSB's final report and the safety recommendation with the aircraft manufacturer, Textron Aviation's Cessna Aircraft Company, regarding the design and operation of the Cessna 206 rear cabin doors.

The Cessna U206 airplane was first certified in 1964 under the Civil Air Regulations (CAR) 3, Small Airplanes Certification Basis. CAR 3, Section 3.387, required, in part, emergency exits on airplanes with closed cabins carrying more than five persons. The regulation required the emergency exits be readily accessible, that they not require exceptional agility of a person using them, and that they be distributed so as to facilitate egress without crowding in all probable attitudes resulting from a crash. Furthermore, the regulation also required the method of opening 2 of emergency exits be simple and obvious, and that the exits be arranged and marked so as to be readily located and operated even in darkness. The Cessna U206 was found to meet the applicable certification requirements during its initial type certification. The FAA also conducted a Special Certification Review in 1970, verifying the emergency exit cabin doors were in compliance with the manufacturer's aircraft certification design basis.

#### Final action

The Cessna 206H airplane, certified in 1997, and the Cessna T206H airplane, certified in 1998, are both subject to the current aircraft certification standards of Title 14, Code of Federal Regulations Part 23, Amendment 23-10. Section 23.807 mandates, in part, that each emergency exit require no exceptional agility to be used in emergencies, have a method of opening that is simple and obvious, be arranged and marked for easy location and operation even in darkness, and have reasonable provisions against jamming by fuselage deformation. The regulation also requires the proper functioning of each emergency exit be shown by tests. The Cessna 206H and Cessna T206H airplanes were both found to meet the applicable aircraft certification standards during their type certification. Additionally, during the Cessna 206H/T206H airplane Canadian validation, the FAA conducted another review assessing compliance against part 23, amendment 23-10, and again found the emergency exit cabin doors were in compliance with its aircraft certification standard.

The FAA has discussed the Cessna 206 airplane emergency exit cabin door concern with other foreign civil aviation authorities as part of its original CAR 3 certification basis and safety reviews. During a safety review conducted in 2008, associated with an FAA safety recommendation submission, the FAA's Small Airplane Directorate and Wichita Aircraft Certification Office (ACO), examined the procedures for passenger egress and determined the Cessna 206 airplanes demonstrated compliance with CAR 3, section 3.387 and section 3.768 as referenced in aircraft Type Certificate Data Sheet A4CE. It was noted during this safety review that current procedures to open the forward emergency exit cabin door as far as possible and then force the rear cabin door full open are compliant and adequate if properly briefed and understood by the flight crew. Another Cessna 206 airplane safety review was conducted in 2019, following a request by Transport Canada. The FAA again concluded the certification design of the emergency exit cabin doors does not constitute an unsafe condition.

We have considered the ATSB's views and acknowledge the cabin door concern has been raised before. The FAA, in the original CAR 3 certification basis, in the special certification safety reviews, and again during certification with 14 CFR Part 23 requirements in the 1990s, each determined the Cessna 206 airplane complies with the applicable requirements for its emergency exit design. Based on these factors, the FAA has concluded no further action is warranted at this time.

#### Investigation

#### AR-2017-011 Analysis of Wake Turbulence Occurrences at Sydney Airport 2012–2016

# Given the parallel runway configuration, there was a disproportionate rate of reported wake turbulence occurrences for aircraft arriving at Sydney Airport compared to other major Australian airports in the years 2012 to 2016. Wake turbulence occurrences at Sydney Airport were found to be primarily associated with 3 factors:

#### Safety issue

- » arrival densities of one or more aircraft per minute (including parallel runway arrivals), especially on flights that arrived on Runway 34 Right
- » wind direction from the west or north west for aircraft arriving on Runway 34 Right, especially when coinciding with a heavy or super heavy aircraft arriving on Runway 34 Left arrivals following an Airbus A380 compared to other aircraft.

Number	AR-2017-011-SR-011
Organisation	Airservices Australia
Recommendation	The ATSB recommends that Airservices Australia introduce measures to reduce the frequency of wake turbulence occurrence at Sydney Airport. Measures that could reduce the likelihood of these occurrences are primarily associated with:  » arrival densities of one or more aircraft per minute (including parallel runway arrivals), especially on flights that arrived on Runway 34 Right  » wind direction from the west or north-west for aircraft arriving on Runway 34 Right, especially when coinciding with a heavy or super heavy aircraft arriving on Runway
Released	34 Left arrivals following an Airbus A380 compared to other aircraft.  15 February 2019
Final action date	25 July 2022
Final action	To address the safety issue, Airservices Australia conducted a comprehensive quantitative analysis of wake vortices for Sydney parallel approaches. This has resulted in the production of a computational model that enables Airservices Australia to simulate wake vortex motion and strength, and interactions with following aircraft.  This report also detailed Airbus A380 movements at Sydney Aerodrome since January 2019.
	The number of A380 movements at Sydney (for the most recent available data, May–July 2022) is around one-third of the average movements in 2019.
Investigation	AO-2018-078 VFR into IMC and controlled flight into terrain involving Pilatus Britten- Norman BN2A, VH-OBL, 98 km west-south-west of Hobart Airport, Tasmania, on 8 December 2018
Safety issue	CASA's acquittal process for repeat safety findings was not effective in ensuring that all previous findings of a similar nature were also appropriately assessed prior to the current and all associated safety findings being acquitted.
Number	AO-2018-078-SR-01
Organisation	CASA
Recommendation	The ATSB recommends that CASA amend its acquittal process for repeat safety findings to ensure it is effective in ensuring that all previous findings of a similar nature are also appropriately assessed prior to the current and all associated safety findings being acquitted.
Released	20 December 2021
Final action date	17 May 2022
Final action	CASA provided the most recent version of the CASA Surveillance Manual (CSM version 5.0).  Open Safety Findings form part of the discussion at the weekly Surveillance Managers' meeting. Open findings are tracked by status and issuing office, with the status classifications being:  » Issued – the finding has been issued and CASA is awaiting the response.  » Response received – the operator has replied, and the finding response is being assessed by CASA.  » Objection received – the operator has objected to the Safety Finding and this is being assessed by CASA.  » Extension of time – the operator has asked for, and been given, an extension to the required timeframe to respond.  » Further evidence required – the operator has replied, and CASA have determined that further evidence is required to acquit the finding.  » Verification required – the operator has replied, and CASA have determined that the action needs to be verified at the next on-site audit.
	<ul> <li>Action Plan – the operator has replied, and CASA have determined that an action plan is required to work with the operator to close out the findings</li> <li>At the management meeting, the status of open findings is discussed generally, with a more specific and detailed discussion occurring for individual operators who are showing a lack of ability or willingness to close out findings satisfactorily. These operators are then either subject to additional activity from the surveillance team, which may include correspondence from the National Manager, and if all surveillance options are exhausted, then a referral to enforcement is then made following the Collaborative Environmental Management (CEM) process.</li> </ul>

Investigation	AO-2014-032 In-flight upset, inadvertent pitch disconnect, and continued operation with serious damage involving ATR 72 aircraft, VH-FVR, 47 km west-south-west of Sydney Airport, New South Wales, on 20 February 2014
Safety issue	The aircraft manufacturer did not account for the transient elevator deflections that occur as a result of the system flexibility and control column input during a pitch disconnect event at all speeds within the flight envelope. As such, there is no assurance that the aircraft has sufficient strength to withstand the loads resulting from a pitch disconnect.
Number	AO-2014-032-SR-016
Organisation	CASA
Recommendation	The ATSB recommends that CASA review ATR's engineering assessment of transient elevator deflections associated with a pitch disconnect, to determine whether the aircraft can safely withstand the loads resulting from a pitch disconnect within the entire operational envelope. In the event that the analysis identifies that the aircraft does not have sufficient strength, it is further recommended that CASA take immediate action to ensure the ongoing safe operation of Australian registered ATR42/72 aircraft.
Released	5 May 2017
Final action date	30 March 2021

Since February 2016, CASA has been monitoring ATR and EASA detailed engineering analysis of the aircraft's pitch control system. However due to inherent conservatism in design ATR have now demonstrated the aircraft has sufficient strength to withstand an intentional pitch disconnect at almost any reasonable operating condition and the aircraft meets its certification requirements. For a worst possible case of factors, the conditions of which have never been encountered in the life of the type, it is possible the maximum load can be marginally exceeded during an intentional pitch disconnect. ATR propose to remove this risk by implementing a further updated pitch disconnect procedure. EASA have provided that the review on ATR's engineering assessment of transient elevator deflections associated with a pitch disconnect is finalised to EASA's satisfaction. EASA are in the process to compile a final submittal regarding the results. EASA plan to provide this submittal by latest Q2/2021.

CASA's position is informed by the ongoing certification status of the aircraft together with an adequate response from the 2 Australian ATR 42/72 operators in terms of their safety management and training and checking systems. CASA and EASA are maintaining close and regular communication in relation to this matter. EASA continues to liaise regularly with ATR as part of their continued investigation and CASA will review each new development on its merits, and subsequently determine whether any further action may be required. In particular, if the completed ATR engineering analysis identifies any ongoing concerns, CASA will take appropriate action, taking into account any measures taken by EASA, in consultation with the Australian operators of this aircraft.

As CASA is not the State of Design for the ATR 42/72 aircraft, CASA issued a Type Acceptance Certificate (TAC) for the ATR 42 and 72 models and does not hold any type design data for these aircraft. Therefore, CASA relies on EASA as the NAA for the State of Design to conduct the assessment and correct any identified deficiencies in the aircraft. EASA has been working with ATR on resolution of the transient elevator deflection with pitch disconnect and providing CASA with updates when necessary.

CASA has been monitoring the progress of the review and assessment by EASA of ATR's analysis. Details provided below:

- 1. EASA and ATR have been working on the issue to understand the loads and demonstrate compliance with the relevant airworthiness standard. Certification Review Item (CRI) D-24 Issue 3 dated 25 January 2019 was raised. This CRI relates to demonstrating compliance with airworthiness requirements JAR 25.671(C (3) and CS 25.671(c)(3) and has been finalise, and closed. This CRI was intended as the method to be used to address AO-2014-032-SI-02.
- 2. EASA advised CASA on 18 March 2020 the following:
- a. That they had reviewed preliminary data that indicates the aircraft can safely withstand the loads from a pitch disconnect within the operational envelope
- b. In context of the preliminary data review, ATR and EASA found potential for improvement of the pitch uncoupling function at high speeds. Consequently the priority shifted to work on an improved the pitch uncoupling AFM procedure. This AFM procedure review is currently in the final phase.
- c. In parallel, EASA is progressing the review on ATR's engineering assessment of transient elevator deflections associated with a pitch disconnect. Finalisation of the assessment is planned for the first half of 2020.

**Final action** 

	Routinely, the status of the pitch uncoupling occurrences is reviewed at regular Airworthiness Review Meetings 3 times per year.
	3. CASA contacted EASA on 16 March 2021 for an update on their review of the ATR engineering assessment of transient elevator deflections associated with a pitch disconnect.
	4. EASA responded on 16 March 2021 advised that the review on ATR's engineering assessment of transient elevator deflections associated with a pitch disconnect is finalised to EASA's satisfaction. EASA are in the process of compiling a final submittal regarding the results. EASA plan to provide this submittal by latest Q2/2021.
	CASA will continue to monitor the actions of EASA on the closure of this safety recommendation as part of its business as usual.
	If EASA issues corrective action, such as an airworthiness directive, under Part 39 of the Civil Aviation Safety Regulations this corrective action would be automatically mandatory for all operators of the affected aircraft in Australia. Any other action taken by the State of Design will be handled by the usual processes and procedures CASA already has in place.
	As the monitoring of this issue is now business as usual, CASA recommends that the ATSB closes AO-2014-032-SR-016.
Investigation	AO-2017-013 Collision with water involving Grumman American Aviation Corp G-73, VH-CQA, 10 km west-south-west of Perth Airport, Western Australia, on 26 January 2017
	CASA did not have an effective framework to approve and oversight air displays, predominantly due to the following factors:
Safety issue	<ul> <li>While the Air Display Manual provided guidance to organisers conducting an air display, it did not inherently provide the processes and tools needed for CASA to approve and oversee one and no other documented guidance existed.</li> <li>Unlike the accreditation models adopted by some other countries, CASA did not have a systematic approach for assessing the suitability of those responsible for organising, coordinating and participating in air displays.</li> <li>CASA did not have a structured process to ensure that risks were both identified</li> </ul>
	and adequately treated.  » The combination of these factors significantly increased the likelihood that safety risks associated with the conduct of the air display were not adequately managed.
Number	AO-2017-013-SR-029
Organisation	CASA
Recommendation	The ATSB recommends CASA undertake further work to enhance their tools and guidance for air display approval and oversight, and procedures to ensure the suitability of those responsible for organising, coordinating and participating in air displays.
Released	19 November 2019
Final action date	3 July 2020
Organisation  Recommendation	CASA  The ATSB recommends CASA undertake further work to enhance their tools and guidance for air display approval and oversight, and procedures to ensure the suitability of those responsible for organising, coordinating and participating in air displays.

Following the initial changes made in 2018 and as part of the continual improvement process, a comprehensive review of the Display Administration and Procedure Manual (ADAPM) and associated processes, forms and guidance was completed in June 2020, to ensure:

- 1. The ADAPM continues to be fit for purpose and integrates seamlessly with transition to the new Flight Operations Regulations. An update of the ADAPM was completed in June 2020 and is currently progressing through the final legal review process for publishing.
- 2. Capability exists with the number of trained Flight Operations Inspector (FOI's) who are approved to assess applications and commence training of additional initial and recurrent training courses for inspectors. A review of the current inspector training course is in progress, to align with the new application forms, updated ADAPM and assessor worksheet. Additional training is planned to commence for inspectors in August 2020 and will also include refresher training for those inspectors currently approved to undertake assessment.
- 3. Application forms, development of assessor worksheet and additional guidance material to permit an expedited nationally consistent application process. New application forms have been approved and will be published alongside the updated ADAPM. The new forms better align with CASA forms philosophy, are clear and simple and better align with requirements of the ADAPM. The updated forms place greater responsibility on the Display Organiser to ensure accurate information is submitted and will result in a higher standard of application to strengthen the assessment process. A new Post Display Report form has combined older forms to simplify administrative workload for the Display Organiser, whilst providing greater assurance for CASA. A new Assessor Worksheet has also been developed, which will bring consistency and standardisation to the assessment process. This form will be implemented with introduction of the new forms and ADAPM at the soonest opportunity.
- 4. Improved communication and consultation with industry in relation to CASA's oversight and regulatory management of Air Displays and the transition to Part 91. A new industry facing webpage will be added to the CASA website that will provide specific information regarding Air Displays and the requirements and forms needed to assist application. Industry consultation is scheduled to commence in September 2020 and will seek to inform stakeholders about the changes to the Air Display process being proposed with transition into Part 91 and alignment with international best practice.

**Final action** 

#### **Marine**

No marine safety recommendations closed in 2022–23.

#### Rail

No rail safety recommendations closed in 2022–23.

# Safety recommendations released in 2022–23

#### **Aviation**

Table 11: Aviation – safety recommendations released in 2022–23

Investigation	AO-2020-007 Collision with terrain involving Lockheed EC130Q, N134CG, 50 km north-east of Cooma-Snowy Mountains Airport (near Peak View), New South Wales, on 23 January 2020
Safety issue	The NSW RFS procedures allowed operators to determine when pilots were initial attack capable. However, they intended for the pilot in command to be certified by the United States Department of Agriculture Forest Service certification process.
Number	AO-2020-007-SR-08
Organisation	NSW RFS
Recommendation	The ATSB recommends that the NSW RFS address the ambiguity with the interpretation of 'initial attack' in the NSW and ACT Aviation Standard Operating Procedures with the intent of this requirement.
Released	29 August 2022
Investigation	AO-2020-007 Collision with terrain involving Lockheed EC130Q, N134CG, 50 km north-east of Cooma-Snowy Mountains Airport (near Peak View), New South Wales, on 23 January 2020
Safety issue	The NSW RFS did not have a policy or procedures in place to manage task rejections, nor to communicate this information internally or to other pilots working in the same area of operation.
Number	AO-2020-007-SR-09
Organisation	NSW RFS
Recommendation	The ATSB recommends that the NSW RFS take further action to address the absence of policies and procedures for personnel to effectively manage and communicate task rejections on the basis of operational safety concerns.
Released	29 August 2022
Investigation	AO-2020-007 Collision with terrain involving Lockheed EC130Q, N134CG, 50 km north-east of Cooma-Snowy Mountains Airport (near Peak View), New South Wales, on 23 January 2020
Safety issue	The NSW RFS had limited large air tanker policies and procedures for aerial supervision requirements and no procedures for deployment without aerial supervision.
Number	AO-2020-007-SR-10
Organisation	NSW RFS
Recommendation	The ATSB recommends that the NSW RFS take further action to address the absence of policies and procedures regarding minimum aerial supervision requirements and the use of initial attack to assist frontline staff with making acceptable risk based tasking decisions.
Released	29 August 2022
Investigation	AO-2020-007 Collision with terrain involving Lockheed EC130Q, N134CG, 50 km north-east of Cooma-Snowy Mountains Airport (near Peak View), New South Wales, on 23 January 2020
Safety issue	Coulson Aviation fleet of C-130 aircraft were not fitted with a windshear detection system, which increased the risk of a windshear encounter and/or delayed response to a windshear encounter during low level operations.
Number	AO-2020-007-SR-11
Organisation	Coulson Aviation

Recommendation	The ATSB recommends that Coulson Aviation further consider the fitment of a windshear detection system to their C-130 aircraft to minimise the time taken for crews to recognise and respond to an encounter particularly when operating at low level and low speed.
Released	29 August 2022
Investigation	AO-2020-007 Collision with terrain involving Lockheed EC130Q, N134CG, 50 km north-east of Cooma-Snowy Mountains Airport (near Peak View), New South Wales, on 23 January 2020
Safety issue	Coulson Aviation did not provide a pre-flight risk assessment for their fire-fighting large air tanker crews. This would provide predefined criteria to ensure consistent and objective decision-making with accepting or rejecting tasks, including factors relating to crew, environment, aircraft and external pressures.
Number	AO-2020-007-SR-12
Organisation	Coulson Aviation
Recommendation	The ATSB recommends that Coulson Aviation take further action to incorporate foreseeable external factors into their pre-flight assessment tool to ensure the overall risk profile of a tasking can be consistently assessed by crews.
Released	29 August 2022
Investigation	AO-2022-029 Flight control systems occurrence involving Boeing 737-800, VH-YFZ Gold Coast Airport, Queensland, on 27 April 2022
Safety issue	Failure of the inboard programming roller cartridge was due to undetected fatigue cracking that occurred in an area that was not included in the detailed flap actuation system inspection.
Number	AO-2022-029-SR-13
Organisation	The Boeing Company
Recommendation	The ATSB recommends that The Boeing Company takes safety action to increase the detection of fatigue cracks in the roller cartridges of 737 800 aircraft prior to failure.
Released	19 December 2022
Investigation	AO-2021-052 Collision with terrain involving Air Tractor AT-400, VH-ACQ 75 km west-south-west of Moree, New South Wales, on 4 December 2021
	The aircraft was not fitted nor required to be fitted with a crash-resistant fuel system under
Safety issue	the current standards or those in place at the time of manufacture. As a result, post-impact fire presents a significant risk of fire-related injuries and fatalities to aircraft occupants.
Safety issue Number	the current standards or those in place at the time of manufacture. As a result, post-impact fire
	the current standards or those in place at the time of manufacture. As a result, post-impact fire presents a significant risk of fire-related injuries and fatalities to aircraft occupants.
Number	the current standards or those in place at the time of manufacture. As a result, post-impact fire presents a significant risk of fire-related injuries and fatalities to aircraft occupants.  AO-2021-052-SR-15
Number Organisation	the current standards or those in place at the time of manufacture. As a result, post-impact fire presents a significant risk of fire-related injuries and fatalities to aircraft occupants.  AO-2021-052-SR-15  United States FAA  The ATSB recommends that the United States FAA take action to address certification requirements for crash-resistant fuel systems for fixed wing aircraft to reduce the risk of post-
Number Organisation Recommendation	the current standards or those in place at the time of manufacture. As a result, post-impact fire presents a significant risk of fire-related injuries and fatalities to aircraft occupants.  AO-2021-052-SR-15  United States FAA  The ATSB recommends that the United States FAA take action to address certification requirements for crash-resistant fuel systems for fixed wing aircraft to reduce the risk of post-impact fire.
Number Organisation Recommendation Released	the current standards or those in place at the time of manufacture. As a result, post-impact fire presents a significant risk of fire-related injuries and fatalities to aircraft occupants.  AO-2021-052-SR-15  United States FAA  The ATSB recommends that the United States FAA take action to address certification requirements for crash-resistant fuel systems for fixed wing aircraft to reduce the risk of post-impact fire.  10 March 2023  Cabin depressurisation involving Airbus A330, VH-EBK 235 NM (435 km) south-west of Adelaide, South Australia, on 5 February 2021  The mitigations introduced by Airbus to counter the design limitation associated with the A330 cabin pressure control systems were ineffective, because:
Number Organisation Recommendation Released Investigation	the current standards or those in place at the time of manufacture. As a result, post-impact fire presents a significant risk of fire-related injuries and fatalities to aircraft occupants.  AO-2021-052-SR-15  United States FAA  The ATSB recommends that the United States FAA take action to address certification requirements for crash-resistant fuel systems for fixed wing aircraft to reduce the risk of post-impact fire.  10 March 2023  Cabin depressurisation involving Airbus A330, VH-EBK 235 NM (435 km) southwest of Adelaide, South Australia, on 5 February 2021  The mitigations introduced by Airbus to counter the design limitation associated with the
Number Organisation Recommendation Released Investigation	the current standards or those in place at the time of manufacture. As a result, post-impact fire presents a significant risk of fire-related injuries and fatalities to aircraft occupants.  AO-2021-052-SR-15  United States FAA  The ATSB recommends that the United States FAA take action to address certification requirements for crash-resistant fuel systems for fixed wing aircraft to reduce the risk of post-impact fire.  10 March 2023  Cabin depressurisation involving Airbus A330, VH-EBK 235 NM (435 km) south-west of Adelaide, South Australia, on 5 February 2021  The mitigations introduced by Airbus to counter the design limitation associated with the A330 cabin pressure control systems were ineffective, because:  » changes to the CAB PR EXCESS CAB ALT alert operational procedure did not ensure appropriate management of the fault
Number Organisation Recommendation Released Investigation Safety issue	the current standards or those in place at the time of manufacture. As a result, post-impact fire presents a significant risk of fire-related injuries and fatalities to aircraft occupants.  AO-2021-052-SR-15  United States FAA  The ATSB recommends that the United States FAA take action to address certification requirements for crash-resistant fuel systems for fixed wing aircraft to reduce the risk of post-impact fire.  10 March 2023  Cabin depressurisation involving Airbus A330, VH-EBK 235 NM (435 km) south-west of Adelaide, South Australia, on 5 February 2021  The mitigations introduced by Airbus to counter the design limitation associated with the A330 cabin pressure control systems were ineffective, because:  » changes to the CAB PR EXCESS CAB ALT alert operational procedure did not ensure appropriate management of the fault » the service bulletin had very limited uptake in the A330/340 global fleet.
Number Organisation Recommendation Released Investigation Safety issue	the current standards or those in place at the time of manufacture. As a result, post-impact fire presents a significant risk of fire-related injuries and fatalities to aircraft occupants.  AO-2021-052-SR-15  United States FAA  The ATSB recommends that the United States FAA take action to address certification requirements for crash-resistant fuel systems for fixed wing aircraft to reduce the risk of post-impact fire.  10 March 2023  Cabin depressurisation involving Airbus A330, VH-EBK 235 NM (435 km) south-west of Adelaide, South Australia, on 5 February 2021  The mitigations introduced by Airbus to counter the design limitation associated with the A330 cabin pressure control systems were ineffective, because:  » changes to the CAB PR EXCESS CAB ALT alert operational procedure did not ensure appropriate management of the fault » the service bulletin had very limited uptake in the A330/340 global fleet.  AO-2021-005-SR-16
Number Organisation Recommendation Released Investigation Safety issue Number Organisation	the current standards or those in place at the time of manufacture. As a result, post-impact fire presents a significant risk of fire-related injuries and fatalities to aircraft occupants.  AO-2021-052-SR-15  United States FAA  The ATSB recommends that the United States FAA take action to address certification requirements for crash-resistant fuel systems for fixed wing aircraft to reduce the risk of post-impact fire.  10 March 2023  Cabin depressurisation involving Airbus A330, VH-EBK 235 NM (435 km) south-west of Adelaide, South Australia, on 5 February 2021  The mitigations introduced by Airbus to counter the design limitation associated with the A330 cabin pressure control systems were ineffective, because:  » changes to the CAB PR EXCESS CAB ALT alert operational procedure did not ensure appropriate management of the fault » the service bulletin had very limited uptake in the A330/340 global fleet.  AO-2021-005-SR-16  Airbus  The ATSB recommends that Airbus takes safety action to address the effectiveness of the

Investigation	AO-2020-059 Collision with terrain involving Aquila AT01, VH-OIS, Coombing Park Airstrip, 27 km south of Orange, New South Wales, on 4 November 2020
Safety issue	The CASA sample operations manual used by the operator that allowed any aerodrome in the Enroute Supplement Australia to be used for flight training did not assure that these aerodromes were suitable for use.
Number	AO-2020-059-SR-17
Organisation	CASA
Recommendation	The ATSB recommends that CASA takes safety action to modify the CASA sample operations manual wording for flight training operations to emphasise that aerodromes in the Enroute Supplement Australia require assessment of suitability prior to use.
Released	4 May 2023
Investigation	AO-2022-007 Touchdown off the runway surface involving Raytheon B200, VH- MVP, at Lord Howe Island Airport, New South Wales, on 18 February 2022
Safety issue	The occurrence flight used a distance measuring equipment (DME) arrival to establish a visual approach in unsuitable visibility conditions. The investigation identified a number of similar approaches conducted by the operator in marginal visibility conditions. Using this approach method, rather than a straight in instrument approach, significantly reduced obstacle clearance assurance for both an approach and any potential missed approaches, and also increased the risk to both the operator's and other aircraft through the use of a non-standard circuit procedure.
Number	AO-2022-007-SR-18
Organisation	Eastern Air Link
Recommendation	The ATSB recommends that Eastern Air Link address the safety issue, through provision of guidance and training to flight crew concerning the safest option in the selection of an approach method when weather conditions are marginal for the conduct of a visual approach.
Released	24 May 2023

#### Marine

Table 12: Marine – safety recommendations released in 2022–23

Investigation	MO-2021-002 Fire on board BBC <i>Rhonetal</i> Port Hedland, Western Australia, on 25 March 2021
Safety issue	BBC <i>Rhonetal's</i> managers had not effectively implemented the shipboard safety management system procedures in place to prevent the fire. This was the tenth such fire on a company ship in the past 14 years, and the fourth investigated by the ATSB, identifying similar contributing factors.
Number	MO-2021-002-SR-01
Organisation	Briese Heavylift
Recommendation	The ATSB recommends that Briese Heavylift takes safety action to ensure safety management system procedures for hot work on board ships that it manages are effectively implemented.
Released	21 September 2022

Investigation	MO-2021-002 Fire on board BBC <i>Rhonetal</i> Port Hedland, Western Australia, on 25 March 2021
Safety issue	BBC Rhonetal's managers had not effectively implemented the shipboard safety management system procedures in place to prevent the fire. This was the tenth such fire on a company ship in the past 14 years, and the fourth investigated by the ATSB, identifying similar contributing factors.
Number	MO-2021-002-SR-01
Organisation	Briese Schiffahrts
Recommendation	The ATSB recommends that Briese Schiffahrts takes safety action to ensure safety management system procedures for hot work on board ships that it manages, and ones managed by its subsidiary companies, are effectively implemented.
Released	21 September 2022

#### Rail

Table 13: Rail – safety recommendations released in 2022–23

Investigation	RO-2021-004 Derailment of freight train 4BM4, Nana Glen, New South Wales, on 25 February 2021
Safety issue	Neither ARTC or Pacific National provided guidance for train crew to respond to extreme wet weather events or floodwater in the rail corridor. There was no guidance for when trains should stop or report if there was water on the track formation, covering the ballast, sleepers or the rail.
Number	RO-2021-004-SR-19
Organisation	Pacific National
Recommendation	The ATSB recommends that Pacific National develops guidance for train crew to respond to and report extreme wet weather events or floodwater in the rail corridor.
Released	6 June 2023
Investigation	RO-2021-004 Derailment of freight train 4BM4, Nana Glen, New South Wales, on 25 February 2021
Safety issue	Neither ARTC or Pacific National provided guidance for train crew to respond to extreme wet weather events or floodwater in the rail corridor. There was no guidance for when trains should stop or report if there was water on the track formation, covering the ballast, sleepers or the rail.
Number	RO-2021-004-SR-20
Organisation	ARTC
Recommendation	The ATSB recommends that ARTC develops guidance for train crew to respond to and report extreme wet weather events or floodwater in the rail corridor.
Released	6 June 2023

# Safety advisory notices released in 2022-23

#### **Aviation**

Table 14: Aviation – safety advisory notices released in 2022–23

Investigation	AO-2021-025 Collision with terrain involving Cessna A150M, VH-CYO 5 km west- south-west of Peachester, Queensland, on 23 June 2021	
Safety issue	N/A	
Number	AO-2021-025-SAN-001	
Organisation	Aerobatic pilots and instructors	
Safety advisory notice	The ATSB strongly encourages all aerobatic pilots and aerobatic flight instructors to be aware:  *** the Mueller/Beggs method of spin recovery does not recover all aircraft types from a spin  *** the Mueller/Beggs spin recovery method limitations should be emphasised during spin theory training  *** the Mueller/Beggs method of spin recovery will not recover a Cessna A150 Aerobat or similar variants from a spin in some circumstances  *** they should review the pilot's operating handbook of the aircraft type that they intend to operate for the recommended spin recovery technique  *** prior to doing spins in any model aircraft, pilots should obtain instruction and or advice in spins from an instructor who is fully qualified and current in spinning that model.	
Released	11 August 2022	
Investigation	AO-2022-026 In-flight fire and collision with terrain involving Beechcraft B58 Baron, VH-NPT near East Kimberley Regional Airport, Kununurra, Western Australia, on 16 April 2022	
Safety issue	N/A	
Number	AO-2022-026-SAN-01	
Organisation	Beechcraft Baron Operators	

Safety advisory notice	The ATSB encourages operators of Beechcraft Baron aircraft to conduct a detailed inspection of the heater fuel supply line and wiring in its vicinity. The examination should focus specifically on the area below the pilot's circuit breaker panel and areas forward of this under the instrument panel. Any identified issues should be reported to CASA (via the defect reporting system) and the manufacturer.  The ATSB encourages Baron operators to review the Electrical Wire Chafing Protection section in Model Communiqué 116 put out by Beechcraft in June of 2008, which is applicable to all Beechcraft models.
	The ATSB further encourages operators to review the anti-chafing provisions within the relevant aircraft maintenance manual (see 20-04-00-001 – Electrical Wiring – Description and Operation) to ensure serviceability of anti-chafing materials and replace or fit, as necessary. Specific consideration should be given to wiring in the vicinity of lines carrying flammable liquids.
Released	21 September 2022

#### Marine

No marine safety advisory notices released in 2022–23.

#### Rail

No rail safety advisory notices released in 2022–23.

# **SECTION 6 - FINANCIAL STATEMENTS**



### **Financial Statements 2022-23**

Australian Transport Safety Bureau

#### **CONTENTS**

#### Certification

#### **Primary Financial Statement**

Statement of Comprehensive Income

Statement of Financial Position

Statement of Changes in Equity

**Cash Flow Statement** 

**Budget Variances Commentary** 

#### Overview

#### Notes to the Financial Statements:

#### 1. Financial Performance

- 1.1 Expenses
- 1.2 Own-Source Revenue and Gains

#### 2. Financial Position

- 2.1 Financial Assets
- 2.2 Non-Financial Assets
- 2.3 Payables
- 2.4 Interest Bearing Liabilities

#### 3. Funding

- 3.1 Appropriations
- 3.2 Net Cash Appropriation Arrangements

#### 4. People and Relationships

- 4.1 Employee Provisions
- 4.2 Key Management Personnel Remuneration
- 4.3 Related Party Disclosures

#### **5. Managing Uncertainties**

- 5.1 Contingent Assets and Liabilities
- 5.2 Financial Instruments
- 5.3 Fair Value Measurement

#### 6. Other Information

6.1 Current / non-current distinction for assets and liabilities





#### INDEPENDENT AUDITOR'S REPORT

To the Minister for Infrastructure, Transport, Regional Development and Local Government

#### Opinion

In my opinion, the financial statements of the Australian Transport Safety Bureau (the Entity) for the year ended 30 June 2023:

- (a) comply with Australian Accounting Standards Simplified Disclosures and the *Public Governance, Performance and Accountability (Financial Reporting) Rule 2015*; and
- (b) present fairly the financial position of the Entity as at 30 June 2023 and its financial performance and cash flows for the year then ended.

The financial statements of the Entity, which I have audited, comprise the following as at 30 June 2023 and for the year then ended:

- Statement by the Chief Commissioner and Chief Financial Officer;
- Statement of Comprehensive Income;
- Statement of Financial Position;
- Statement of Changes in Equity;
- Cash Flow Statement; and
- Notes to the Financial Statements, comprising a summary of significant accounting policies and other explanatory information.

#### Basis for opinion

I conducted my audit in accordance with the Australian National Audit Office Auditing Standards, which incorporate the Australian Auditing Standards. My responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of my report. I am independent of the Entity in accordance with the relevant ethical requirements for financial statement audits conducted by the Auditor-General and his delegates. These include the relevant independence requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants (including Independence Standards)* (the Code) to the extent that they are not in conflict with the *Auditor-General Act 1997*. I have also fulfilled my other responsibilities in accordance with the Code. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

#### Accountable Authority's responsibility for the financial statements

As the Accountable Authority of the Entity, the Chief Commissioner is responsible under the *Public Governance*, *Performance and Accountability Act 2013* (the Act) for the preparation and fair presentation of annual financial statements that comply with Australian Accounting Standards – Simplified Disclosures and the rules made under the Act. The Chief Commissioner is also responsible for such internal control as the Chief Commissioner determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Chief Commissioner is responsible for assessing the ability of the Entity to continue as a going concern, taking into account whether the Entity's operations will cease as a result of an administrative restructure or for any other reason. The Chief Commissioner is also responsible for disclosing, as applicable, matters related to going concern and using the going concern basis of accounting, unless the assessment indicates that it is not appropriate.

GPO Box 707, Canberra ACT 2601 38 Sydney Avenue, Forrest ACT 2603 Phone (02) 6203 7300

#### Auditor's responsibilities for the audit of the financial statements

My objective is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian National Audit Office Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with the Australian National Audit Office Auditing Standards, I exercise professional judgement and maintain professional scepticism throughout the audit. I also:

- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or
  error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is
  sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material
  misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion,
  forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are
  appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of
  the Entity's internal control;
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Accountable Authority;
- conclude on the appropriateness of the Accountable Authority's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Entity's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Entity to cease to continue as a going concern; and
- evaluate the overall presentation, structure and content of the financial statements, including the
  disclosures, and whether the financial statements represent the underlying transactions and events in a
  manner that achieves fair presentation.

I communicate with the Accountable Authority regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

Australian National Audit Office

Rita Bhana

Audit Principal

RBhunn

Delegate of the Auditor-General

Canberra

29 September 2023

#### STATEMENT BY THE CHIEF COMMISSIONER AND CHIEF FINANCIAL OFFICER

In our opinion, the attached financial statements for the year ended 30 June 2023 comply with subsection 42(2) of *the Public Governance, Performance and Accountability Act 2013* (PGPA Act), and are based on properly maintained financial records as per subsection 41(2) of the PGPA Act.

In our opinion, at the date of this statement, there are reasonable grounds to believe that the Australian Transport Safety Bureau will be able to pay its debts as and when they fall due.

Angus Mitchell
Chief Commissioner

nos

29 September 2023

Krishna Kumar

Chief Financial Officer

29 September 2023

#### **Statement of Comprehensive Income**

for the period ended 30 June 2023

		2023	2022	Original Budget
	Notes	\$'000	\$'000	\$'000
NET COST OF SERVICES				
Expenses				
Employee benefits	1.1A	16,845	15,963	16,334
Suppliers	1.1B	8,093	7,188	7,428
Depreciation and amortisation	2.2A	2,536	2,334	2,445
Finance costs	1.1C	79	84	52
Write-down and impairment of other assets	1.1D	21	154	
Total expenses		27,574	25,723	26,259
Own-source income				
Own-source revenue				
Revenue from contracts with customers	1.2A	1,271	978	1,456
Other revenue	1.2B	2,743	2,760	2,829
Total own-source revenue		4,014	3,738	4,285
Gains				
Other gains	1.2C	9	460	-
Total gains		9	460	-
Total own-source income		4,023	4,198	4,285
Net cost of services		(23,551)	(21,525)	(21,974)
Revenue from government	1.2D	20,710	20,863	21,047
Deficit before income tax on continuing operations		(2,841)	(662)	(927)
Deficit from continuing operations		(2,841)	(662)	(927)
OTHER COMPREHENSIVE INCOME Items not subject to subsequent reclassificati	on			
to net cost of services	-			
Changes in asset revaluation surplus		632	(7)	-
Total comprehensive loss		(2,209)	(669)	(927)

#### **Statement of Financial Position**

as at 30 June 2023

Notes         \$'000         \$'000         \$'000           ASSETS           Financial assets         Cash and cash equivalents         2.1A         240         348         348           Cash and cash equivalents         2.1B         7,996         9,057         9,057           Accrued revenue         9         12         12           Total financial assets         8,245         9,417         9,417           Non-financial assets         8,245         9,417         9,417           Non-financial assets         8,245         9,417         9,417           Non-financial assets         2,2A         7,690         8,898         7,729           Heritage and cultural         2,2A         16         16         16           Plant and equipment         2,2A         3,279         2,713         2,513           Computer software         2,2A         2,468         2,555         2,396           Prepayments         593         575         575           Total non-financial assets         14,046         14,757         13,229           Total assets         2,34         482         335         335           Suppliers         2,38         501			2023	2022	Original Budget
Financial assets         2.1A         240         348         348           Cash and cash equivalents         2.1B         7,996         9,057         9,057           Accrued revenue         9         12         12           Total financial assets         8,245         9,417         9,417           Non-financial assets¹         8         7,729         12         12           Buildings         2.2A         7,690         8,898         7,729           Heritage and cultural         2.2A         16         16         16           Plant and equipment         2.2A         3,279         2,713         2,513           Computer software         2.2A         2,468         2,555         2,396           Prepayments         593         575         575           Total non-financial assets         14,046         14,757         13,229           Total assets         2.3A         482         335         335           Other payables         2.3B         501         477         57           Total payables         2.3A         482         335         335           Total payables         2.3A         4,330         9,171         7,988		Notes	\$'000	\$'000	
Cash and cash equivalents         2.1A         240         348         348           Trade and other receivables         2.1B         7,996         9,057         9,057           Accrued revenue         9         12         12           Total financial assets         8,245         9,417         9,417           Non-financial assets¹           Buildings         2,2A         7,690         8,898         7,729           Heritage and cultural         2,2A         16         16         16           Plant and equipment         2,2A         3,279         2,713         2,513           Computer software         2,2A         2,468         2,555         2,396           Prepayments         593         575         575           Total non-financial assets         14,046         14,757         13,229           Total assets         23A         482         335         335           Suppliers         2,3A         482         335         335           Other payables         2,3A         482         335         352           Total payables         983         812         392           Interest bearing liabilities         8,130         9,171	ASSETS				
Trade and other receivables         2.18         7,996         9,057         9,057           Accrued revenue         9         12         12           Total financial assets         8,245         9,417         9,417           Non-financial assets¹         Buildings         2.2A         7,690         8,898         7,729           Heritage and cultural         2.2A         16	Financial assets				
Accrued revenue         9         12         12           Total financial assets         8,245         9,417         9,417           Non-financial assets¹         Security of the properties of the paragraph of the	Cash and cash equivalents	2.1A	240	348	348
Total financial assets         8,245         9,417         9,417           Non-financial assets¹         8uildings         2.2A         7,690         8,898         7,729           Heritage and cultural         2.2A         16         16         16           Plant and equipment         2.2A         3,279         2,713         2,513           Computer software         2.2A         2,468         2,555         2,396           Prepayments         593         575         575           Total non-financial assets         14,046         14,757         13,229           Total assets         2,3A         482         335         335           Suppliers         2,3A         482         335         335           Other payables         2,3B         501         477         57           Total payables         2,3B         501         477         57           Total payables         2,4A         8,130         9,171         7,988           Total payables         2,4A         8,130         9,171         7,988           Total interest bearing liabilities         8,130         9,171         7,988           Total provisions         4,1A         5,361         4,7	Trade and other receivables	2.1B	7,996		
Non-financial assets¹           Buildings         2.2A         7,690         8,898         7,729           Heritage and cultural         2.2A         16         16         16           Plant and equipment         2.2A         3,279         2,713         2,513           Computer software         2.2A         2,468         2,555         2,396           Prepayments         593         575         575           Total non-financial assets         14,046         14,757         13,229           Total assets         22,291         24,174         22,646           LIABILITIES         2         2,34         482         335         335           Other payables         2,3A         482         335         335           Other payables         2,3A         482         335         35           Total payables         983         812         392           Interest bearing liabilities         8,130         9,171         7,988           Leases         2,4A         8,130         9,171         7,988           Total interest bearing liabilities         8,130         9,171         7,988           Employee provisions         4,1A         5,361		_			
Buildings         2.2A         7,690         8,898         7,729           Heritage and cultural         2.2A         16         16         16           Plant and equipment         2.2A         3,279         2,713         2,513           Computer software         2.2A         2,468         2,555         2,396           Prepayments         593         575         575           Total non-financial assets         14,046         14,757         13,229           Total assets         22,291         24,174         22,646           LIABILITIES         23A         482         335         335           Other payables         2.3A         482         335         35           Other payables         2.3B         501         477         57           Total payables         2.4A         8,130         9,171         7,988           Interest bearing liabilities         8,130         9,171         7,988           Total interest bearing liabilities         4.1A         5,361         4,747         5,167           Total provisions         4.1A         5,361         4,747         5,167           Total liabilities         14,474         14,730         13,547 <td>Total financial assets</td> <td>_</td> <td>8,245</td> <td>9,417</td> <td>9,417</td>	Total financial assets	_	8,245	9,417	9,417
Heritage and cultural         2.2A         16         16         16           Plant and equipment         2.2A         3,279         2,713         2,513           Computer software         2.2A         2,468         2,555         2,396           Prepayments         593         575         575           Total non-financial assets         14,046         14,757         13,229           Total assets         22,291         24,174         22,646           LIABILITIES         Payables         Suppliers         2.3A         482         335         335           Other payables         2.3B         501         477         57           Total payables         2.3B         501         477         57           Total payables         2.3B         501         477         57           Total payables         2.4A         8,130         9,171         7,988           Total provisions         4.1A         5,361         4,747         5,167           Total interest bearing liabilities         4.1A         5,361         4,747         5,167           Total provisions         4.1A         5,361         4,747         5,167           Total liabilities         14,474	Non-financial assets <sup>1</sup>				
Plant and equipment         2.2A         3,279         2,713         2,513           Computer software         2.2A         2,468         2,555         2,396           Prepayments         593         575         575           Total non-financial assets         14,046         14,757         13,229           Total assets         22,291         24,174         22,646           LIABILITIES         23A         482         335         335           Other payables         2.3A         482         335         35           Other payables         2.3B         501         477         57           Total payables         2.4A         8,130         9,171         7,988           Interest bearing liabilities         8,130         9,171         7,988           Total interest bearing liabilities         8,130         9,171         7,988           Provisions         4.1A         5,361         4,747         5,167           Total provisions         4.1A         5,361         4,747         5,167           Total liabilities         14,474         14,730         13,547           Net assets         7,817         9,444         9,099           EQUITY <t< td=""><td>Buildings</td><td>2.2A</td><td>7,690</td><td>8,898</td><td>7,729</td></t<>	Buildings	2.2A	7,690	8,898	7,729
Computer software Prepayments         2.2A         2,468 593 575 575         2,396 575 575           Total non-financial assets         14,046 14,757 13,229         13,229           Total assets         22,291 24,174 22,646         22,646           LIABILITIES         Payables         Suppliers         2.3A 482 335 335 335 501 477 57         335 355 335 335 335 335 335 335 335 335	Heritage and cultural	2.2A	16	16	16
Prepayments         593         575         575           Total non-financial assets         14,046         14,757         13,229           Total assets         22,291         24,174         22,646           LIABILITIES         Payables           Suppliers         2.3A         482         335         335           Other payables         2.3B         501         477         57           Total payables         983         812         392           Interest bearing liabilities         2.4A         8,130         9,171         7,988           Total interest bearing liabilities         2.4A         8,130         9,171         7,988           Provisions         4.1A         5,361         4,747         5,167           Total provisions         4.1A         5,361         4,747         5,167           Total liabilities         14,474         14,730         13,547           Net assets         7,817         9,444         9,099           EQUITY           Contributed equity         6,099         5,517         6,099           Reserves         1,146         514         514           Retained surplus         5,722         3,413					
Total non-financial assets         14,046         14,757         13,229           Total assets         22,291         24,174         22,646           LIABILITIES           Payables           Suppliers         2.3A         482         335         335           Other payables         2.3B         501         477         57           Total payables         893         812         392           Interest bearing liabilities         2.4A         8,130         9,171         7,988           Total interest bearing liabilities         8,130         9,171         7,988           Provisions         4.1A         5,361         4,747         5,167           Total provisions         4.1A         5,361         4,747         5,167           Total provisions         4.1A         5,361         4,747         5,167           Total liabilities         14,474         14,730         13,547           Net assets         7,817         9,444         9,099           EQUITY         6,099         5,517         6,099           Reserves         1,146         514         514           Retained surplus         5,722         3,413         2,48		2.2A			
Total assets         22,291         24,174         22,646           LIABILITIES           Payables         Suppliers         2.3A         482         335         335           Other payables         2.3B         501         477         57           Total payables         983         812         392           Interest bearing liabilities         2.4A         8,130         9,171         7,988           Total interest bearing liabilities         8,130         9,171         7,988           Total interest bearing liabilities         8,130         9,171         7,988           Provisions         4.1A         5,361         4,747         5,167           Total provisions         4.1A         5,361         4,747         5,167           Total liabilities         14,474         14,730         13,547           Net assets         7,817         9,444         9,099           EQUITY         6,099         5,517         6,099           Contributed equity         6,099         5,517         6,099           Reserves         1,146         514         514           Retained surplus         572         3,413         2,486		_			
LIABILITIES         Payables         Suppliers       2.3A       482       335       335         Other payables       2.3B       501       477       57         Total payables       983       812       392         Interest bearing liabilities       Eases       2.4A       8,130       9,171       7,988         Total interest bearing liabilities       8,130       9,171       7,988         Provisions       8,130       9,171       7,988         Employee provisions       4.1A       5,361       4,747       5,167         Total provisions       5,361       4,747       5,167         Total liabilities       14,474       14,730       13,547         Net assets       7,817       9,444       9,099         EQUITY       6,099       5,517       6,099         Reserves       1,146       514       514         Retained surplus       572       3,413       2,486		_			
Payables           Suppliers         2.3A         482         335         335           Other payables         2.3B         501         477         57           Total payables         983         812         392           Interest bearing liabilities         8,130         9,171         7,988           Leases         2.4A         8,130         9,171         7,988           Provisions         8,130         9,171         7,988           Employee provisions         4.1A         5,361         4,747         5,167           Total provisions         4.1A         5,361         4,747         5,167           Total liabilities         14,474         14,730         13,547           Net assets         7,817         9,444         9,099           EQUITY         6,099         5,517         6,099           Reserves         1,146         514         514           Retained surplus         572         3,413         2,486	Total assets	_	22,291	24,174	22,646
Suppliers         2.3A         482         335         335           Other payables         2.3B         501         477         57           Total payables         983         812         392           Interest bearing liabilities         8,130         9,171         7,988           Total interest bearing liabilities         8,130         9,171         7,988           Provisions         8,130         9,171         7,988           Employee provisions         4.1A         5,361         4,747         5,167           Total provisions         5,361         4,747         5,167           Total liabilities         14,474         14,730         13,547           Net assets         7,817         9,444         9,099           EQUITY         6,099         5,517         6,099           Reserves         1,146         514         514           Retained surplus         572         3,413         2,486	LIABILITIES				
Other payables       2.3B       501       477       57         Total payables       983       812       392         Interest bearing liabilities       2.4A       8,130       9,171       7,988         Provisions       8,130       9,171       7,988         Provisions       4.1A       5,361       4,747       5,167         Total provisions       4.1A       5,361       4,747       5,167         Total liabilities       14,474       14,730       13,547         Net assets       7,817       9,444       9,099         EQUITY         Contributed equity       6,099       5,517       6,099         Reserves       1,146       514       514         Retained surplus       572       3,413       2,486	Payables				
Total payables         983         812         392           Interest bearing liabilities         2.4A         8,130         9,171         7,988           Provisions         8,130         9,171         7,988           Employee provisions         4.1A         5,361         4,747         5,167           Total provisions         4.1A         5,361         4,747         5,167           Total liabilities         14,474         14,730         13,547           Net assets         7,817         9,444         9,099           EQUITY           Contributed equity         6,099         5,517         6,099           Reserves         1,146         514         514           Retained surplus         572         3,413         2,486	Suppliers	2.3A	482	335	335
Interest bearing liabilities   Leases   2.4A   8,130   9,171   7,988     Total interest bearing liabilities   8,130   9,171   7,988     Provisions	Other payables	2.3B	501	477	57
Leases       2.4A       8,130       9,171       7,988         Provisions         Employee provisions       4.1A       5,361       4,747       5,167         Total provisions       5,361       4,747       5,167         Total liabilities       14,474       14,730       13,547         Net assets       7,817       9,444       9,099         EQUITY         Contributed equity       6,099       5,517       6,099         Reserves       1,146       514       514         Retained surplus       572       3,413       2,486	Total payables	_	983	812	392
Total interest bearing liabilities         8,130         9,171         7,988           Provisions           Employee provisions         4.1A         5,361         4,747         5,167           Total provisions         5,361         4,747         5,167           Total liabilities         14,474         14,730         13,547           Net assets         7,817         9,444         9,099           EQUITY         6,099         5,517         6,099           Reserves         1,146         514         514           Retained surplus         572         3,413         2,486	Interest bearing liabilities				
Provisions         Employee provisions       4.1A       5,361       4,747       5,167         Total provisions       5,361       4,747       5,167         Total liabilities       14,474       14,730       13,547         Net assets       7,817       9,444       9,099         EQUITY         Contributed equity       6,099       5,517       6,099         Reserves       1,146       514       514         Retained surplus       572       3,413       2,486	Leases	2.4A	8,130	9,171	7,988
Employee provisions       4.1A       5,361       4,747       5,167         Total provisions       5,361       4,747       5,167         Total liabilities       14,474       14,730       13,547         Net assets       7,817       9,444       9,099         EQUITY         Contributed equity       6,099       5,517       6,099         Reserves       1,146       514       514         Retained surplus       572       3,413       2,486	Total interest bearing liabilities	_	8,130	9,171	7,988
Employee provisions       4.1A       5,361       4,747       5,167         Total provisions       5,361       4,747       5,167         Total liabilities       14,474       14,730       13,547         Net assets       7,817       9,444       9,099         EQUITY         Contributed equity       6,099       5,517       6,099         Reserves       1,146       514       514         Retained surplus       572       3,413       2,486	Provisions				
Total provisions         5,361         4,747         5,167           Total liabilities         14,474         14,730         13,547           Net assets         7,817         9,444         9,099           EQUITY         Contributed equity         6,099         5,517         6,099           Reserves         1,146         514         514           Retained surplus         572         3,413         2,486		4 1A	5.361	4 747	5 167
Total liabilities         14,474         14,730         13,547           Net assets         7,817         9,444         9,099           EQUITY         6,099         5,517         6,099           Reserves         1,146         514         514           Retained surplus         572         3,413         2,486					
Net assets       7,817       9,444       9,099         EQUITY       8,099       5,517       6,099       6,099       5,517       6,099       5,514       514	•	_		14,730	
Contributed equity       6,099       5,517       6,099         Reserves       1,146       514       514         Retained surplus       572       3,413       2,486	Net assets	_	7,817	9,444	
Contributed equity       6,099       5,517       6,099         Reserves       1,146       514       514         Retained surplus       572       3,413       2,486	FOLUTY	_	<u> </u>	-	
Reserves       1,146       514       514         Retained surplus       572       3,413       2,486	_		6 099	5 517	6 099
Retained surplus         572         3,413         2,486			-	•	•
	Total equity	_			

<sup>&</sup>lt;sup>1</sup> Right-of-use assets are included in the buildings and plant and equipment asset categories.

#### **Statement of Changes in Equity**

for the period ended 30 June 2023

	2023	2022	Original Budget
Notes	\$′000	\$'000	\$′000
CONTRIBUTED EQUITY			
Opening balance			
Balance carried forward from previous period	5,517	4,939	5,517
Transactions with owners			
Contributions by owners			
Departmental capital budget	582	578	582
Total transactions with owners	582	578	582
Closing balance as at 30 June	6,099	5,517	6,099
RETAINED EARNINGS Opening balance	2.442	4.075	2.442
Balance carried forward from previous period	3,413	4,075	3,413
Adjusted opening balance	3,413	4,075	3,413
Comprehensive loss	(2.041)	(662)	(027)
Deficit for the period	(2,841)	(662)	(927)
Total comprehensive loss Closing balance as at 30 June	(2,841) 572	(662) 3,413	(927) 2,486
ASSET REVALUATION RESERVE			
Opening balance			
Balance carried forward from previous period	514	521	514
Adjusted opening balance	514	521	514
Other Comprehensive income / (loss)			
Other comprehensive income / (loss)	632	(7)	-
Total comprehensive income / (loss)	632	(7)	-
Closing balance as at 30 June	1,146	514	514
Total Equity as at 30 June	7,817	9,444	9,099

#### **Cash Flow Statement**

for the period ended 30 June 2023

		2023	2022	Original Budget
	Notes	\$'000	\$'000	\$'000
OPERATING ACTIVITIES				
Cash received				
Appropriations		21,159	20,429	21,047
Sale of goods and rendering of services		1,433	1,108	1,456
Net GST received		670	513	-
Other Total cash received	_	163	177	22 502
Total cash received		23,425	22,227	22,503
Cash used				
Employees		16,157	15,951	16,334
Suppliers		6,008	4,789	4,599
Interest payments on lease liabilities		79	84	52
Other		176	165	-
Total cash used		22,420	20,989	20,985
Net cash from operating activities	_	1,005	1,238	1,518
INVESTING ACTIVITIES Cash received Proceeds from sales of property, plant and equipment Total cash received	_	-	-	-
Cash used	_			
Purchase of property, plant and equipment		400	471	582
Purchase of computer software		727	644	-
Total cash used	_	1,127	1,115	582
Net cash used by investing activities	_	(1,127)	(1,115)	(582)
FINANCING ACTIVITIES Cash received				
Contributed equity		1,127	1,056	582
Total cash received		1,127	1,056	582
- · · ·			•	
Cash used		1 112	1 1 7	1 510
Principal payments of lease liabilities  Total cash used	_	1,113 1,113	1,167 1,167	1,518 1,518
Net cash from/(used by) financing activities		1,113	(111)	(936)
, , , , , , , , , , , , , , , , , , ,			, ,	(/
Net increase/(decrease) in cash held		(108)	12	-
Cash and cash equivalents at the beginning of the reporting period		348	336	348
Cash and cash equivalents at the end of the reporting period	2.1A	240	348	348

#### **Budget Variances Commentary**

The explanations provide a comparison of the original budget as presented in the October 2022-23 Portfolio Budget Statements (PBS) to the 2022-23 final outcome as presented in accordance with Australian Accounting Standards for the Australian Transport Safety Bureau (ATSB). The Budget is not audited.

Variances are considered to be 'major' based on the following criteria:

- the variance between budget and actual is greater than 10%: and
- the variance between budget and actual is greater than 2% of total expenses or total own-source revenues: or
- the variance between budget and actual is below this threshold but is considered important for the reader's understanding or is relevant to an assessment of the discharge of accountability and to an analysis of performance of the agency.

In some instances, a budget has not been provided for in the PBS, for example non-cash items such as asset revaluations and sale of assets adjustments. Unless the variance is considered to be 'major' no explanation has been provided.

# Expenses Statement of Comprehensive Income Expenses The variance between the budget and 2022-23 actual is mainly related to the overspend in staffing and supplier costs to ensure ATSB has sufficient esources to meet its legislative and international obligations and the resultant operating loss was approved by the Minister for Finance. Affected line items (and statement) Expenses - Suppliers Expenses - Employee benefits

Income	Statement of Comprehensive Income
A decrease in funding received in relation to the ATSB's international projects	Own-source revenue - Revenue from contracts wit
occurred after the original budget was set.	customers
Financial Assets	Statement of Financial Position
The variance between the budget and 2022-23 actual is mainly related to the	Financial assets - Cash and cash equivalents
higher than budgeted expenditure to meet the legislative and international	Financial assets - Trade and other receivables
obligations and the resultant drawings of funds from the cash reserve as per	
the approval from the Minister for Finance.	
Non-Financial Assets	Statement of Financial Position
The variance between the budget and 2022-23 actual is mainly related to the	Non-financial assets - Plant and equipment
revaluation of Property, Plant and Equipment and higher than budgeted expenditure on Internally Developed Software.	Non-financial assets - Computer software

### **Budget Variances Commentary (continued)**

Variances in the Cash Flow Statement are broadly consistent with the variances

explained above for income and expenses.

### **Explanations of major variances** Affected line items (and statement) Payables **Statement of Financial Position** The variance between the budget within the PBS and the actual outcome for Payables - Other payables the 2022-23 financial year, is mainly attributable to higher than expected other payables compared to the original budget. **Statement of Changes in Equity Statement of Changes in Equity** Total equity is less than projected in the budget mainly due to the differences between the actual and budgeted operating result, with the larger variance identified above. This reduction is offset by the revaluations in the Other Comprehensive Income. **Cash Flow Statement Cash Flow Statement**

### **Overview**

The ATSB is an Australian Government controlled not-for-profit entity. The objective of the entity is to improve transport safety in Australia through: independent 'no blame' investigation of transport safety accidents and other safety occurrences; safety data recording, analysis and research; and fostering safety awareness, knowledge and action. ATSB's central office is located at 12, Moore Street, Canberra, Australian Capital territory. It has field offices in Sydney, Melbourne, Brisbane, Adelaide and Perth.

#### The Basis of Preparation

The Financial Statements are required by:

a) section 42 of the Public Governance, Performance and Accountability Act 2013

The financial statements have been prepared in accordance with:

- a) Public Governance, Performance and Accountability (Financial Reporting) Rule 2015 (FRR); and
- b) Australian Accounting Standards and Interpretations including simplified disclosures for Tier 2 Entities under AASB 1060 issued by the Australian Accounting Standards Board (AASB) that apply for the reporting period.

The financial statements have been prepared on an accrual basis and in accordance with the historical cost convention, except for certain assets and liabilities at fair value. Except where stated, no allowance is made for the effect of changing prices on the results or the financial position. The financial statements are presented in Australian dollars.

#### **New Accounting Standards**

Two amending standards (AASB 2021-2 and AASB 2021-6) were adopted earlier than the application date as stated in the standard. These amending standards have been adopted for the 2022-23 reporting period. The following amending standards were issued prior to the signing of the statement by the Chief Commisioner and Chief Financial Officer, were applicable to the current reporting period and did not have a material effect on the ATSB's financial statements:

Standard/ Interpretation	Nature of change in accounting policy, transitional provisions, and adjustment to financial statements
AASB 2021-2 Amendments to Australian Accounting Standards – Disclosure of Accounting Policies and Definition of Accounting Estimates (AASB 2021-2) and	AASB 2021-2 amends AASB 7, AASB 101, AASB 108, AASB 134 and AASB Practice Statement 2. The amending standard requires the disclosure of material, rather than significant, accounting policies, and clarifies what is considered a change in accounting policy compared to a change in accounting estimate.
AASB 2021-6 Amendments to Australian Accounting Standards -	AASB 2021-6 amends the Tier 2 reporting requirements set out in AASB 1049, AASB 1054 and AASB 1060 to reflect the changes made by AASB 2021-2.
Disclosure of Accounting Policies: Tier 2 and Other Australian Accounting Standards (AASB 2021- 6)	This amending standard is not expected to have a material impact on the entity's financial statements for the current reporting period or future reporting periods.

#### **Taxation**

The entity is exempt from all forms of taxation except Fringe Benefits Tax (FBT) and the Goods and Services Tax (GST).

### **Events After the Reporting Period**

There were no events subsequent to 30 June 2023 that had the potential to significantly effect the ongoing structure and financial activities of the ATSB.

### **Note 1 - Financial Performance**

This section analyses the financial performance of the Australian Transport Safety Bureau for the year ended 30 June 2023.

### 1.1 Expenses

	2023	2022
	\$'000	\$'000
1.1A: Employee benefits		
Wages and salaries	12,607	12,414
Superannuation		
Defined contribution plans	1,538	1,462
Defined benefit plans	696	747
Leave and other entitlements	1,701	1,214
Separation and redundancies	84	-
Other employee expenses	219	126
Total employee benefits	16,845	15,963

### **Accounting Policy**

Accounting policies for employee related expenses is contained in the People and Relationships section.

### 1.1B: Suppliers

Development, Communications and the Arts	-	270
Contracted services	146	151
Travel	662	246
Training and conferences	166	90
Communications	180	138
Audit fees <sup>1</sup>	144	149
Office rent	37	35
Publications and printing	14	17
Consultants	220	206
Legal	96	24
Other	385	390
Total goods and services supplied or rendered	7,998	7,095
Goods supplied	757	631
Services rendered	7,241	6,464
Total goods and services supplied or rendered	7,998	7,095
Other suppliers		
Workers compensation expenses	95	93
Total other suppliers		
	95	93
Total suppliers	8,093	7,188

The above lease disclosures should be read in conjunction with the accompanying notes 1.1C, 1.2C, 2.2A, 2.4A and 3.2.

<sup>&</sup>lt;sup>1</sup> It consists of both internal and external audit fees. The external audit fee under free of charge is \$51k.

### 1.1 Expenses (continued)

### **Accounting Policy**

Short-term leases and leases of low-value assets

The ATSB has elected not to recognise right-of-use assets and lease liabilities for short-term leases of assets that have a lease term of 12 months or less and leases of low-value assets (less than \$10,000). The ATSB recognises the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

	2023	2022
	\$'000	\$'000
1.1C: Finance costs		
Interest on lease liabilities	79	84
Total finance costs	79	84

The above lease disclosures should be read in conjunction with the accompanying notes 1.1B, 1.2C, 2.2A, 2.4A and 3.2.

### **Accounting Policy**

All borrowing costs are expensed as incurred.

### 1.1D: Write-down and impairment of other assets

Impairment of property, plant and equipment	-	154
Impairment on intangible assets	21	-
Total write-down and impairment of other assets	21	154

1.2 Own-Source Revenue and Gains		
	2023	2022
	\$′000	\$'000
Own-Source Revenue		
1.2A: Revenue from contracts with customers		
Rendering of services	1,271	978
Total revenue from contracts with customers	1,271	978

### **Accounting Policy**

AASB 15 Revenue from Contracts with Customers has been applied to all new and uncompleted contracts from the date of initial application.

The following is a description of principal activities from which the ATSB generates its revenue:

- Government appropriations
- International programmes of work
- Cost recovery rail investigations

The ATSB's revenue in relation to its international programmes and cost recovery activities are agreement based and within scope for AASB 15. There are separate agreements, with separate terms, based on performance over time obligations and point in time obligations.

The transaction price is the total amount of consideration to which the ATSB expects to be entitled in exchange for transferring promised goods or services to a customer. The consideration promised in a contract with a customer may include fixed amounts, variable amounts, or both.

Receivables for goods and services, which have 30 day terms (2022: 30 day terms), are recognised at the nominal amounts due less any impairment allowance account. Collectability of debts is reviewed at end of the reporting period. Allowances are made when collectability of the debt is no longer probable.

### 1.2B: Other revenue

Remuneration of auditors 1 51 51
Investigation Services 2,769
Total other revenue 2,743 2,760

### **Accounting Policy**

Resources Received Free of Charge

Resources received free of charge are recognised as revenue when, and only when, a fair value can be reliably determined and the services would have been purchased if they had not been donated. Use of those resources is recognised as an expense. Resources received free of charge are recorded as either revenue or gains depending on their nature.

<sup>&</sup>lt;sup>1</sup> The ANAO does not provide any other services other than an audit of the Financial Statements.

# 1.2 Own-Source Revenue and gains (continued) 2023 2022 \$'000 \$'000 Gains \$'000 \$'000 1.2C: Other gains Gain from sale of leased assets 9 - 460 Other 1 - 460 - 460 Total other gains 9 460

The above lease disclosures should be read in conjunction with the accompanying notes 1.1B, 1.1C, 2.2A, 2.4A and 3.2.

### **Accounting Policy**

Sale of Assets

Gains from disposal of assets are recognised when control of the asset has passed to the buyer.

### 1.2D: Revenue from Government

Departmental appropriations 20,710

Total revenue from Government 20,710

### **Accounting Policy**

### Revenue from Government

Amounts appropriated for departmental appropriations for the year (adjusted for any formal additions and reductions) are recognised as Revenue from Government when the ATSB gains control of the appropriation, except for certain amounts relating to activities that are reciprocal in nature, in which case revenue is recognised only when it has been earned. Appropriations receivable are recognised at their nominal amounts.

20,863

20,863

<sup>&</sup>lt;sup>1</sup> The Other Gain is related to the lease termination accounted for under AASB 16.

### **Note 2 - Financial Position**

This section analyses the Australian Transport Safety Bureau's assets used to conduct its operations and the operating liabilities incurred as a result.

### 2.1 Financial Assets

	2023	2022
	\$'000	\$'000
2.1A: Cash and cash equivalents		
Cash on hand or on deposit	240	348
Total cash and cash equivalents	240	348

### **Accounting Policy**

Cash is recognised at its nominal amount. Cash and cash equivalents includes:

- a) cash on hand; and
- b) demand deposits in bank accounts with an original maturity of 3 months or less that are readily convertible to known amounts of cash and subject to insignificant risk of changes in value.

### 2.1B: Trade and other receivables

Goods and services receivables		
Goods and services	24	97
Total goods and services receivables	24	97
Appropriations receivables		
Appropriation receivable	7,917	8,911
Total appropriations receivables	7,917	8,911
Other receivables		
Statutory receivables	55	49
Total other receivables	55	49
Total trade and other receivables (gross)	7,996	9,057
Total trade and other receivables (net)	7,996	9,057

Trade and other receivables have been assessed for impairment and none was identified.

### **Accounting Policy**

### Financial assets

Trade receivables and other receivables that are held for the purpose of collecting the contractual cash flows where the cash flows are solely payments of principal and interest, that are not provided at below-market interest rates, are subsequently measured at amortised cost using the effective interest method adjusted for any loss allowance.

### 2.2 Non-Financial Assets

### 2.2A: Reconciliation of the Opening and Closing Balances of Property, Plant and Equipment and Intangibles

Reconciliation of the opening and closing balances of property, plant and equipment for 2023

	Decilation and	Heritage	Plant &	Computer	Tatal				
	Buildings	Buildings	Buildings	Buildings	Buildings &	& Cultural	Equipment	Software <sup>1</sup>	Total
	\$'000	\$'000	\$'000	\$'000	\$'000				
As at 1 July 2022									
Gross book value	10,405	16	3,422	4,329	18,172				
Accumulated depreciation, amortisation and impairment	(1,507)	-	(709)	(1,774)	(3,990)				
Total as at 1 July 2022	8,898	16	2,713	2,555	14,182				
Additions									
Purchase	-	-	400	-	400				
Internally developed	-	-	-	727	727				
Revaluations and impairments recognised in other			632		632				
comprehensive income <sup>2</sup>	-	-	032	-	632				
Write-downs and Impairments recognised in net cost of	_	_	_	(21)	(21)				
services <sup>2</sup>				(= - /	(,				
Depreciation and amortisation	-	-	(479)	(793)	(1,272)				
Depreciation on right-of-use assets	(1,251)	-	(13)	-	(1,264)				
Other movements of right-of-use assets	43	-	26		69				
Total as at 30 June 2023	7,690	16	3,279	2,468	13,453				

	Buildings	Heritage & Cultural	Plant and equipment	Computer Software	Total
	\$'000	\$'000	\$'000	\$'000	\$'000
Total as at 30 June 2023 represented by					
Gross book value	10,452	16	3,283	4,218	17,969
Accumulated depreciation, amortisation and impairment	(2,762)	-	(4)	(1,750)	(4,516)
Total as at 30 June 2023	7,690	16	3,279	2,468	13,453
Carrying amount of right-of-use assets	7,690	-	99	-	7,789

<sup>&</sup>lt;sup>1</sup> The carrying amount of computer software includes \$2,433k internally generated and \$35k purchased software.

The above lease disclosures should be read in conjunction with the accompanying notes 1.1B, 1.1C, 1.2C, 2.4A and 3.2.

### Revaluation of non-financial assets

All revaluations were conducted in accordance with the revaluation policy stated at Note 5.3. An independent valuer, CBRE Pty Ltd revalued all non-financial assets with effect at 30 June 2023.

<sup>&</sup>lt;sup>2</sup> The ATSB Management ensured that the appropriate assessments were made for impairment, useful lives and the valuation of non-financial assets at 30 June 2023.

#### Accounting Policy

Assets are recorded at cost on acquisition except as stated below. The cost of acquisition includes the fair value of assets transferred in exchange and liabilities undertaken. Financial assets are initially measured at their fair value the following useful lives: plus transaction costs where appropriate.

Depreciation rates applying to each class of depreciable asset are based on

2023

2022

Assets acquired at no cost, or for nominal consideration, are initially recognised as assets and income at their fair value at the date of acquisition, Plant & Equipment unless acquired as a consequence of restructuring of administrative arrangements. In the latter case, assets are initially recognised as contributions by owners at the amounts at which they were recognised in the Heritage & Cultural transferor's accounts immediately prior to the restructuring.

#### 3-50 years 3-10 years Computer Equipment 3-20 years 4 years Office Equipment 3-10 years 3-10 years 100 years 100 years

#### Asset Recognition Threshold

Purchases of property, plant and equipment are recognised initially at cost in the statement of financial position, except for purchases costing less than \$5,000 excluding GST, which are expensed in the year of acquisition (other than where they form part of a group of similar items which are significant in total).

The ATSB has items of property, plant and equipment that are heritage and cultural assets that have limited useful lives and are depreciated.

The depreciation rates for ROU assets are based on the commencement date to the earlier of the end of the useful life of the ROU asset or the end of the lease term.

#### Leased Right of Use (ROU) Assets

Leased ROU assets are capitalised at the commencement date of the lease and comprise of the initial lease liability amount, initial direct costs incurred when entering into the lease less any lease incentives received. These assets are accounted for by Commonwealth lessees as separate asset classes to corresponding assets owned outright, but included in the same column as where the corresponding underlying assets would be presented if they were

On initial adoption of AASB 16 the ATSB has adjusted the ROU assets at the date of initial application by the amount of any provision for onerous leases recognised immediately before the date of initial application. Following initial were deprived of the asset, its value in use is taken to be its depreciated application, an impairment review is undertaken for any ROU lease asset that replacement cost. shows indicators of impairment and an impairment loss is recognised against any ROU asset that is impaired. Leased ROU assets continue to be measured <u>Derecognition</u> at cost after initial recognition in Commonwealth agency, General Government Sector and Whole of Government financial statements.

#### *Impairment*

All assets were assessed for impairment at 30 June 2023.

Where indications of impairment exist, the asset's recoverable amount is estimated and an impairment adjustment made if the asset's recoverable amount is less than its carrying amount.

The recoverable amount of an asset is the higher of its fair value less costs of disposal and its value in use. Value in use is the present value of the future cash flows expected to be derived from the asset. Where the future economic benefit of an asset is not primarily dependent on the asset's ability to generate future cash flows, and the asset would be replaced if the ATSB

#### Revaluations

Following initial recognition at cost, property, plant and equipment (excluding ROU assets) are carried at fair value (or an amount not materially The ATSB has a Pegasus Mark II Propellor from a Supermarine Walrus different from fair value) less subsequent accumulated depreciation and accumulated impairment losses. Valuations are conducted with sufficient biplane reconnaissance aircraft first flown in 1933. frequency to ensure that the carrying amounts of assets did not differ materially from the assets' fair values as at the reporting date. The regularity of independent valuations depends upon the volatility of movements in market values for the relevant assets.

Revaluation adjustments are made on a class basis. Any revaluation increment is credited to equity under the heading of asset revaluation reserve except to the extent that it reversed a previous revaluation decrement of the same asset class that was previously recognised in the surplus/deficit. Revaluation decrements for a class of assets are recognised directly in the surplus/deficit except to the extent that they reversed a previous revaluation increment for that class.

Any accumulated depreciation as at the revaluation date is eliminated against the gross carrying amount of the asset and the asset restated to the revalued amount.

Heritage and Cultural Assets

An item of property, plant and equipment is derecognised upon disposal or when no further future economic benefits are expected from its use or

### Intangibles

The ATSB's intangibles comprise of purchased software and internally developed software for internal use. These assets are carried at cost less accumulated amortisation and accumulated impairment losses.

aircraft. The Supermarine Walrus was a British single-engine amphibious

The ATSB has classified this item as a heritage and cultural asset as its

primary purpose relates to its heritage and cultural significance.

Software is amortised on a straight-line basis over its anticipated useful life. The useful lives of the ATSB's softwares are five years.

All software assets were assessed for indications of impairment as at 30 June 2023.

#### Depreciation

Depreciable property, plant and equipment assets are written-off to their estimated residual values over their estimated useful lives to the ATSB using, in all cases, the straight-line method of depreciation.

Depreciation rates (useful lives), residual values and methods are reviewed at each reporting date and necessary adjustments are recognised in the current, or current and future reporting periods, as appropriate.

2.3 Payables		
	2023 \$′000	2022 \$'000
2.3A: Suppliers		
Trade creditors and accruals	241	128
Accrued expenses	241	207
Total suppliers	482	335
2.3B: Other payables		
Salaries and wages	430	391
Superannuation	71	50
Unearned income	<u> </u>	36
Total other payables	501	477

### **Accounting Policy**

Supplier and other payables are recognised at amortised cost. Liabilities are recognised to the extent that the goods or services have been received (irrespective of having been invoiced). Settlement is usually made within 31 days.

### Parental Leave Payments Scheme

Amounts received under the Parental Leave Payments Scheme by the ATSB not yet paid to employees were presented gross as cash and a liability (payable). The total amount received under this scheme was \$4,875 (2022: Nil).

2.4 Interest Bearing Liabilities		
	2023 \$'000	2022 \$'000
2.4A: Leases		
Lease Liabilities		
Buildings	8,030	9,086
Plant and equipment	100	85
Total leases	8,130	9,171
Maturity analysis - contractual undiscounted cash flows		
Within 1 year	1,165	1,177
Between 1 to 5 years	3,851	4,956
More than 5 years	3,334	3,315
Total leases	8,350	9,448

The above lease disclosures should be read in conjunction with the accompanying notes 1.1B, 1.1C, 1.2C, 2.2A and 3.2.

The ATSB has applied AASB 16 for all leases except short term leases as described in Note 1.1 and the cash outflow for leases for the year ended 30 June 2023 was \$1.192m (2022: \$1.251m)

### **Accounting Policy**

For all new contracts entered into, the ATSB considers whether the contract is, or contains a lease. A lease is defined as 'a contract, or part of a contract, that conveys the right to use an asset (the underlying asset) for a period of time in exchange for consideration'.

Once it has been determined that a contract is, or contains a lease, the lease liability is initially measured at the present value of the lease payments unpaid at the commencement date, discounted using the interest rate implicit in the lease, if that rate is readily determinable, or the department's incremental borrowing rate.

Subsequent to initial measurement, the liability will be reduced for payments made and increased for interest. It is remeasured to reflect any reassessment or modification to the lease. When the lease liability is remeasured, the corresponding adjustment is reflected in the right-of-use asset or profit and loss depending on the nature of the reassessment or modification.

### **Note 3 - Funding**

This section identifies the Australian Transport Safety Bureau's funding structure.

### 3.1 Appropriations

### 3.1A: Annual appropriations ('recoverable GST exclusive')

### **Annual Appropriations for 2023**

				Appropriation applied in 2023	
	Annual appropriation	Adjustments to appropriation <sup>1</sup>	Total appropriation	(current and prior years)	Variance <sup>2</sup>
	\$'000	\$'000	\$'000	\$'000	\$'000
Departmental					,
Ordinary annual services <sup>3</sup>	21,047	1,596	22,643	22,863	(220)
Capital Budget	582	-	582	1,127	(545)
Total departmental	21,629	1,596	23,225	23,990	(765)

<sup>&</sup>lt;sup>1</sup> PGPA Act Section 74 receipts.

Annual Appropriations for 2022

7 amada 7 ppropriations for 2022				Appropriation applied in 2022	
	Annual	Adjustments to	Total	(current and prior	
	appropriation	appropriation <sup>1</sup>	appropriation	years)	Variance <sup>2</sup>
	\$'000	\$'000	\$'000	\$'000	\$'000
Departmental					
Ordinary annual services	20,863	1,285	22,148	21,559	589
Capital Budget	578	=	578	1,115	(537)
Total departmental	21,441	1,285	22,726	22,674	52

<sup>&</sup>lt;sup>1</sup> PGPA Act Section 74 receipts.

### 3.1B: Unspent annual appropriations ('recoverable GST exclusive')

	2023 \$′000	2022 \$'000
Appropriation Act (No. 1) 2021-22	-	8,112
Appropriation Act (No. 1) 2021-22 (DCB)	-	799
Appropriation Act (No. 1) 2021-22 (Cash at Bank - 30 June)	-	348
Appropriation Act (No. 1) 2022-23	7,663	-
Appropriation Act (No. 1) 2022-23 <sup>1</sup>	337	
Appropriation Act (No. 1) 2022-23 (DCB)	254	-
Appropriation Act (No. 1) 2022-23 (Cash at Bank - 30 June)	240	-
Total departmental	8,494	9,259

<sup>&</sup>lt;sup>1</sup> An amount of \$337K related to the savings initiative was quarantined under section 51 during 2022-23.

<sup>&</sup>lt;sup>2</sup> The variance between appropriations and appropriations applied in 2022-23 is due to a combination of overspends within supplier expenses, accrued supplier invoices and a delay with the finalisation of capital projects.

<sup>&</sup>lt;sup>3</sup> The annual appropriation of \$21,047k includes \$337k that was withheld under section 51 during 2022-23.

<sup>&</sup>lt;sup>2</sup> The variance between appropriations and appropriations applied in 2021-22 is due to a combination of underspends within supplier expenses, accrued supplier invoices and a delay with the finalisation of capital projects.

### 3.2 Net Cash Appropriation Arrangements

	2023 \$'000	2022 \$'000
Total comprehensive loss as per the Statement of Comprehensive Income	(2,209)	(669)
Plus: depreciation/amortisation expenses funded through Appropriations	1,272	1,007
Plus: depreciation of right-of-use assets	1,264	1,327
Less: principal repayments - leased assets	(1,113)	(1,167)
Net Cash Operating Surplus/(Deficit)	(786)	498
Changes in Asset Revaluation Reserve	(632)	7
Operating Surplus/(Deficit)	(1,418)	505

The above lease disclosures should be read in conjunction with the accompanying notes 1.1B, 1.1C, 1.2C, 2.2A and 2.4A.

From 2010-11, the Government introduced net cash appropriation arrangements where revenue appropriations for depreciation/amortisation expenses ceased. Entities now receive a separate capital budget provided through equity appropriations. Capital budgets are to be appropriated in the period when cash payment for capital expenditure is required.

The inclusion of depreciation/amortisation expenses related to ROU leased assets and the lease liability principal repayment amount reflects the cash impact on implementation of AASB 16, it does not directly reflect a change in appropriation arrangements.

### Note 4 - People and Relationship

This section describes a range of employment and post-employment benefits provided to our people and our relationships with other key people.

### **4.1 Employee Provisions**

	2023	2022
	\$'000	\$'000
4.1A: Employee provisions		
Leave	5,361	4,747
Total employee provisions	5,361	4,747

### **Accounting policy**

Liabilities for 'short-term employee benefits' (as defined in AASB 119 *Employee Benefits*) and termination benefits expected within twelve months of the end of reporting period are measured at their nominal amounts.

Other long-term employee benefits are measured as net total of the present value of the defined benefit obligation at the end of the reporting period minus the fair value at the end of the reporting period of plan assets (if any) out of which the obligations are to be settled directly.

#### Leave

The liability for employee benefits includes provisions for annual leave and long service leave. The leave liabilities are calculated on the basis of employees' remuneration at the estimated salary rates that will be applied at the time the leave is taken, including the entity's employer superannuation contribution rates to the extent that the leave is likely to be taken during service rather than paid out on termination.

The liability for long service leave has been determined by reference to the Australian Government Shorthand Method outlined in the FRR as at 30 June 2023. The estimate of the present value of the liability takes into account attrition rates and pay increases through promotion and inflation.

#### Separation and Redundancy

A provision is made for separation and redundancy benefit payments. The entity recognises a provision for termination when it has developed a detailed formal plan for the terminations and has informed those employees affected that it will carry out the terminations.

### <u>Superannuation</u>

The ATSB's staff are members of the Commonwealth Superannuation Scheme (CSS), the Public Sector Superannuation Scheme (PSS), the PSS accumulation plan (PSSap), or other superannuation funds held outside the Australian Government.

The CSS and PSS are defined benefit schemes for the Australian Government. The PSSap is a defined contribution scheme.

The liability for defined benefits is recognised in the financial statements of the Australian Government and is settled by the Australian Government in due course. This liability is reported in the Department of Finance's administered schedules and notes.

The ATSB makes employer contributions to the employees' defined benefit superannuation scheme at rates determined by an actuary to be sufficient to meet the current cost to the Government. The ATSB accounts for the contributions as if they were contributions to defined contribution plans.

### 4.2 Key Management Personnel Remuneration

Key management personnel (KMP) are those persons having authority and responsibility for planning, directing and controlling the activities of the ATSB, directly or indirectly, including any director (whether executive or otherwise) of that entity.

The ATSB has determined the KMP to be the Chief Commissioner and Chief Operating Officer who the Chief Commissioner considers to be KMP because of their responsibilities and the nature of their work. KMP is reported in the table below:

	2023	2022
	\$'000	\$'000
Short-term employee benefits	716	617
Post-employment benefits	78	70
Other long-term employee benefits	72	61
Total key management personnel remuneration expenses <sup>1</sup>	866	748

The total number of KMP that are included in the above table is 2 individuals (2022: 2 individuals).

### 4.3 Related Party Disclosures

### Related party relationships:

The ATSB is an Australian Government controlled entity. Related parties to this entity are KMP including the Portfolio Minister and Executive, their close family members, and other Australian Government entities.

### Transactions with related parties:

Given the breadth of Government activities, related parties may transact with the government sector in the same capacity as ordinary citizens. Such transactions include the payment or refund of taxes, receipt of a Medicare rebate or higher education loans. These transactions have not been separately disclosed in this note.

Significant transactions with related parties can include:

- the payments of grants or loans;
- purchases of goods and services;
- asset purchases, sales transfers or leases;
- debts forgiven; and
- guarantees.

Giving consideration to relationships with related entities, and transactions entered into during the reporting period by the ATSB, it has been determined that there are no related party transactions to be separately disclosed (2022: Nil).

<sup>&</sup>lt;sup>1.</sup> The above key management personnel remuneration excludes the remuneration and other benefits of the Portfolio Minister. The Portfolio Minister's remuneration and other benefits are set by the Remuneration Tribunal and are not paid by the ATSB.

### **Note 5 - Managing Uncertainties**

This section analyses how the Australian Transport Safety Bureau manages financial risks within its operating environment.

### **5.1 Contingent Assets and Liabilities**

### **Quantifiable contingencies**

At 30 June 2023, the ATSB had no quantifiable contingencies (2022: Nil).

### **Unquantifiable contingencies**

At 30 June 2023, the ATSB had no unquantifiable contingencies (2022: Nil).

### **Accounting Policy**

Contingent liabilities and contingent assets are not recognised in the statement of financial position but are reported in the notes. They may arise from uncertainty as to the existence of a liability or asset or represent an asset or liability in respect of which the amount cannot be reliably measured. Contingent assets are disclosed when settlement is probable but not virtually certain and contingent liabilities are disclosed when settlement is greater than remote.

5.2 Financial Instruments		
	2023	2022
	\$′000	\$'000
5.2A: Categories of financial instruments		
Financial assets at amortised cost		
Cash and cash equivalents	240	348
Trade and other receivables	24	97
Total financial assets at amortised cost	264	445
Total financial assets	264	445
Financial liabilities		
Financial liabilities measured at amortised cost		
Trade creditors	241	128
Accrued Expenses <sup>1</sup>	241	207
Total financial liabilities measured at amortised cost	482	335
Total financial liabilities	482	335

<sup>&</sup>lt;sup>1</sup> Comparative figure is updated due to incorrectly being excluded from the 2021-22 financial statements.

### 5.2 Financial Instruments (continued)

### Accounting Policy Financial assets

In accordance with AASB 9 *Financial Instruments*, the ATSB classifies its financial assets in the following categories:

- a) financial assets at fair value through profit or loss;
- b) financial assets at fair value through other comprehensive income; and
- c) financial assets measured at amortised cost.

The classification depends on both the ATSB's business model for managing the financial assets and contractual cash flow characteristics at the time of initial recognition. Financial assets are recognised when the ATSB becomes a party to the contract and, as a consequence, has a legal right to receive or a legal obligation to pay cash and derecognised when the contractual rights to the cash flows from the financial asset expire or are transferred upon trade date.

#### Financial Assets at Amortised Cost

Financial assets included in this category need to meet two criteria:

- 1. the financial asset is held in order to collect the contractual cash flows; and
- 2. the cash flows are solely payments of principal and interest (SPPI) on the principal outstanding amount.

Amortised cost is determined using the effective interest method.

#### Effective Interest Method

Income is recognised on an effective interest rate basis for financial assets that are recognised at amortised cost.

### Impairment of Financial Assets

Financial assets are assessed for impairment at the end of each reporting period based on Expected Credit Losses, using the general approach which measures the loss allowance based on an amount equal to lifetime expected credit losses where risk has significantly increased, or an amount equal to 12-month expected credit losses if risk has not increased.

The simplified approach for trade, contract and lease receivables is used. This approach always measures the loss allowance as the amount equal to the lifetime expected credit losses.

A write-off constitutes a derecognition event where the write-off directly reduces the gross carrying amount of the financial asset.

#### Financial liabilities

Financial liabilities are classified as either financial liabilities 'at fair value through profit or loss' or other financial liabilities. Financial liabilities are recognised and derecognised upon 'trade date'.

#### Financial Liabilities at Amortised Cost

Financial liabilities, including borrowings, are initially measured at fair value, net of transaction costs. These liabilities are subsequently measured at amortised cost using the effective interest method, with interest expense recognised on an effective interest basis.

Supplier and other payables are recognised at amortised cost. Liabilities are recognised to the extent that the goods or services have been received (and irrespective of having been invoiced).

### 5.3 Fair Value Measurement

	2023 \$'000	2022 \$'000
5.3 Fair value measurement		
Non-financial assets		
Heritage and cultural	16	16
Property, plant and equipment	3,279	2,713
	3,295	2,729

### **Accounting Policy**

The ATSB has Heritage and Cultural, and Property, Plant and Equipment assets and the fair value for each asset is measured at market selling price, or depreciated replacement cost in isolated instances where no market prices or indicators are available for specialised, diagnostic equipment.

Following initial recognition at cost, property, plant and equipment are carried at fair value. Valuations are conducted with sufficient frequency to ensure that the carrying amounts of assets do not differ materially from the asset's fair value as at the reporting date. The regularity of independent valuations depends on the volatility of movements in market values for the relevant assets.

The ATSB engaged CBRE Pty Ltd to undertake a revaluation of all plant and equipment assets with effect at 30 June 2023 and confirm that the models developed comply with AASB 13 Fair Value Measurement.

Revaluation adjustments were made on a class basis. Any revaluation increment was credited to equity under the heading of asset revaluation reserve except to the extent that it reversed a previous revaluation decrement of the same asset class that was previously recognised in the surplus/deficit. Revaluation decrements for a class of assets were recognised directly in the surplus/deficit except to the extent that they reversed a previous revaluation increment for that class.

Any accumulated depreciation as at the revaluation date was eliminated against the gross carrying amount of the asset and the asset was restated to the revalued amount.

The ATSB's property, plant and equipment assets under the fair value hierarchy, are valued at Level 3. The ATSB Management ensured that the appropriate assessments were made for impairment, useful lives and the valuation of non-financial assets at 30 June 2023.

### **Note 6 - Other information**

### 6.1 Current/non-current distinction for assets and liabilities

### 6.1A: Current/non-current distinction for assets and liabilities

	2023 \$′000	2022 \$'000
Assets expected to be recovered in:		
No more than 12 months		
Cash and cash equivalents	240	348
Trade and other receivables	7,996	9,069
Accrued Revenue	9	12
Prepayments	548	564
Total no more than 12 months	8,793	9,993
More than 12 months		
Land & Building	7,690	8,898
Heritage and cultural	16	16
Plant and equipment	3,279	2,713
Computer software	2,468	2,555
Prepayments	45	11
Total more than 12 months	13,499	14,193
Total assets	22,291	24,186
Liabilities expected to be settled in:		
No more than 12 months		
Suppliers	482	335
Other payables	501	477
Leases	1,096	1,603
Employee provisions	1,835	1,655
Total no more than 12 months	3,914	4,070
More than 12 months		
Leases	7,034	7,568
Employee provisions	3,526	3,092
Total more than 12 months	10,560	10,660
Total liabilities	14,474	14,730

## SECTION 7 – MANAGEMENT AND ACCOUNTABILITY

### Management and accountability

### **The Commission**

The ATSB is governed by a Commission, comprising a Chief Commissioner and 3 part-time Commissioners.

The Commission provides guidance on the selection of accidents and other safety incidents to be investigated. The Commission is responsible for exercising the power to publish reports of accident investigations. It also supports the ATSB in encouraging safety action ahead of final reports, thus reducing the need to issue safety recommendations.

The Commission operates within the corporate governance framework of the ATSB Commission Governance Manual. The manual sets out the Commission's legislative requirements, parliamentary and ministerial accountability, membership and functions, administrative policies and procedures, and reporting obligations.

The Commission meets at least 4 times a year and manages ATSB business through regular teleconferences and electronic communications in accordance with its obligations under the TSI Act and its agreed policies.

### **Senior Leadership Team**

During 2022–23, the ATSB Senior Leadership Team (SLT) met fortnightly to discuss strategic management issues and priorities. The SLT consisted of the Chief Commissioner, the Chief Operating Officer, the Directors Transport Safety and the Heads of Operational Support.

### **Audit and Risk Committee**

The Audit and Risk Committee provides independent assurance and advice to the Chief Commissioner (and to the Commission and SLT) on ATSB financial and performance reporting responsibilities, risk oversight and management, and system of internal control. The Audit and Risk Committee consists of an independent chair and 2 independent members. The Committee held 4 meetings throughout the financial year, in September and December 2022, and March and June 2023.

In 2022–23, the Committee advised and provided assurance on a range of matters, including the ATSB:

- » Internal Audit Annual Program
- » enterprise risk management, fraud control and business continuity frameworks
- » performance reporting
- » financial statement preparations
- » work health and safety management
- » compliance with the PGPA Act and the associated Rule
- » internal audit governance framework including the Internal Audit Charter.

The internal audit program for 2022–23 focused on assuring ATSB legislative compliance and performance against its core functions, for example a review of ATSB payroll functions.

The Audit and Risk Committee Charter is available on the ATSB website at www.atsb.gov.au.

### **Business planning and reporting**

During 2022–23, the ATSB conducted a series of strategic planning workshops representing a significant proportion of our staff to produce our inaugural *ATSB Strategic Plan 2022–23*. The strategic plan clearly articulates ATSB goals and strategies that will enable and enhance the effectiveness of our operations as Australia's national transport safety investigator.

The strategic plan is now the pinnacle of the ATSB's planning governance framework, with reference to the ATSB Corporate Plan 2023–24 and the ATSB Annual Plan 2023–24. A condensed format of the strategic plan in a 'placemat format' can be found on the ATSB website at <a href="https://www.atsbgov.au">www.atsbgov.au</a>.

Each year, the ATSB develops an annual plan to set business objectives for the financial year. The annual plan is consistent with the strategic direction provided through the strategic plan and corporate plan. The annual plan incorporates the operational priorities, activities, deliverables and KPIs for the financial year.

The ATSB Annual Plan 2022–23 gave priority to:

- » independent investigation of transport accidents and other safety occurrences, and research
- » implementing systems and programs enabling greater efficiency and effectiveness
- » strategic projects
- » further embedding governance and assurance processes
- » enhancing stakeholder engagement.

### **Risk management**

Consistent with the PGPA Act, the ATSB maintains a risk management framework. The framework includes a Risk Management Policy, Statement of Risk Appetite and Tolerance and Enterprise Risk Register. The framework is an integral element of the broader ATSB governance, planning and management framework. The ATSB has integrated risk assessment and mitigation into business practices, planning and performance reporting – at both corporate and business unit levels.

The ATSB is committed to a comprehensive, coordinated and systematic approach to the management of risk – directed towards supporting managers at all levels to anticipate and plan for risk, and to respond appropriately. For 2022–23, the ATSB focused on risks related to delivery of outcomes, financial sustainability, reputation, injury (physical and psychological), and security.

### **Business continuity plan**

The ATSB business continuity management framework details the policies and procedures for the agency to respond to a business disruption. The framework ensures the ATSB is well placed to implement recovery processes and return to business as usual as quickly as possible while preserving the safety of staff and limiting the damage and disruption to business operations.

### Fraud control and corruption

In accordance with the PGPA Act and the *National Anti-Corruption Commission Act 2022*, the ATSB maintains a fraud and corruption management framework which includes a Fraud Control and Corruption Policy and a Fraud Control and Corruption Plan.

The ATSB manages a fraud risk register to identify potential fraud risks and subsequently minimise the incidence of fraud. This process is accompanied by development, implementation and regular assessment of fraud prevention, detection and response strategies.

The ATSB staff awareness program incorporates activities for existing and new staff.

The Audit and Risk Committee and the Commission receive reports on fraud and corruption risks and the implementation of controls and treatments.

### **Ethical standards**

Australia expects the ATSB to conduct its activities ethically and with integrity. The APS Code of Conduct sets out the standard of behaviour expected of our people and others working in the organisation. The Code of Conduct aligns with our values and articulates the standards of behaviour, principles and actions expected of all who work for the ATSB. All our people must undertake training in the APS values and APS Code of Conduct as part of our induction program.

### People and culture

Our people are our greatest asset and we are committed to creating a culture that supports collaboration and inclusive behaviours, provides opportunity for individual growth, and provides a safe working environment for our people.

In 2022–23, key priorities were:

- » our commitment to developing a new health and wellbeing strategy, and diversity and inclusion action plans
- » our continued commitment to building stronger technical and leadership capability to enhance the capability of our people
- » promoting a positive workplace culture.

Staff contributions to the ATSB strategic plan in 2022 highlighted the need for a more strategic approach to supporting staff wellbeing and inclusion, and facilitating organisational resilience. In response, ATSB staff participated in a series of consultation forums from November 2022 to June 2023 to develop:

- » the ATSB Health and Wellbeing Strategy 2023–26, consisting of 7 sub-strategies focusing on physical health, mental health, culture, and community engagement
- » the ATSB Diversity and Inclusion Action Plan 2023–26, consisting of 6 sub-plans each with a different diversity focus (gender, age, cultural and linguistic background, First Nations Australians, disability, and LGBTIQA+).

Collectively, these plans identify over 200 individual actions the ATSB has committed to undertake over the next 3 years to enhance our culture and ensure a safe, inclusive and resilient workplace.

During 2022–23, we focused on enhancing the availability of training to support key ATSB development priorities, including supervision and leadership, technical skills, and work health, safety and wellbeing.

Key initiatives over the period were:

- » implementation of a new learning management system, enabling better access to training, the sharing of training offerings with other government agencies, and enhanced compliance reporting
- » successful completion of the ATSB Leadership Program by 24 staff members in senior roles
- » the development and implementation of targeted eLearning programs, focusing on technical requirements for investigators, supervision and management, and core skills
- » the delivery of regular online and face-to-face all-staff awareness sessions, targeting core obligations such as work health and safety, bullying and harassment, and diversity and inclusion
- » an information night for friends and family of ATSB investigators, raising awareness of key risks faced by investigators and providing contacts and resources for families to support our investigator cohort.

### Staffing profile

The ATSB staffing profile has shifted slightly, from 108 at the end of June 2022 to 112 at the end of June 2023. The associated staff turnover rate was approximately 4%, reduced from 14% in 2022–23. Table 15 displays the ATSB staff numbers, by classification, as at 30 June 2023.

Table 15: ATSB staffing profile at 30 June 2023

Substantive Classification	Gender x (full-time)	Female (full- time)	Female (part-time)	Male (full- time)	Male (part- time)	Non- ongoing	Total
Statutory office holders	-	-	1	1	1	-	3
Senior Executive Service (SES)	-	-	-	1	-	-	1
EL 2	-	8	2	31	1	*6	42
EL 1	-	5	3	20	-	1	28
APS 6	-	14	2	11	-	*6	27
APS 5	-	5	1	4	-	1	10
APS 4	-	-	-	1	-	-	1
Total	-	32	9	69	2	14	112

<sup>\*</sup>The figures outlined in Table 15 include 6 casual employees, employed by the ATSB on irregular and intermittent non-going contracts as at 30 June 2023.

This total is comprised of the following employment arrangements:

- » 108 staff (representing all non-SES employees) covered by the enterprise agreement
- » one SES employee covered by section 24(1) determinations, established in accordance with the ATSB SES remuneration policy
- » 3 statutory office holders (representing the Commissioners) determined by the remuneration tribunal.

There are no other employment arrangements in place and there is no provision for performance pay.

Of the 109 SES and non-SES employees, 73 employees were based in Canberra, 19 based in Brisbane, 2 based in Adelaide, 6 based in Perth, 7 based in Melbourne and 2 based in Sydney.

Non-salary benefits provided to employees under the enterprise agreement include:

- » flexible working arrangements, including part-time and working from home
- » access to various leave, supporting work/life balance
- » influenza vaccinations and annual health checks
- » access to the Employee Assistance Program.

### **Indigenous employees**

At 30 June 2023, the ATSB had one employee who identified as Indigenous.

### **Salary rates**

Table 16 displays the salary rates supporting the above employment arrangements as at 30 June 2023.

Table 16: ATSB salary rates at 30 June 2023

Substantive classification	Lower(\$)	Upper(\$)		
Statutory office holders	As determined by the remuneration tribunal			
EL 2	128,415	157,828		
EL 1	108,061	130,955		
APS 6	84,324	100,306		
APS 5	77,771	83,975		
APS 4	69,663	75,698		
Note: Maximums include transport safety investigator and respective supervisor salaries, representing a \$2,202–\$11,260 increase on standard APS 6–EL 2 rates.				

Senior executive remuneration for 2022–23 is captured and presented in Table 20: Information about remuneration for key management personnel.

### **Purchasing**

The ATSB purchases goods and services in accordance with the Commonwealth Procurement Rules (CPRs). These rules are applied through the accountable authority instructions. The ATSB procurement policies and processes have been developed to ensure that:

- » it undertakes competitive, non-discriminatory procurements
- » it uses resources efficiently, effectively, economically and ethically
- » it makes all procurement decisions in an accountable and transparent manner.

### **Consultants**

The ATSB engages consultants when it lacks specialist expertise, or when independent research, review or assessment is required. Consultants are typically engaged to:

- » investigate or diagnose a defined issue or problem
- » carry out defined reviews or evaluations
- » provide independent advice, information or creative solutions to assist ATSB decision-making.

The ATSB policies on selection and engagement of consultants are in accordance with the CPRs. Before engaging consultants, the ATSB considers the skills and resources required for the task, the skills available internally and the cost effectiveness of engaging an external contractor.

During 2022–23, 4 new reportable consultancy contracts were entered into involving total actual expenditure of \$115,904 (GST inclusive). There were 6 ongoing consultancy contracts totalling \$209,510 carried over from 2021–22.

During 2022–23, 25 new reportable non-consultancy contracts were entered into involving total actual expenditure of \$1,244,266 (GST inclusive). There were 30 ongoing non-consultancy contracts totalling \$4,771,115 (GST inclusive) carried over from 2021–22.

Annual reports contain information about actual expenditure on reportable contracts for consultancies and non-consultancies. Information on the value of contracts and consultancies is available from the AusTender website at <a href="https://www.tenders.gov.au">www.tenders.gov.au</a>.

### **Australian National Audit Office access clauses**

There were no contracts during 2022–23 that did not provide for the Auditor-General to have access to the contractors' premises.

### **Exempt contracts**

No contracts were exempted on public interest grounds from publication on AusTender during 2022–23.

### **Procurement initiatives to support small business**

The ATSB supports small business participation in the Commonwealth Government procurement market. Small and medium enterprises (SME) and small enterprise participation statistics are available on the Department of Finance website at www.finance.gov.au.

The ATSB seeks to support SMEs, consistent with paragraph 5.4 of the CPRs. It ensures that its communications are expressed in clear and simple language. Its finance system is set up to ensure prompt payments to all contractors and suppliers, and it makes use of credit cards.

### Legal services and expenditure

Paragraph 11.1(a) of the Legal Services Directions 2017, issued by the Attorney-General under the *Judiciary Act 1903*, requires chief executives of departments and agencies to ensure that legal services expenditure is appropriately recorded and monitored. Chief executives must also ensure that their agencies make records of their legal services expenditure for the previous financial year, available by 30 October in the following financial year. The following amounts are exclusive of GST.

ATSB expenditure on legal services for 2022–23 was \$435,893 comprising:

- » \$340,637 on internal legal services
- » \$95,256 on external legal services.

### **External scrutiny and participation**

### Independent Review of Australia's Domestic Commercial Vessel Safety Legislation, Delivery Costs and Charging Options

In December 2021, the Australian Government commissioned an independent review of Australia's DCV safety legislation, and costs and charging arrangements. The review included consideration of whether the ATSB should have responsibility for DCVs, and if so, how that would be best implemented. The ATSB met with the independent reviewers and provided a submission to the first phase. The ATSB will continue to work productively with the reviewers. The review is ongoing.

### **Coronial inquests**

The ATSB is required to participate in coronial investigations and inquests. The ATSB participated in or assisted enquiries for 6 coronial matters during 2022–23 relating to ATSB investigations:

- » Fatal collision with terrain involving US-registered C130 air tanker near Peak View, New South Wales, on 23 January 2020.
- » Fatal collision with water involving Yak 52 aircraft conducting low level aerobatics near South Stradbroke Island, Queensland, on 5 June 2019.
- » Fatal collision with water involving DHC02 aircraft (Sydney Seaplanes) at Jerusalem Bay, New South Wales, on 31 December 2017.
- » Fatal mid-air collision between Beech Travel Air twin-engine aircraft and Piper Seminole twinengine aircraft south of Mangalore Airport, Victoria, on 19 February 2020.
- » Loss of control and collision with terrain involving Eurocopter AS350BA helicopter at Hobart Airport, Tasmania, on 7 November 2017.
- » Controlled flight into terrain involving Cessna 404 near Lockhart River, Queensland, on 11 March 2020.

Findings for the matters involving the Yak 52 aircraft and DHC02 aircraft (Sydney Seaplanes) have been completed by coroners. Other matters above are yet to be completed by the responsible coroners.

### **SECTION 8 – APPENDICES**

### **Appendix A: Other mandatory information**

### Work Health and Safety Act 2011

The ATSB is committed to maintaining a safe and healthy work environment and promoting strategies to enhance personal wellbeing.

Strengthening our work health and safety (WHS) management systems remains a key focus as demonstrated by the implementation of an online WHS management system.

The ATSB WHS and Wellbeing Committee held a meeting on average every 6 weeks throughout 2022–23. The ATSB health and safety representatives, representing 4 offices and 3 transport modes (aviation, marine and rail), conducted regular hazard and risk identification inspections and risk mitigation activities.

### **Notifiable incidents**

In 2022–23, no notifiable incidents occurred under Part 3 or Part 5 of the WHS Act.

### Work health and safety investigations

No investigations were conducted, and no notices were given in relation to incidents at ATSB workplaces during 2022–23.

### **Advertising and market research**

During 2022–22, the ATSB spent \$1,766 (GST inclusive) on advertising for recruitment. There were no further payments for advertising or market research.

### **Ecologically sustainable development and environmental performance reporting**

(Section 516A of the Environment Protection and Biodiversity Conservation Act 1999)

The ATSB is fully committed to the principles of ecologically sustainable development. The nature of its work as Australia's national transport safety investigator – with a focus on the investigation of transport accidents, research into transport safety and dissemination of safety information – means that the ATSB commitment is expressed through its day-to-day activities within its offices.

The ATSB operates under the Energy Efficiency in Government Operations (EEGO) Policy, and through its office accommodation leasing arrangements, the ATSB environmental management system complies with ISO 14001:2004 – the international standard for environmental management systems. The system is focused on ATSB office-based activities in Canberra. Initiatives are applied at regional office premises, where appropriate.

The ATSB has contracted out its data centres to private providers, with the result that servers and information and communication technology (ICT) infrastructure are located outside the ATSB premises. This produced a significant saving in energy use. The ATSB has limited its energy use through various initiatives that focus on improving the energy efficiency of the property portfolio, for example:

- » operating a virtualised and cloud IT infrastructure environment
- » using 7% green energy
- » ensuring that desktop IT equipment uses energy-saving policies, such as automatic turn-off for monitors and hard drives after periods of inactivity
- » reducing the number of printers in the network
- » setting each printer default to mono (black) and double-sided printing
- » using photocopy paper containing 60% recycled paper for internal use
- » conserving energy, water, paper and other natural resources while still maintaining a comfortable work environment
- » actively recycling paper waste
- » promoting the separation of general waste into recyclable and non-recyclable items before disposal
- » promoting video conferencing as an alternative to travel, where practicable
- » using motion-sensor lighting in offices
- » reducing the effect of direct sunlight on air conditioning systems by installing blinds or tinting, where appropriate.

### **Grant programs**

The ATSB did not administer any grant programs during 2022–23.

### **Disability reporting mechanism**

The Australian Public Service Disability Employment Strategy 2020–25 sets out a comprehensive plan to improve employment outcomes for people with disability. This strategy aligns with the National Disability Strategy and reinforces the Australian Government's commitment to the United Nations Convention on the Rights of Persons with Disabilities. Disability reporting is included in the Australian Public Service Commission (APSC) State of the Service Reports and the APS Statistical Bulletin.

### **Freedom of Information**

The following information explains how to request access to documents held by the ATSB under the *Freedom of Information Act 1982* (FOI Act). It also explains what records the ATSB holds, and what arrangements the ATSB has in place for outside participation.

Entities subject to the FOI Act are required, under Part II of the Act, to publish information as part of the information publication scheme. Information including an Agency Plan showing what information it published, is available on the ATSB website at <a href="https://www.atsb.gov.au">www.atsb.gov.au</a>.

Detailed information about the FOI Act is available via the Office of the Australian Information Commissioner (OAIC) website at <a href="https://www.oaic.gov.au">www.oaic.gov.au</a> and the Federal Register of Legislation website at <a href="https://www.legislation.gov.au">www.legislation.gov.au</a>.

### How to lodge a request for information

Information about how to make an application under the FOI Act can be found on the ATSB website at <a href="https://www.atsb.gov.au">www.atsb.gov.au</a>.

A request under the FOI Act for access to documents must:

- » be in writing
- » state that the request is an application for the purposes of the FOI Act
- » provide enough information to enable the documents sought to be identified
- » give details of how notices under the FOI Act may be sent.

Submission of FOI requests, or enquiries about access, should be directed to:

### **Freedom of Information Coordinator**

Australian Transport Safety Bureau

GPO Box 21

CANBERRA ACT 2601

Email: FOI-ATSB@atsb.gov.au

### Charges

There are no application fees payable to lodge an FOI request.

The ATSB may impose a charge for the work involved in providing access to documents required through a request under the FOI Act. These charges are imposed in accordance with the FOI Act and the *Freedom of Information (Charges) Regulations 2019.* These charges may relate to the time spent searching for and retrieving relevant documents, decision-making time, photocopying and other costs. The FOI Act also provides that the first 5 hours of decision-making time is waived. The applicant will be notified as soon as possible with an estimate of the charges associated with the processing of the request. The request will not be processed until the applicant responds to such notification.

In some circumstances, charges associated with the processing of the request may be remitted. Should the applicant wish to seek remission of the charges, the criteria considered by the ATSB include whether:

- » payment of the charges, or part of the charges, would cause financial hardship to the applicant or a person on whose behalf the application was made
- » giving access to documents is in the general public interest, or in the interest of a substantial section of the public.

The applicant would need to contact the ATSB in writing, or by email, to explain why they meet the criteria, or to inform the agency of overall circumstances which justify non payment of charges. Requests for the remission of the charges should be forwarded to the Freedom of Information Coordinator.

It may not be possible to obtain access to all the documents sought in an FOI request. Access is limited by exemptions, such as section 38 – secrecy provisions of the FOI Act.

The ATSB is required to perform its functions under section 12AA of the TSI Act. A significant amount of information gathered by the ATSB during the course of its investigations is defined as restricted information under section 3 of the TSI Act, and access to such information is exempt from release in accordance with subparagraph 38(1)(b)(i) of the FOI Act.

### Freedom of information requests

In 2022–23, the ATSB received 14 FOI requests.

Table 17: Freedom of information activity

Requests           On hand at 1 July 2022 (A)         3           New requests received (B)         14           Requests withdrawn (C)         8           Requests transferred in full to another agency (D)         0           Requests on hand at 30 June 2023 (E)         3           Total requests completed at 30 June 2023 (A+B-C-D-E)         6           Action on requests         2           Access in full         2           Access refused         2           Access refused         2           Access transferred in full         0           Request withdrawn         8           Response times (excluding withdrawn) 4         0           0-30 days         1           31-60 days         5           61-90 days         0           90+ days         0           Internal review         1           Requests received         1           Decision affirmed         1           Decision amended         0           Request withdrawn         0
New requests received (B)       14         Requests withdrawn (C)       8         Requests transferred in full to another agency (D)       0         Requests on hand at 30 June 2023 (E)       3         Total requests completed at 30 June 2023 (A+B-C-D-E)       6         Action on requests       2         Access in full       2         Access in part       2         Access refused       2         Access transferred in full       0         Request withdrawn       8         Response times (excluding withdrawn) 4         0-30 days       1         31-60 days       5         61-90 days       0         90+ days       0         Requests received       1         Decision affirmed       1         Decision amended       0
Requests withdrawn (C)       8         Requests transferred in full to another agency (D)       0         Requests on hand at 30 June 2023 (E)       3         Total requests completed at 30 June 2023 (A+B-C-D-E)       6         Action on requests       2         Access in full       2         Access in part       2         Access refused       2         Access transferred in full       0         Request withdrawn       8         Response times (excluding withdrawn) 4         0-30 days       1         31-60 days       5         61-90 days       0         90+ days       0         Internal review       1         Requests received       1         Decision affirmed       1         Decision amended       0
Requests transferred in full to another agency (D)  Requests on hand at 30 June 2023 (E)  Total requests completed at 30 June 2023 (A+B-C-D-E)  Action on requests  Access in full  2  Access in part  2  Access refused  2  Access transferred in full  0  Request withdrawn  8  Response times (excluding withdrawn) 4  0-30 days  1  31-60 days  5  61-90 days  0  Internal review  Requests received  1  Decision affirmed  1  Decision amended
Requests on hand at 30 June 2023 (E)  Total requests completed at 30 June 2023 (A+B-C-D-E)  Action on requests  Access in full  2  Access in part  2  Access refused  2  Access transferred in full  0  Request withdrawn  8  Response times (excluding withdrawn) 4  0-30 days  1  31-60 days  5  61-90 days  0  90+ days  0  Internal review  Requests received  1  Decision affirmed  1  Decision amended
Total requests completed at 30 June 2023 (A+B-C-D-E)  Action on requests  Access in full  2  Access in part  2  Access refused  2  Access transferred in full  Request withdrawn  8  Response times (excluding withdrawn) 4  0-30 days  1  31-60 days  5  61-90 days  90+ days  0  Internal review  Requests received  1  Decision affirmed  1  Decision amended
Access in full 2 Access in part 2 Access refused 2 Access transferred in full 0 Request withdrawn 8 Response times (excluding withdrawn) 4 0-30 days 1 31-60 days 5 61-90 days 0 90+ days 0 Internal review Requests received 1 Decision affirmed 0
Access in full       2         Access in part       2         Access refused       2         Access transferred in full       0         Request withdrawn       8         Response times (excluding withdrawn) 4         0-30 days       1         31-60 days       5         61-90 days       0         90+ days       0         Internal review         Requests received       1         Decision affirmed       1         Decision amended       0
Access in part 2  Access refused 2  Access transferred in full 0  Request withdrawn 8  Response times (excluding withdrawn) 4  0–30 days 1  31–60 days 5  61–90 days 0  Internal review  Requests received 1  Decision affirmed 1  Decision amended 0
Access refused 2  Access transferred in full 0  Request withdrawn 8  Response times (excluding withdrawn) 4  0-30 days 1  31-60 days 5  61-90 days 0  90+ days 0  Internal review  Requests received 1  Decision affirmed 1  Decision amended 0
Access transferred in full 0 Request withdrawn 8  Response times (excluding withdrawn) 4  0-30 days 1  31-60 days 5  61-90 days 0  90+ days 0  Internal review  Requests received 1  Decision affirmed 1  Decision amended 0
Request withdrawn 8  Response times (excluding withdrawn) 4  0–30 days 1  31–60 days 5  61–90 days 0  90+ days 0  Internal review  Requests received 1  Decision affirmed 1  Decision amended 0
Response times (excluding withdrawn) 4  0-30 days 1  31-60 days 5  61-90 days 0  90+ days 0  Internal review  Requests received 1  Decision affirmed 1  Decision amended 0
0-30 days       1         31-60 days       5         61-90 days       0         90+ days       0         Internal review         Requests received       1         Decision affirmed       1         Decision amended       0
31–60 days       5         61–90 days       0         90+ days       0         Internal review         Requests received       1         Decision affirmed       1         Decision amended       0
61–90 days 0 90+ days 0 Internal review Requests received 1 Decision affirmed 1 Decision amended 0
90+ days 0 Internal review Requests received 1 Decision affirmed 1 Decision amended 0
Internal review  Requests received 1  Decision affirmed 1  Decision amended 0
Requests received1Decision affirmed1Decision amended0
Decision affirmed 1  Decision amended 0
Decision amended 0
Request withdrawn 0
<u>'</u>
Information Commissioner review
Applications received 0
Decision affirmed 0
Decision amended 0
Application withdrawn 0
Administrative Appeals Tribunal (AAT) review
Applications received 0

<sup>&</sup>lt;sup>4</sup>These statistics cannot be compared directly with the deadlines set in the FOI Act, as the FOI Act provides for extension of time to allow for consultation with third parties, negotiation of charges and other issues

### **Records the ATSB holds**

The ATSB holds records such as:

- » human and financial resource management records
- » briefing papers and submissions prepared for ministers, parliamentary secretaries, parliamentary committees, the Cabinet and the Executive Council (most of these are classified documents)
- » business papers, briefing notes and meeting records for committees, and conferences in which the ATSB services or participates
- » documents prepared by international agencies
- » documents relating to the development of legislation
- » internal administration documents
- » internal treaties, memoranda of understanding and international conventions
- » legal documents, including legislation, contracts, leases and court documents
- » maps and other geographical information
- » ministerial responses to parliamentary questions, interdepartmental and general correspondence and papers
- » policy documents, recommendations and decisions
- » registers of documents, agreements and approvals
- » statistics and databases
- » technical standards, guidelines, specifications, charts, photographs, drawings and manuals
- » accident and incident investigation and notification records.

To view a list of manuals and other documents the ATSB uses when making decisions or recommendations that affect the public, visit the ATSB website at <a href="https://www.atsb.gov.au">www.atsb.gov.au</a>.

Under section 8C of the FOI Act, an exempt matter is not required to be published. The ATSB reserves the right to delete exempt matter from its information prior to providing access.

To find out more about the types of personal information the ATSB holds, please refer to the ATSB Privacy Policy on the ATSB website at www.atsb.gov.au.

For further information, please contact the ATSB either by telephone on 1800 020 616 or by email at atsbinfo@atsb.gov.au.

### **Functions and decision-making powers**

The ATSB functions are detailed in section 12AA of the TSI Act and are further described throughout this report.

Certain officers exercise decision-making powers under portfolio legislation and other matters. These responsibilities are set out in the Administrative Arrangements Order (AAO) for the Commonwealth of Australia and relate to transport safety, including investigations.

For a complete and up-to-date copy of the AAO, visit the Federal Register of Legislation website at <a href="https://www.legislation.gov.au">www.legislation.gov.au</a>.

To assist ATSB employees in exercising their powers appropriately, and enable access to their decision-making authorities, the ATSB uses an intranet site which allows employees to view delegations online. It also allows employees to check information about the powers and authorities assigned under the legislation set out in the AAO and by-laws, such as the PGPA Act and the *Public Service Act 1999*. Powers delegated under the TSI Act are recorded on the back of identity cards for all investigators.

### **Arrangements for outside participation**

The ATSB consults widely to gain the views of its stakeholders and clients about future policy directions and program delivery. This includes consulting with other Australian state and territory government departments and agencies, as appropriate, and with foreign governments – particularly in the context of transport safety investigations. The ATSB may also contact a very broad range of stakeholders for particular policy issues.

### **Appendix B: Entity resource statement 2022–23**

Table 18: Entity resource statement 2022-23

	Actual available appropriation 2022–23 \$'000 (a)	Payments made 2022–23 \$'000 (b)	Balance remaining 2022–23 \$'000 (a) - (b)
Ordinary Annual Service	es <sup>1</sup>		
Departmental appropriation <sup>2</sup>	32,136	23,990	8,146
Total	32,136	23,990	8,146
Total ordinary annual services A	32,136	23,990	8,146
Other services			
Departmental non-operation	ng		
Equity injections	0	0	0
Total	0	0	0
Total other services B	0	0	0
Total net resourcing and payments for the Australian Transport Safety Bureau	32,136	23,990	8,146

<sup>&</sup>lt;sup>1</sup> Appropriation Act (No. 1) 2022-23 and includes prior year departmental appropriation and section 74 Retained Revenue Receipts.
<sup>2</sup> This includes \$0.337 million that was withheld under Section 51 during 2022-23. It also includes an amount of \$0.582 million in 2022-23 for the Departmental Capital Budget. For accounting purposes, this amount has been designated as 'contributions by owners'.

### **Expenses for Outcome 1**

Outcome 1: Improved transport safety in Australia including through independent 'no-blame' investigation of transport accidents and other safety occurrences; safety data recording, analysis and research; and influencing safety action.

Table 19: Expenses for outcome

Program 1 1. Australian	Budget* 2022–23 \$'000 (a) Transport Safety Bureau	Actual Expenses 2022–23 \$'000 (b)	Variation 2022–23 \$'000 (a) - (b)
	Transport Salety Duleau		
Departmental expense			
Departmental appropriation <sup>3</sup>	22,503	22,306	197
Expenses not requiring appropriation in the Budget year	3,756	5,268	-1,512
Total for Program 1.1	26,259	27,574	-1,315
Total expenses for Outcome 1	26,259	27,574	-1,315

<sup>\*</sup> Full year budget, including any subsequent adjustment made to the 2022–23 Budget at Additional Estimates

	2022-23	2021–22
Average Staffing Level (number)	102	101

### **Appendix C: Executive remuneration**

Table 20: Information about remuneration for key management personnel

		Short te	m benefit	S	Post employment benefits	Other le benefit	ong term s	Other long term benefits	Total remuneration
Name	Position title	Base salary	Bonuses	Other benefits and allowances	Superannuation contributions	Long service leave	Other long term benefits		
A Mitchell	Chief Commissioner	430,297	0	0	25,292	10,610	32,994	0	499,193
C McNamara	Chief Operating Officer	282,723	0	2,705	53,152	6,971	21,678	0	367,229

<sup>3</sup> Departmental Appropriation combines Ordinary annual services (Appropriation Act No. 1 and No. 5) and Retained Revenue Receipts under section 74 of the PGPA Act

Table 21: Information about remuneration for other highly paid staff

		Short ter	m benefits		Post employment benefits	Other lor benefits	ig term	Termination benefits	Total remuneration
Total remuneration bands	Number of other highly paid staff	Average base salary	Average bonuses	Average other benefits and allowances	Average superannuation contributions	Average long service leave	Average other long term benefits	Average termination benefits	Average total remuneration
\$240,000- \$245,000	-	-	-	-	-	-	-	-	-
\$245,001- \$270,000	2	157,828	-	41,403	36,403	4,810	14,957	-	255,401
\$270,001- \$295,000	1	157,828	-	66,670	41,740	5,469	17,007	-	288,714
\$295,001- \$320,000	-	-	-	-	-	-	-	-	-
\$320,001- \$345,000	-	-	-	-	-	-	-	-	-
\$345,001- \$370,000	-	-	-	-	-	-	-	-	-
\$370,001- \$395,000	-	-	-	-	-	-	-	-	-
\$395,001- \$420,000	-	-	-	-	-	-	-	-	-
\$420,001- \$445,000	-	-	-	-	-	-	-	-	-
\$445,001- \$470,000	-	-	-	-	-	-	-	-	-
\$470,001- \$495,000	-	-	-	-	-	-	-	-	-
\$495,001	-	-	-	-	-	-	-	-	-

### **Appendix D: Management of human resources**

Table 22: All ongoing employees current report period (2022–23)

	Man/l	Male		Woma	n/Fema	ale	Non-b	oinary		Prefer to ans			Uses a	ent term	1	Total
	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	
NSW	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	2
Qld	14	-	14	4	-	4	-	-	-	-	-	-	-	-	-	18
SA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	2
Tas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vic	4	1	5	1	1	2	-	-	-	-	-	-	-	-	-	7
WA	5	-	5	-	1	1	-	-	-	-	-	-	-	-	-	6
ACT	37	-	37	25	4	29	-	-	-	-	-	-	-	-	-	66
NT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
External	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Overseas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	64	1	65	30	6	36	-	-	-	-	-	-	-	-	-	101

Table 23: All non-ongoing employees previous report period (2021–22)

	Man/I	Male		Woman/Female			Non-binary			Prefers not to answer			Uses a different term			Total
	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	
NSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Qld	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	1
SA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ACT	6	3	9	1	1	2	-	-	-	-	-	-	-	-	-	11
NT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
External	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Overseas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	6	4	10	1	1	2	-	-	-	-	-	-	-	-	-	12

Table 24: All non-ongoing employees current report period (2022–23)

	Man/I	Male		Woma	oman/Female			Non-binary			Prefers not to answer			Uses a different term		
	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	
NSW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Qld	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	1
SA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ACT	4	-	4	2	1	3	-	-	-	-	-	-	-	-	-	7
NT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
External	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Overseas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	4	-	4	2	2	4	-	-	-	-	-	-	-	-	-	8

Table 25: All ongoing employees previous report period (2021–22)

	Man/I	Male		Woman/Female			Non-k	Non-binary			Prefers not to answer			Uses a different term		
	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	
NSW	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	2
Qld	13	-	13	3	-	3	-	-	-	-	-	-	-	-	-	16
SA	3	-	3	-	-	-	-	-	-	-	-	-	-	-	-	3
Tas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vic	5	-	5	-	1	-	1	-	-	-	-	-	-	-	-	6
WA	5	-	5	-	1	-	1	-	-	-	-	-	-	-	-	6
ACT	34	-	34	19	6	25	-	-	-	-	-	-	-	-	-	59
NT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
External	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Overseas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	62	-	62	22	8	30	-	-	-	-	-	-	-	-	-	92

# Appendix E: Australian Public Sector (APS) classification and gender

Table 26: Australian Public Service Act ongoing employees current report period (2022–23)

	Man/I	Male		Woma	an/Fema	ale	Non-b	oinary		Prefer to ans			Uses a	ı ent term	1	Total
	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	
SES 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SES 2	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1
SES 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EL 2	29	1	30	8	2	-	-	-	-	-	-	-	-	-	-	40
EL 1	19	-	19	5	3	-	-	-	-	-	-	-	-	-	-	27
APS 6	10	-	10	12	1	-	-	-	-	-	-	-	-	-	-	23
APS 5	4	-	4	5	-	-	-	-	-	-	-	-	-	-	-	9
APS 4	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1
APS 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
APS 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
APS 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	64	1	65	30	6	-	-	-	-	-	-	-	-	-	-	101

Table 27: Australian Public Service Act non-ongoing employees current report period (2022–23)

	Man/N	Male		Woma	n/Fema	ale	Non-b	inary		Prefer to ans			Uses a	ı ent term	1	Total
	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	
SES 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SES 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SES 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EL 2	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	2
EL 1	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1
APS 6	1	-	1	3	1	4	-	-	-	-	-	-	-	-	-	5
APS 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
APS 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
APS 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
APS 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
APS 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	4	-	4	3	1	4	-	-	-	-	-	-	-	-	_	8

Table 28: Australian Public Service Act ongoing employees previous report period (2021–22)

	Male			Female			Indeterr	ninate		Total
	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total Indeterminate	
SES 3	-	-	-	-	-	-	-	-	-	-
SES 2	1	-	1	-	-	-	-	-	-	1
SES 1	-	-	-	-	-	-	-	-	-	-
EL 2	29	-	29	5	3	8	-	-	-	37
EL 1	19	-	19	9	2	11	-	-	-	30
APS 6	9	-	9	5	1	6	-	-	-	15
APS 5	4	-	4	3	2	5	-	-	-	9
APS 4	-	-	-	-	-	-	-	-	-	-
APS 3	-	-	-	-	-	-	-	-	-	-
APS 2	-	-	-	-	-	-	-	-	-	-
APS 1	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total	62	-	62	22	8	30	-	-	-	92

Table 29: Australian Public Service Act non-ongoing employees previous report period (2021–22)

	Male	Male					Indeterminate			Total
	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total Indeterminate	
NSW	-	-	-	-	-	-	-	-	-	-
Qld	-	1	1	-	-	-	-	-	-	1
SA	-	-	-	-	-	-	-	-	-	-
Tas	-	-	-	-	-	-	-	-	-	-
Vic	-	-	-	-	-	-	-	-	-	-
WA	-	-	-	-	-	-	-	-	-	-
ACT	6	3	9	1	1	2	-	-	-	11
NT	-	-	-	-	-	-	-	-	-	-
External Territories	-	-	-	-	-	-	-	-	-	-
Overseas	-	-	-	-	-	-	-	-	-	-
Total	6	4	10	1	1	2	-	-	-	12

# Appendix F: Employment type by full-time and part-time status

Table 30: Australian Public Service Act employees by full-time and part-time status current report period (2022–23)

	Ongoing			Non-Ongoin	g		Total
	Full time	Part time	Total	Full time	Part time	Total	
SES 3	-	-	-	-	-	-	-
SES 2	1	-	1	-	-		1
SES 1	-	-	-	-	-	-	-
EL 2	37	3	40	2	-	2	42
EL 1	24	3	27	1	-	1	28
APS 6	22	1	23	3	1	4	27
APS 5	9	-	9	-	1	1	10
APS 4	1	-	1	-	-	-	1
APS 3	-	-	-	-	-	-	-
APS 2	-	-	-	-	-	-	-
APS 1	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
Total	94	7	101	6	2	8	109

Table 31: Australian Public Service Act employees by full-time and part-time status previous report period (2021–22)

	Ongoing			Non-Ongoin	g		Total
	Full time	Part time	Total	Full time	Part time	Total	
SES 3	-	-	-	-	-	-	-
SES 2	1	-	1	-	-	-	1
SES 1	-	-	-	-	-	-	-
EL 2	37	3	40	1	4	5	45
EL 1	29	2	31	1	-	1	32
APS 6	10	1	11	1	1	2	13
APS 5	7	2	9	4	-	4	13
APS 4	-	-	-	-	-	-	-
APS 3	-	-	-	-	-	-	-
APS 2	-	-	-	-	-	-	-
APS 1	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
Total	84	8	92	7	5	12	104

## **Appendix G: Employment type by location**

Table 32: Australian Public Service Act employment type by location current report period (2022–23)

	Ongoing	Non-Ongoing	Total
NSW	2	-	2
Qld	17	1	18
SA	2	-	2
Tas	-	-	-
Vic	7	-	7
WA	6	-	6
ACT	67	7	74
NT	-	-	-
External	-	-	-
Overseas	-	-	-
Total	101	8	109

Table 33: Australian Public Service Act employment type by location previous report period (2021–22)

	Ongoing	Non-Ongoing	Total
NSW	2	-	2
Qld	16	1	17
SA	3		3
Tas	-	-	-
Vic	6		6
WA	6		6
ACT	59	11	70
NT	-	-	-
External	-	-	-
Overseas	-	-	-
Total	92	12	104

## Appendix H: Indigenous employment

Table 34: Australian Public Service Act Indigenous employment current report period (2022–23)

	Total
Ongoing	1
Non-Ongoing	-
Total	1

Table 35: Australian Public Service Act Indigenous employment previous report period (2021–22)

	Total
Ongoing	-
Non-Ongoing	-
Total	-

## Appendix I: Employment arrangements of SES and non-SES employees

Table 36: Australian Public Service Act employment arrangements current report period (2022–23)

Arrangement Title	SES	Non-SES	Total
Enterprise Agreement	-	108	108
S.24.1 Determination	1	-	1
Total	1	108	109

## Appendix J: Salary ranges by classification level

Table 37: Australian Public Service Act employment salary ranges by classification level (minimum/maximum) current report period (2022–23)

	Minimum Salary	Maximum Salary
SES 3	-	-
SES 2	290,440	290,440
SES 1	-	-
EL 2	128,415	157,828
EL 1	108,061	130,955
APS 6	84,324	100,306
APS 5	77,771	83,975
APS 4	69,663	75,698
APS 3	62,872	67,888
APS 2	\$55,107	60,839
APS 1	48,659	53,596
Other	-	-
Minimum/Maximum range	48,659	290,440

### **Appendix K: Performance pay by classification level**

Australian Public Service Act employment performance pay by classification level current report period (2022–23)

A table detailing performance pay by classification level for the reporting period (2022–23) has been removed as it is not applicable for the ATSB.

## Appendix L: Accountable Authority

Table 38: Australian Public Service Act employment arrangements current report period (2022–23)

		Period as the accountable authority or member within the reporting period		
Name	Position Title/Position held	Start Date (1 July 2022 or after)	End Date (30 June 2023 or before)	
Angus Mitchell	Chief Commissioner/Chief Executive Officer	1 July 2022	30 June 2023	

## Appendix M: Significant non-compliance with the finance law

Table 39: Significant non-compliance with the finance law

Description of non-compliance	Remedial Action
Nil	0

## **Appendix N: Audit committee 2022–23**

Table 40: Audit committee 2022–23

Member name	Qualifications, knowledge, skills or experience (include formal and informal as relevant)	Number of meetings attended / total number of meetings	Total annual remuneration	Total
Clare Kitcher (Chair)	» GAICD     » CPRM     » BSc (Hons) Dunelm     » Experienced public sector executive and non-executive director specialising in risk management and business transformation     » Prequalified independent member of Audit and Risk Committees in NSW	4	15,788	N/A
Ken Kanofski	» Bachelor of Business  » MBA  » GAICD  » FCPA  » Experienced company director and chair  » More than 20 years' CEO experience in the public sector  » Extensive experience in transport and safety	4	22,941	N/A
Cheryl-Anne Navarro	<ul> <li>» FCPA with over 23 years         of public sector finance         experience, and 6 years in         senior executive positions.</li> <li>» MBA, Deakin University</li> <li>» Bachelor of Commerce,         Australian National University</li> </ul>	4	0	N/A

## **Appendix O: Reportable consultancy contracts**

Table 41: Expenditure on reportable consultancy contracts current report period (2022–23)

	Number	Expenditure \$ (GST inc.)
New consultant contracts entered into during the period	4	115,904
Ongoing consultant contracts entered into during the previous period	6	209,510
Total Consultancy Expenditure 2022–23	10	325,414

### **Appendix P: Reportable non-consultancy contracts**

Table 42: Expenditure on reportable non-consultancy contracts current report period (2022–23)

Reportable Non-Consultancy Contracts	Number	Expenditure \$ (GST inc.)
New Non-Consultancy Contract entered into during the reporting period	25	1,244,266
Ongoing Non-Consultancy Contracts entered into during a previous reporting period	30	4,771,115
Total	55	6,015,380

Appendix Q: Additional information about organisations receiving amounts under reportable consultancy contracts or reportable non-consultancy contracts

Table 43: Organisations receiving a share of reportable consultancy contract expenditure current report period 2022–23

Name of Organisation (ABN)	Expenditure \$ (GST inc.)
ProAllied Australia Pty Ltd (50631285651)	51,040
Human Synergistics Pty Ltd (11093428098)	17,616
Executive Intelligence Group Pty Ltd (88088137071)	22,000
Christopher McDermott (97394470126)	25,248
Taradel Consulting Pty Ltd (28145327224)	94,545
ChartSmart Consulting Pty Ltd (88133375112)	16,355
Sententia Consulting Pty Ltd (85639580662)	34,429
Puzzle Partners Consulting Pty Ltd (69107246926)	14,577
Kitcher Risk Solutions (85983112392)	15,650
Ken Kanofski Advisory Pty Ltd (49634100753)	33,954
Total Consultancy Contract Expenditure 2022–23	325,414

Table 44: Organisations receiving a share of reportable non-consultancy contract expenditure current report period 2022–23

Name of Organisation (ABN)	Expenditure \$ (GST inc.)
AcronymlT Pty Ltd (68096077422)	147,626
Aurion Corporation Pty Ltd (63050431868)	78,672
Data3 Ltd (31010545267)	407,364
Donesafe (31165144767)	11,088
Edge Integration Pty Ltd (89074677311)	72,353
ELMO Software Ltd (13102455087)	14,168
Investa Asset Management (QLD) Pty Ltd (35098527167)	266,195
NTT Australia Digital Pty Ltd (31100103268)	861,076
NTT Australia Pty Ltd (65003371239)	1,045,345
Roy Weston Corporate Pty Ltd (81075243006)	50,023
Sliced Tech Pty Ltd (53165997008)	655,288
Sofrina Pty Ltd ATF The Sofrina Trust (63157232513)	6,162
The Trustee for Dexus Wholesale property Trust 1 (75942337384)	185,668
Ventia Property Pty Ltd (16618028676)	201,091
SG Fleet Australia Pty Limited (15003429356)	15,727
Showtime Consulting Ptd Ltd (78152096672)	246,829
Telstra Limited (64086174781)	302,841
AMP Capital Office and Industrial Pty Ltd (44099105094)	995,270
Canon Business Services Australia Pty Ltd (42063577739)	95,850
Resilient Results Pty Ltd (50427703572)	2,750
Pro AV Solutions(ACT) Pty Ltd (16636895602)	83,457
Unify Solutions Pty Ltd (46109584947)	33,000
Struers Australia (82557994775)	66,764
Action Maintenance Service (77047842027)	36,622
Pursuit Technology Australia Pty Ltd (47600787139)	11,946
Secom Technical Services Pty Ltd (97319699425)	13,568
Fulcrum Management Pty Ltd (70050334257)	16,555
Digital Camera Warehouse Pty Ltd (31510583734)	16,640
Qualtrics LLC (98616068823)	14,267
Russell Fraser Sales Pty Ltd (79074258549)	11,795
Apollo Law Pty Ltd (36635631622)	49,381
Total Non-Consultancy Contract Expenditure 2022–23	6,015,380

## **Appendix R: Aids to access**

Table 45: Aids to access details current report period (2022–23)

Annual report Contact Officer (Title/Position held)	Annual Report Coordinator
Contact Phone Number	1800 020 616
Contact Email	atsbinfo@atsb.gov.au
Entity website (URL)	www.atsb.gov.au

# Appendix S: Report on financial performance summary

Table 46: Entity resource statement subset summary current report period 2022–23

	Actual Available appropriation – current year (a)\$'000	Payments made (b) \$'000	Balance remaining (a) - (b) \$'000
Departmental			
Annual appropriations – ordinary annual services <sup>1</sup>	32,136	23,990	8,146
Annual appropriations – other services – non-operating	-	-	-
Total departmental annual appropriations	32,136	23,990	8,146
Departmental special appropriations	-	-	-
Total special appropriations	-	-	-
Special accounts	-	-	-
Total special accounts	-	-	-
less departmental appropriations drawn from annual/special appropriations and credited to special accounts	-	-	-
Total departmental resourcing (A)	32,136	23,990	8,146
Administered			
Annual appropriations – ordinary annual services	-	-	-
Annual appropriations – other services – non-operating	-	-	-
Annual appropriations – other services – specific payments to states, ACT, NT and local government	-	-	-
Annual appropriations – other services – new administered expenses	-	-	-
Total administered annual appropriations	-	-	-
Administered special appropriations	-	-	-
Total administered special appropriations	-	-	-
Special accounts	-	-	-
Total special accounts receipts	-	-	-
less administered appropriations drawn from annual/ special appropriations and credited to special accounts	-	-	-
less payments to corporate entities from annual/ special appropriations	-	-	-
Total administered resourcing (B)	-	-	-
Total resourcing and payments for entity (A + B)	32,136	23,990	8,146

<sup>&</sup>lt;sup>1</sup> Annual Appropriations for current year includes an amount of 0.337 million that was withheld under Section 51 in 2022-23.

## **Appendix T: Financial statements summary**

The below financial statements summary data templates are a subset of the full audited financial statements contained in the annual report. These individual line items should be read in isolation of each other. In many cases the "total" lines will not equal the sum of the previous line items above. The presentation of expenses and liabilities are consistent with the ATSB's audited annual financial statements.

Table 47: Statement of Comprehensive income for the period ended 30 June 2023

	30 June 2023	30 June 2022	Original Budget
	\$'000	\$'000	\$'000
NET COST OF SERVICES			
Expenses			
Employee Benefits Expense	16,845	15,963	16,334
Suppliers Expense	8,093	7,188	7,428
Depreciation and Amortisation Expense	2,536	2,334	2,445
Total Expenses	27,574	25,723	26,259
Income			
Total Own-Source Income	4,023	4,198	4,285
Net cost of services			
Net cost of services	-23,551	-21,525	-21,974
Revenue from Government			
Revenue from Government	20,710	20,863	21,047
Surplus/(Deficit) after Tax			
Surplus/(Deficit) after Tax	-2,841	-662	-927
OTHER COMPREHENSIVE INCOME			
Total comprehensive Income/(Loss)	-2,209	-669	-927

Table 48: Statement of financial position as at 30 June 2023

	30 June 2023	30 June 2022	Original Budget
	\$'000	\$'000	\$'000
ASSETS			
Total Financial Assets	8,245	9,417	9,417
Total Non-Financial Assets	14,046	14,757	13,229
Total Assets	22,291	24,174	22,646
LIABILITIES			
Total Payables	983	812	392
Total Interest Bearing Liabilities	8,130	9,171	7,988
Total Provisions	5,361	4,747	5,167
Total Liabilities	14,474	14,730	13,547
Net Assets	7,817	9,444	9,099
EQUITY			
Total Equity	7,817	9,444	9,099

Table 49: Statement of changes in equity for the current report period 2022–23

	30 June 2023	30 June 2022	Original Budget
	\$'000	\$'000	\$'000
Opening balance			
Balance Carried Forward from Previous Period	9,444	9,535	9,444
Adjusted Opening Balance	9,444	9,535	9,444
Comprehensive income			
Total Comprehensive Income	-2,209	-669	-927
Closing Balance as at 30 June	7,817	9,444	9,099

Table 50: Cash flow statement for period (2022–23)

	30 June 2023	30 June 2022	Original Budget	
	\$'000	\$'000	\$'000	
OPERATING ACTIVITIES				
Total Cash Received (OPERATING ACTIVITIES)	23,425	22,227	22,503	
Total Cash Used for (OPERATING ACTIVITIES)	22,420	20,989	20,985	
Net Cash from OPERATING ACTIVITIES	1,005	1,238	1,518	
INVESTING ACTIVITIES				
Total Cash Received (INVESTING ACTIVITIES)	-	-	-	
Total Cash Used (INVESTING ACTIVITIES)	1,127	1,115	582	
Net Cash from INVESTING ACTIVITIES	-1,127	-1,115	-582	
Purchase of Property, Plant and Equipment	400	471	582	
Purchase of Intangibles	727	644	-	
FINANCING ACTIVITIES				
Total Cash Received (FINANCING ACTIVITIES)	1,127	1,056	582	
Total Cash Used (FINANCING ACTIVITIES)	1,113	1,167	1,518	
Net Cash from FINANCING ACTIVITIES	14	-111	-936	
Cash at the End of the Reporting Period	Cash at the End of the Reporting Period			
Cash at the End of the Reporting Period	240	348	348	

Table 51: Current assets and liabilities

	30 June 2023	30 June 2022	Original Budget	
	\$'000	\$'000	\$'000	
Assets – No more than 12 months	8,793	9,993	9,992	
Liabilities – No more than 12 months	3,914	4,070	3,650	

Table 52: Commonwealth lessees – Departmental leases under AASB 16 (2022–23)

	30 June 2023	30 June 2022	Original Budget
	\$'000	\$'000	\$'000
Note to Depreciation – Depreciation on right-of-use assets	1,264	1,327	1,504
Cash Flow – Operating Activities – Interest Payments on Lease Liabilities	79	84	52
Cash Flow – Financing Activities – Principal Payments of Lease Liabilities	1,113	1,167	1,518

Table 53: Regulatory charging summary note

	30 June 2023	30 June 2022
	\$'000	\$'000
Expenses		
Total expenses	0	0
External Revenue		
Total external revenue	0	0

## Appendix U: APS Net Zero 2030 emissions reporting

APS Net Zero 2030 is the Government's policy for the Australian Public Service (APS) to reduce its greenhouse gas emissions to net zero by 2030, and transparently report on its emissions. As part of this, non-corporate and corporate Commonwealth entities are required to report on their operational greenhouse gas emissions.

The Greenhouse Gas Emissions Inventory presents greenhouse gas emissions over the 2022–23 period. Results are presented on the basis of Carbon Dioxide Equivalent (CO2-e) emissions. Greenhouse gas emissions reporting has been developed with methodology that is consistent with the Whole-of-Australian Government approach as part of the APS Net Zero 2030 policy. Not all data sources were available at the time of the report and adjustments to baseline data may be required in future reports.

Table 54: APS Net Zero 2030 emissions reporting

Emission Source	Scope 1 kg CO2-e	Scope 2 kg CO2-e	Scope 3 kg CO2-e	Total kg CO2-e
Electricity (Location Based Approach)	N/A	-	-	-
Natural Gas	-	N/A	-	-
Fleet Vehicles	-	N/A	81,300	81,300
Domestic Flights	N/A	N/A	-	-
Other Energy	-	N/A	-	-
Total kg CO2-e	-	-	81,300	81,300

The electricity emissions reported above are calculated using the location based approach. When applying the market based method, which accounts for activities such as Greenpower, purchased LGCs and/or being located in the ACT, the total emissions for electricity, are below:

Emission Source	Scope 1 kg CO2-e	Scope 2 kg CO2-e	Scope 3 kg CO2-e	Total kg CO2-e
Electricity (Location Based Approach	N/A	-	-	-
Natural Gas	-	N/A	-	-
Fleet Vehicles	-	N/A	81,300	81,300
Domestic Flights	N/A	N/A	-	-
Other Energy	-	N/A	-	-
Total kg CO2-e	-	-	81,300	81,300

## Appendix V: Glossary

Term	Description
AAO	Administrative Arrangements Order
Accident	An investigable matter involving a transport vehicle occurs when:
	<ul> <li>a person dies, or suffers serious injury, as a result of an occurrence associated with the operation of the vehicle</li> </ul>
	» the vehicle is destroyed, or seriously damaged, as a result of an occurrence associated with the operation of the vehicle
	» any property is destroyed, or seriously damaged, as a result of an occurrence
	associated with the operation of the vehicle.
Accident Investigation Commission (AIC)	The Papua New Guinea Government institution responsible for the investigation of safety deficiencies in aviation transport.
ADAPM	Display Administration and Procedures Manual
ADE	Air Digital Engineering
ADS-B	Automatic Dependent Surveillance Broadcast.
Aerial work	Aircraft operations – including ambulance and emergency medical services, agriculture, mustering, search and rescue, fire control, surveying and photography.
Agricultural operations	Operations involving the carriage and/or spreading of chemicals, seed, fertiliser or other substances for agricultural purposes – including the purposes of pest and disease control.
AIGP	ICAO Accident Investigation Panel
AIG	Accident Investigation Group
AIMS	ATSB Investigation Management System
Air Transport Operation	A passenger transport operation, a cargo transport operation or a medical transport operation that is conducted for hire or reward.
Airworthiness Directive	A notification to owners and operators of certified aircraft that a known safety deficiency with a particular model of aircraft, engine, avionics or other system exists and must be corrected. If a certified aircraft has outstanding airworthiness directives that have not been complied with, the aircraft is not considered airworthy.
ALA	Aeroplane Landing Area
Amateur-built aircraft	Aircraft not built in a factory but for the user's personal use or recreation. May include ultralight, original design, plans built, kit built or experimental aircraft.
AMC	Australian Maritime College
AMSA	Australian Maritime Safety Authority
ANAO	Australian National Audit Office
APAC	ICAO Asia Pacific
APS	Australian Public Service
APSC	Australian Public Service Commission
ARA	Australian Railways Association
ARTC	Australian Rail Track Corporation
ATSB	Australian Transport Safety Bureau
ATSB safety action	Formal activities conducted by the ATSB to initiate safety action by relevant organisations to address a safety issue. Includes safety recommendations and safety advisory notices.
BRM	Bridge Resource Management
CASA	Civil Aviation Safety Authority
CASR	Civil Aviation Safety Regulations
CFIT	Controlled Flight Into Terrain
Charter	A non-scheduled air transport operation.
CITS	Chief Investigator Transport Safety (Victoria)

Term	Description
Collective	The collective pitch control, or collective lever, in a helicopter changes the pitch angle of all the main rotor blades at the same time, independent of their position. Therefore, if a collective input is made, all the blades change equally. The result is that the helicopter increases or decreases its total lift derived from the rotor.
Complex investigations	Investigations rated at level 1, level 2 or level 3 in accordance with the ATSB's rating system.
Contributing safety factor	A safety factor that, if it had not occurred or existed at the relevant time, then:
	<ul> <li>» the occurrence would probably not have occurred</li> <li>» adverse consequences associated with the occurrence would probably not have occurred or have been as serious</li> <li>» another contributing safety factor would probably not have occurred or existed.</li> </ul>
CPRs	Commonwealth Procurement Rules
CPRM	Certified Practising Risk Manager
Critical safety issue	Associated with an intolerable level of risk and generally leading to the immediate issue of a safety recommendation, unless corrective safety action has already been taken.
CRI	Class Rating Instructor
CVR (black box)	Cockpit voice recorder
DCV	Domestic Commercial Vessel as defined by the Marine Safety (Domestic Commercial Vessel) National Law Act 2012.
DFSB	Defence Flight Safety Bureau
DME	Distance Measuring Equipment
EASA	European Aviation Safety Agency
EEGO	Energy Efficiency in Government Operations
EL	Executive Level
ERSA	En-Route Supplement Australia
FAA	Federal Aviation Administration (United States)
Fatal accident	A transport accident in which at least one fatality results within 30 days of the accident.
Fatality/Fatal injury	Any injury acquired by a person involved in a transport accident which results in death within 30 days of the accident.
FCPA	Fellow of CPA Australia.
Flight data recorder (FDR) (black box)	A recorder placed in an aircraft for the purpose of facilitating the investigation of an aircraft accident or incident.
Flying training	Flying under instruction for the issue or renewal of a licence, rating, aircraft type endorsement or any other type of flying aimed at upgrading an individual's flight qualification – including solo navigation exercises conducted as part of a course of applied flying training, or check and training operations conducted by RPT operators.
FOI Act	Freedom of Information Act 1982
GAICD	Graduate of the Australian Institute of Company Directors
General aviation	General aviation covers:  » aerial work operations (including aerial agriculture, aerial mustering, search and rescue, and aerial survey)  » flying training  » private aviation  » business and sports (including gliding) aviation – Australian-registered (VH), or foreign-registered.
GovCMS	Content management system platform.
GPS	Global Positioning System
Hours flown	Calculated from the time the wheels start, with the intention of flight, to the time the wheels stop after completion of the flight.

Term	Description
Human factors	Human factors is the multidisciplinary science that applies knowledge about the capabilities and limitations of human performance to all aspects of the design operation and maintenance of products and systems. It considers the effect of physical, psychological and environmental factors on human performance in different task environments – including the role of human operators in complex systems.
IALA	International Association of Marine Aids to Navigation and Lighthouse Authorities
ICAO	International Civil Aviation Organization
Immediately reportable matter	A serious transport safety matter that covers occurrences such as:  » accidents involving death » serious injury » destruction or serious damage of vehicles or property » when an accident nearly occurs.
ICT	Information and Communications Technology
IFSD	In-flight shutdown
IMC	Instrument Meteorological Conditions
IMO	International Maritime Organization
Incident	An occurrence, other than an accident, associated with the operation of transport vehicle that affects, or could affect, the safety of the operation.
ITSA	International Transportation Safety Association
ITSAP	The Australian Government's Indonesia Transport Safety Assistance Package.
KPI	Key Performance Indicator
Less complex investigations	Those rated at level 4 or level 5 under the ATSB rating scheme.
MBA	Master Business Administration
Minor injury	An injury sustained by a person, in an accident, that was not fatal or serious and does not require hospitalisation.
MIPP	Major Investigation Preparedness Plan
MOPSC	Maximum Operational Passenger Seating Configuration
MOS	Manual of Standards
MRCA	Material risk control assessment
Multi-modal	Across the three 3 modes of transport covered by the ATSB: aviation, marine and rail.
National Transportation Safety Committee (NTSC)	An Indonesian Government institution responsible for the investigation of safety deficiencies in aviation, maritime and land transport.
NGR	New generation rollingstock
Occurrences accidents and incidents	Occurrences are reportable matters – either an immediately reportable matter (IRM) or a routine reportable matter (RRM). They comprise accidents, serious incidents and incidents.
ONRSR	Office of the National Rail Safety Regulator
Other aerial work	Other aerial work includes:  » operations conducted for the purposes of serial work other than 'flying training' and  » 'agricultural operations'  » operations classified as other aerial work – including aerial surveying and photography, spotting, aerial stock mustering, search and rescue, ambulance, towing (including glider, target and banner towing), advertising, cloud seeding, firefighting, parachute dropping and coastal surveillance.
Other safety issue	Associated with a risk level regarded as unacceptable unless it is kept as low as reasonably practicable. Where there is a reasonable expectation that safety action could be taken in response to reduce risk, the ATSB will issue a safety recommendation to the appropriate agency when proactive safety action is not forthcoming.
OTSI	Office of Transport Safety Investigations (New South Wales)
PGPA Act	Public Governance, Performance and Accountability Act 2013

Term	Description
Pilotage	Use of licensed coastal pilots to guide ships through designated areas.
PN	Pacific National
PNG	Papua New Guinea
РОН	Pilot's Operating Handbook
Portfolio Budget Statements (PBS)	These statements explain the provisions of the appropriation bills (budget bills); that is, where the appropriate funds are going to be spent.
Private/business	Private flying is conducted for recreational or personal transport without revenue.  Business flying refers to the use of aircraft as a means of transport to support a business or profession.
Recreational aviation	Aircraft being used for recreational flying that are registered by a recreational aviation administration organisation.
REEFVTS	Great Barrier Reef and Torres Strait Vesel Traffic Service
Regular public transport	A scheduled air transport operation, which the ATSB further categorises as:
(RPT)	<ul> <li>low-capacity RPT – an RPT aircraft that provides a maximum of 38 passenger seats, or a maximum payload no greater than 4,200 kilograms</li> <li>high-capacity RPT – an RPT aircraft that provides more than 38 passenger seats, or a maximum payload greater than 4,200 kilograms.</li> </ul>
ReOC	A remotely piloted aircraft operator's certificate.
REPCON	The aviation confidential reporting scheme.
Reportable safety concern	Any matter that endangers or could endanger a transport vehicle.
RFS	Rural Fire Service
RHC	Robinson Helicopter Company
RISSB	Rail Industry Safety Standards Board
RPAS	Remotely piloted aircraft systems.
Safety action	The things that organisations and individuals do in response to the identification of safety issues, in order to prevent accidents and incidents. There are two main types: ATSB safety action non-ATSB safety action.
Safety advisory notice (SAN)	Formal advice by the ATSB to an organisation, or relevant parts of the aviation industry, that it should consider the safety issue and take action where it believes it is appropriate. A safety advisory notice is a 'softer' output than a safety recommendation and is used for less significant safety issues – when the available evidence is more limited or when the target audience is not a specific organisation.
Safety factor	An event or condition that increases safety risk – something that increases the likelihood of an occurrence and/or the severity of the adverse consequences associated with an occurrence.
Safety issues	A safety factor which can reasonably be regarded as having the potential to adversely affect the safety of future operations and:
	<ul> <li>is a characteristic of an organisation or a system, rather than a characteristic of a specific individual, or</li> <li>is characteristic of an operational environment at a specific point in time.</li> </ul>
Safety recommendation	ATSB safety recommendations are formal recommendations from the ATSB to an organisation for it to address a specific safety issue. They focus on stating the problem (i.e. the description of the safety issue). They do not identify specific solutions for reducing risk.
Serious incident	An incident involving circumstances indicating an accident nearly occurred.

Term	Description
Serious injury	An injury which is sustained by a person in an accident and involves one or more of
	the following:
	» requires hospitalisation for more than 48 hours, commencing within 7 days from
	the date the injury was received
	<ul> <li>results in a fracture of any bone (except simple fractures of fingers, toes or nose)</li> <li>involves lacerations which cause severe haemorrhage, nerve, muscle or</li> </ul>
	tendon damage
	» involves injury to any internal organ
	» involves second- or third-degree burns, or any burns affecting more than 5% of the body surface
	» involves verified exposure to infectious substances or injurious radiation.
SES	Senior Executive Service
SFIS	Surveillance Flight Information Service
Short investigation	Short, factual, office-based investigations of less complex safety occurrences rated at level 5 under the ATSB rating scheme.
SLT	Senior Leadership Team
SME	Small and medium enterprises.
SPAD	Signal passed at danger.
Sports aviation	Aircraft excluded from the RPT, GA or military aircraft categories – including ultralights,
	gliders, hang gliders, rotorcraft and balloon aviation. Most, if not all sport aviation craft are registered with various sporting bodies rather than with the CASA, although exceptions to
	this rule occur. Sports aviation also includes parachute operations and acrobatics. Sports
	aviation in this report does not include Australian nonVH registered aircraft.
Statutory agency	A body or group of persons declared by an Act to be a statutory agency for the purposes of the Public Service Act 1999.
Systemic failure	A breakdown in the system as a whole.
TAC	Type Acceptance Certificate
TAWS	Terrain Awareness Warning System
TCAS	Traffic alert and collision avoidance system.
TCU	Terminal Control Unity
TMA	Terminal Control Area
TOA	Track Occupancy Authority
Transport safety matter	As defined by the Transport Safety Investigation Act 2003, these matters consist of occurrences in which:
	» the transport vehicle is destroyed
	<ul> <li>» the transport vehicle is damaged</li> <li>» the transport vehicle is abandoned, disabled, stranded or missing in operation</li> </ul>
	» a person dies as a result of an occurrence associated with the operation of the
	transport vehicle
	» a person is injured or incapacitated as a result of an occurrence associated with the operation of the transport vehicle
	» any property is damaged as a result of an occurrence associated with the
	operation of the transport vehicle
	<ul> <li>» the transport vehicle is involved in a near accident</li> <li>» the transport vehicle is involved in an occurrence that affected, or could have</li> </ul>
	affected, the safety of the operation of the transport vehicle
	» something occurred that affected, is affecting, or might affect transport safety.
TSI Act	Transport Safety Investigation Act 2003
TSI Regulations	Transport Safety Investigation Regulations 2021
VDR	Voyage Data Recorder
VFR	Visual Flight Rules
WHS	Work Health and Safety

## List of requirements

Below is the table set out in Schedule 2 of the PGPA Rule. Section 17AJ(d) requires this table be included in entities' annual reports as an aid of access.

PGPA Rule Reference	Part of Report	Description	Requirement	Page
17AD(g)	Letter of transmittal			
17AI	Letter of transmittal	A copy of the letter of transmittal signed and dated by accountable authority on date final text approved, with statement that the report has been prepared in accordance with section 46 of the Act and any enabling legislation that specifies additional requirements in relation to the annual report.	Mandatory	iii
17AD(h)	Aids to access			
17AJ(a)	Contents	Table of contents (print only).	Mandatory	iv
17AJ(b)	Index	Alphabetical index (print only).	Mandatory	162
17AJ(c)	Appendix V: Glossary	Glossary of abbreviations and acronyms.	Mandatory	151-155
17AJ(d)	List of requirements	List of requirements.	Mandatory	156
17AJ(e)	Introduction	Details of contact officer.	Mandatory	145
17AJ(f)	Introduction	Entity's website address.	Mandatory	ii, 145
17AJ(g)	Introduction	Electronic address of report.	Mandatory	ii, 145
17AD(a)	Review by accountable	authority		
17AD(a)	Chief Commissioner's Review 2022-23	A review by the accountable authority of the entity.	Mandatory	3-5
17AD(b)	Overview of the entity			
17AE(1)(a)(i)	Agency Overview	A description of the role and functions of the entity.	Mandatory	6-23
17AE(1)(a)(ii)	Organisational Structure	A description of the organisational structure of the entity.	Mandatory	16
17AE(1)(a)(iii)	Outcome and program structure	A description of the outcomes and programmes administered by the entity.	Mandatory	20
17AE(1)(a)(iv)	Agency overview	A description of the purposes of the entity as included in corporate plan.	Mandatory	6
17AE(1)(aa)(i)	Appendix L: Accountable Authority	Name of the accountable authority or each member of the accountable authority	Mandatory	142
17AE(1)(aa) (ii)	Appendix L: Accountable Authority	Position title of the accountable authority or each member of the accountable authority	Mandatory	142
17AE(1)(aa) (iii)	Appendix L: Accountable Authority	Period as the accountable authority or member of the accountable authority within the reporting period	Mandatory	142
17AE(1)(b)	-	An outline of the structure of the portfolio of the entity.	Portfolio departments mandatory	N/A
17AE(2)	-	Where the outcomes and programs administered by the entity differ from any Portfolio Budget Statement, Portfolio Additional Estimates Statement or other portfolio estimates statement that was prepared for the entity for the period, include details of variation and reasons for change.	If applicable, Mandatory	N/A

PGPA Rule Reference	Part of Report	Description	Requirement	Page
17AD(c)	Report on the Performance of the entity			
	Annual performance S	tatements		
17AD(c)(i); 16F	Report on performance	Annual performance statement in accordance with paragraph 39(1)(b) of the Act and section 16F of the Rule.	Mandatory	24-52
17AD(c)(ii)	Report on Financial Performance			
17AF(1)(a)	Financial performance update	A discussion and analysis of the entity's financial performance.	Mandatory	52
17AF(1)(b)	Appendix B: Entity resource statement 2022-23	A table summarising the total resources and total payments of the entity.	Mandatory	133
17AF(2)	Financial performance update	If there may be significant changes in the financial results during or after the previous or current reporting period, information on those changes, including: the cause of any operating loss of the entity; how the entity has responded to the loss and the actions that have been taken in relation to the loss; and any matter or circumstances that it can reasonably be anticipated will have a significant impact on the entity's future operation or financial results.	If applicable, Mandatory.	52
17AD(d)	Management and Acco	ountability		
	Corporate Governance			
17AG(2)(a)	Fraud control	Information on compliance with section 10 (fraud systems)	Mandatory	
17AG(2)(b)(i)	Letter of transmittal	A certification by accountable authority that fraud risk assessments and fraud control plans have been prepared.	Mandatory	iii
17AG(2)(b)(ii)	Letter of transmittal	A certification by accountable authority that appropriate mechanisms for preventing, detecting incidents of, investigating or otherwise dealing with, and recording or reporting fraud that meet the specific needs of the entity are in place.	Mandatory	iii
17AG(2)(b) (iii)	Letter of transmittal	A certification by accountable authority that all reasonable measures have been taken to deal appropriately with fraud relating to the entity.	Mandatory	iii
17AG(2)(c)	Management and accountability	An outline of structures and processes in place for the entity to implement principles and objectives of corporate governance.	Mandatory	120
17AG(2)(d) – (e)	-	A statement of significant issues reported to Minister under paragraph 19(1)(e) of the Act that relates to noncompliance with Finance law and action taken to remedy noncompliance.	If applicable, Mandatory	N/A
	Audit Committee			
17AG(2A)(a)	Audit and Risk Committee	A direct electronic address of the charter determining the functions of the entity's audit committee.	Mandatory	121
17AG(2A)(b)	Appendix N. Audit Committee 2022-23	The name of each member of the entity's audit committee.	Mandatory	143
17AG(2A)(c)	Appendix N. Audit Committee 2022-23	The qualifications, knowledge, skills or experience of each member of the entity's audit committee.	Mandatory	143

PGPA Rule Reference	Part of Report	Description	Requirement	Page
17AG(2A)(d)	Appendix N. Audit Committee 2022-23	Information about the attendance of each member of the entity's audit committee at committee meetings.	Mandatory	143
17AG(2A)(e)	Appendix N. Audit Committee 2022-23	The remuneration of each member of the entity's audit committee.	Mandatory	143
	<b>External Scrutiny</b>			
17AG(3)	External Scrutiny and participation	Information on the most significant developments in external scrutiny and the entity's response to the scrutiny.	Mandatory	126
17AG(3)(a)	-	Information on judicial decisions and decisions of administrative tribunals and by the Australian Information Commissioner that may have a significant effect on the operations of the entity.	If applicable, Mandatory	N/A
17AG(3)(b)	-	Information on any reports on operations of the entity by the AuditorGeneral (other than report under section 43 of the Act), a Parliamentary Committee, or the Commonwealth Ombudsman.	If applicable, Mandatory	N/A
17AG(3)(c)	-	Information on any capability reviews on the entity that were released during the period.	If applicable, Mandatory	N/A
	Management of Huma	n Resources		
17AG(4)(a)	Staff Management	An assessment of the entity's effectiveness in managing and developing employees to achieve entity objectives.	Mandatory	122-123
17AG(4)(aa)	Appendix D; Management of Human Resources	Statistics on the entity's employees on an ongoing and nonongoing basis, including the following:  (a) statistics on fulltime employees;  (b) statistics on parttime employees;  (c) statistics on gender  (d) statistics on staff location	Mandatory	135 -139
17AG(4)(b)	Appendix E: Australian Public Sector (APS) classification and gender Appendix F; Employment type by full-time and part-time status Appendix G: Employment type by location Appendix H: Indigenous employment	Statistics on the entity's APS employees on an ongoing and nonongoing basis; including the following:  » Statistics on staffing classification level;  » Statistics on fulltime employees;  » Statistics on parttime employees;  » Statistics on gender;  » Statistics on staff location;  » Statistics on employees who identify as Indigenous.	Mandatory	137 - 140
17AG(4)(c)	Staff management	Information on any enterprise agreements, individual flexibility arrangements, Australian workplace agreements, common law contracts and determinations under subsection 24(1) of the Public Service Act 1999.	Mandatory	123
17AG(4)(c)(i)	Appendix I: Employment arrangements of SES and non-SES employees	Information on the number of SES and nonSES employees covered by agreements etc identified in paragraph 17AG(4)(c).	Mandatory	141

PGPA Rule Reference	Part of Report	Description	Requirement	Page
17AG(4)(c)(ii)	Appendix J: Salary ranges by classification level	The salary ranges available for APS employees by classification level.	Mandatory	141
17AG(4)(c)(iii)	Staff Management	A description of nonsalary benefits provided to employees.	Mandatory	123
17AG(4)(d)(i)	Staff Management	Information on the number of employees at each classification level who received performance pay.	If applicable, Mandatory	123
17AG(4)(d)(ii)	Staff Management	Information on aggregate amounts of performance pay at each classification level.	If applicable, Mandatory	123
17AG(4)(d) (iii)	Staff Management	Information on the average amount of performance payment, and range of such payments, at each classification level.	If applicable, Mandatory	123
17AG(4)(d) (iv)	Staff Management	Information on aggregate amount of performance payments.	If applicable, Mandatory	123
	Assets Management			
17AG(5)	-	An assessment of effectiveness of assets management where asset management is a significant part of the entity's activities	If applicable, mandatory	N/A
	Purchasing			
17AG(6)	Purchasing	An assessment of entity performance against the Commonwealth Procurement Rules.	Mandatory	124
	Reportable consultance	y contracts		
17AG(7)(a)	Purchasing	A summary statement detailing the number of new reportable consultancy contracts entered into during the period; the total actual expenditure on all such contracts (inclusive of GST); the number of ongoing reportable consultancy contracts that were entered into during a previous reporting period; and the total actual expenditure in the reporting period on those ongoing contracts (inclusive of GST).	Mandatory	124
17AG(7)(b)	Purchasing	A statement that "During [reporting period], [specified number] new reportable consultancy contracts were entered into involving total actual expenditure of \$[specified million]. In addition, [specified number] ongoing reportable consultancy contracts were active during the period, involving total actual expenditure of \$[specified million]".	Mandatory	124
17AG(7)(c)	Purchasing	A summary of the policies and procedures for selecting and engaging consultants and the main categories of purposes for which consultants were selected and engaged.	Mandatory	124
17AG(7)(d)	Purchasing	A statement that "Annual reports contain information about actual expenditure on reportable consultancy contracts. Information on the value of reportable consultancy contracts is available on the AusTender website."	Mandatory	124

PGPA Rule Reference	Part of Report	Description	Requirement	Page
	Reportable non-consu	Itancy contracts		
17AG(7A)(a)	Purchasing	A summary statement detailing the number of new reportable non-consultancy contracts entered into during the period; the total actual expenditure on such contracts (inclusive of GST); the number of ongoing reportable non-consultancy contracts that were entered into during a previous reporting period; and the total actual expenditure in the reporting period on those ongoing contracts (inclusive of GST).	Mandatory	124
17AG(7A)(b)	Purchasing	A statement that "Annual reports contain information about actual expenditure on reportable non-consultancy contracts. Information on the value of reportable non-consultancy contracts is available on the AusTender website."	Mandatory	124
17AD(daa)		n about organisations receiving amounts under re	eportable	
47464	•	or reportable non-consultancy contracts		444
17AGA	Appendix Q: Additional information about organisations receiving amounts under reportable consultancy contracts or reportable non- consultancy contracts	Additional information, in accordance with section 17AGA, about organisations receiving amounts under reportable consultancy contracts or reportable non-consultancy contracts.	Mandatory	144
	Australian National Au	dit Office Access Clauses		
17AG(8)	Purchasing	If an entity entered into a contract with a value of more than \$100 000 (inclusive of GST) and the contract did not provide the AuditorGeneral with access to the contractor's premises, the report must include the name of the contractor, purpose and value of the contract, and the reason why a clause allowing access was not included in the contract.	If applicable, Mandatory	144
	<b>Exempt contracts</b>			
17AG(9)	Purchasing	If an entity entered into a contract or there is a standing offer with a value greater than \$10 000 (inclusive of GST) which has been exempted from being published in AusTender because it would disclose exempt matters under the FOI Act, the annual report must include a statement that the contract or standing offer has been exempted, and the value of the contract or standing offer, to the extent that doing so does not disclose the exempt matters.	If applicable, Mandatory	144
	Small business			
17AG(10)(a)	Purchasing	A statement that "[Name of entity] supports small business participation in the Commonwealth Government procurement market. Small and Medium Enterprises (SME) and Small Enterprise participation statistics are available on the Department of Finance's website."	Mandatory	144
17AG(10)(b)	Purchasing	An outline of the ways in which the procurement practices of the entity support small and medium enterprises.	Mandatory	144

PGPA Rule Reference	Part of Report	Description	Requirement	Page
17AG(10)(c)	-	If the entity is considered by the Department administered by the Finance Minister as material in nature—a statement that "[Name of entity] recognises the importance of ensuring that small businesses are paid on time. The results of the Survey of Australian Government Payments to Small Business are available on the Treasury's website."	If applicable, Mandatory	N/A
	Financial Statements			
17AD(e)	Financial Statements	Inclusion of the annual financial statements in accordance with subsection 43(4) of the Act.	Mandatory	96-101
	Executive Remuneration	on		
17AD(da)	Appendix C: Executive Remuneration	Information about executive remuneration in accordance with Subdivision C of Division 3A of Part 23 of the Rule.	Mandatory	134
17AD(f)	Other Mandatory Info	rmation		
17AH(1)(a)(i)	Appendix A: Other mandatory information	If the entity conducted advertising campaigns, a statement that "During [reporting period], the [name of entity] conducted the following advertising campaigns: [name of advertising campaigns undertaken]. Further information on those advertising campaigns is available at [address of entity's website] and in the reports on Australian Government advertising prepared by the Department of Finance. Those reports are available on the Department of Finance's website."	If applicable, Mandatory	127
17AH(1)(a)(ii)	Appendix A: Other mandatory information	If the entity did not conduct advertising campaigns, a statement to that effect.	If applicable, Mandatory	127
17AH(1)(b)	Appendix A: Other mandatory information	A statement that "Information on grants awarded by [name of entity] during [reporting period] is available at [address of entity's website]."	If applicable, Mandatory	127
17AH(1)(c)	Appendix A: Other mandatory information	Outline of mechanisms of disability reporting, including reference to website for further information.	Mandatory	127
17AH(1)(d)	Appendix A: Other mandatory information	Website reference to where the entity's Information Publication Scheme statement pursuant to Part II of FOI Act can be found.	Mandatory	127
17AH(1)(e)	-	Correction of material errors in previous annual report	If applicable, mandatory	N/A
17AH(2)	Appendix A: Other mandatory information	Information required by other legislation	Mandatory	127

## Index

A	decision-making powers, 132
abbreviations, see glossary	functions, 132
accountability and management, 120–122	mission, 6
accountable authority, 142	objectives, 7, 20, 21
statement by, 24	organisational structure, 16
see also Chief Commissioner and Chief Executive	outcome and objectives, 20
Officer	overview, 6–23
achievements see performance	purpose statement, 6, 25
address and contact details, ii	reporting, 21
annual report contact officer, 145	role and functions, 6, 7, 20, 129, 132
FOI, 129	senior leadership team, 120
Administrative Appeals Tribunal reviews, 130	Australasian Railways Association (ARA) AusRail
Administrative Arrangements Order, 132	Conference, 42
advertising and market research, 127 aerobatic pilots, 89	Automatic Dependent Surveillance Broadcast (ADS-B) transmitting, receiving and display devices, 41
air ambulance operations, 22	aviation occurrence database, 8, 13, 49
air arribulance operations, 22 aircraft maintenance engineers, 12	aviation safety
Airports Act 1996, 68	accidents, serious incidents and incidents, 53-56
Airports Act 1990, 66 Airservices Australia, 6, 9, 41, 68, 80	confidential reporting see REPCON
alert bulletins, 15	coronial inquests, 126
annual performance statement, 24	investigations, 3, 4, 9, 53–56
annual report contact officer, 2	occurrence briefs, 33, 38
Asia Pacific Accident Investigation Group see	occurrence notifications, 8, 38
International Civil Aviation Organization	safety actions released, 76
ATSB Investigation Management System (AIMS), 8n, 26,	safety advisory notices released, 89–90
35	safety issues, 62–68
ATSB occurrence database, 8 see also National Aviation	safety recommendations closed, 77–84
Occurrence Database	Aviation White Paper, 5
Audit and Risk Committee, 120–121, 122	AvSafety forums, 41
member remuneration, 143	В
audits	
financial statements, 93–94	'black box' data recovery and analysis, 11
internal, 121–122	bridge resource management, 3, 46, 59, 69
International Maritime Organization, 51	Brisbane Airport, 34
AusTender, 125	Bureau of Meteorology, 41
Australian Helicopter Industry Association, 53	Bureau of Infrastructure and Transport Research
Australian International Airshow, 40–41	Economics, 35
Australian Maritime Safety Authority, 6, 8, 9, 10	business planning and reporting, 121
Australian National Audit Office	C
access clauses, 125	Canberra Airport, 34
financial statements audit, 83–94	Chicago Convention 1944 see Convention on
Australian Public Service Disability Employment Strategy 2020–25, 128	International Civil Aviation
Australian Rail Track Corporation, 74, 75, 87	Chief Commissioner, iii, 17, 21, 33, 45, 46, 102, 115, 120, 134, 142
Australian Transport Safety Bureau (ATSB)	Review, 3–4
accountable authority, 142	Statement, 95
Commission, 17, 120	Chief Executive Officer see Chief Commissioner
Commissioners, 4, 120, 123, 17–19	E.i.e. Executive officer see effer commissioner

Chief Financial Officer, 95, 102	disability reporting, 128
Chief Investigator, Transport Safety (Victoria), 10	Display Administration and Procedure Manual (ADAPM),
Chief Operating Officer, 19, 115, 120	84
Civil Aviation Safety Authority (CASA), 6, 9, 12, 39, 41, 53,	diversity and inclusion, 122
55, 64, 66–67, 68, 77, 78, 80, 81–82, 83, 84	domestic commercial vessels, 10
forums, 41	E
Civil Aviation Safety Regulations 1998, 67	
collaboration see international engagement;	ecologically sustainable development, 127–128
stakeholder engagement	education and communication, 6, 7, 9, 13, 15, 20, 40, 41–48
Collaborative Environmental Management process, 80	employees see staff management
Commission see Australian Transport Safety Bureau – Commission	Employee Assistance Program, 124
Commissioners see Australian Transport Safety Bureau –	energy use, 127–128, 149, 150
Commissioners	Energy Efficiency in Government Operations (EEGO)
Committees	Policy, 127
Audit and Risk Committee, 120–121, 122	En-Route Supplement Australia (ERSA), 55, 77
WHS and Wellbeing Committee, 127	enterprise agreement, 123, 124, 141
Commonwealth Procurement Rules, 124	entity resource statement, 133–134
communication and education, 46–48	Environment Protection and Biodiversity Conservation
conferences participated in, 42, 43–44	Act 1999, 127
confidential reporting scheme (REPCON), 4, 13, 15, 38,	environmental performance, 127–128, 149–150
39,	Essendon Fields Airport, 3, 26
consultants, 124, 143, 144–145	ethical standards, 122
contact officer	European Aviation Safety Agency, 77, 82, 83
annual report, 145	exempt contracts, 125
FOI, 131	exercises see major accident preparedness
contracts, 125, 128, 144–145	expenses for outcomes, 134
exempt, 125	expenses for outcomes, 134 external scrutiny, 126
exempt, 125 Convention on International Civil Aviation Aircraft Accident and Incident Investigation (Annex 13), 9, 15, 50 coronial inquests, 126	external scrutiny, 126
exempt, 125  Convention on International Civil Aviation Aircraft Accident and Incident Investigation (Annex 13), 9, 15, 50 coronial inquests, 126 corporate governance, 120–122, <i>see</i> also senior	external scrutiny, 126
exempt, 125  Convention on International Civil Aviation Aircraft Accident and Incident Investigation (Annex 13), 9, 15, 50 coronial inquests, 126 corporate governance, 120–122, see also senior executives	external scrutiny, 126  F Federal Aviation Administration (FAA), 78, 86
exempt, 125  Convention on International Civil Aviation Aircraft Accident and Incident Investigation (Annex 13), 9, 15, 50 coronial inquests, 126 corporate governance, 120–122, <i>see</i> also senior executives  Corporate Plan, 24, 33, 35, 40, 121	external scrutiny, 126  F Federal Aviation Administration (FAA), 78, 86 finance law compliance, 142
exempt, 125  Convention on International Civil Aviation Aircraft Accident and Incident Investigation (Annex 13), 9, 15, 50 coronial inquests, 126 corporate governance, 120–122, see also senior executives  Corporate Plan, 24, 33, 35, 40, 121 performance measures see performance	external scrutiny, 126  F Federal Aviation Administration (FAA), 78, 86 finance law compliance, 142 financial performance, 52, 103–106 entity resource statement, 133–134 summary report, 146
exempt, 125  Convention on International Civil Aviation Aircraft Accident and Incident Investigation (Annex 13), 9, 15, 50 coronial inquests, 126 corporate governance, 120–122, see also senior executives  Corporate Plan, 24, 33, 35, 40, 121 performance measures see performance Council of Australian Governments national maritime	external scrutiny, 126  F Federal Aviation Administration (FAA), 78, 86 finance law compliance, 142 financial performance, 52, 103–106     entity resource statement, 133–134     summary report, 146 financial statements, 96–101
exempt, 125  Convention on International Civil Aviation Aircraft Accident and Incident Investigation (Annex 13), 9, 15, 50 coronial inquests, 126 corporate governance, 120–122, see also senior executives  Corporate Plan, 24, 33, 35, 40, 121 performance measures see performance Council of Australian Governments national maritime reforms, 10	F Federal Aviation Administration (FAA), 78, 86 finance law compliance, 142 financial performance, 52, 103–106 entity resource statement, 133–134 summary report, 146 financial statements, 96–101 auditor's report, 93–94
exempt, 125  Convention on International Civil Aviation Aircraft Accident and Incident Investigation (Annex 13), 9, 15, 50 coronial inquests, 126 corporate governance, 120–122, see also senior executives  Corporate Plan, 24, 33, 35, 40, 121 performance measures see performance Council of Australian Governments national maritime reforms, 10	external scrutiny, 126  F Federal Aviation Administration (FAA), 78, 86 finance law compliance, 142 financial performance, 52, 103–106     entity resource statement, 133–134     summary report, 146 financial statements, 96–101
exempt, 125  Convention on International Civil Aviation Aircraft Accident and Incident Investigation (Annex 13), 9, 15, 50 coronial inquests, 126 corporate governance, 120–122, see also senior executives  Corporate Plan, 24, 33, 35, 40, 121 performance measures see performance  Council of Australian Governments national maritime reforms, 10  D  data analysis capacity, 35	F Federal Aviation Administration (FAA), 78, 86 finance law compliance, 142 financial performance, 52, 103–106 entity resource statement, 133–134 summary report, 146 financial statements, 96–101 auditor's report, 93–94 Chief Commissioner and Chief Financial Officer
exempt, 125  Convention on International Civil Aviation Aircraft Accident and Incident Investigation (Annex 13), 9, 15, 50 coronial inquests, 126 corporate governance, 120–122, see also senior executives  Corporate Plan, 24, 33, 35, 40, 121 performance measures see performance Council of Australian Governments national maritime reforms, 10  D  data analysis capacity, 35 data and recorder recovery, 35–36	F Federal Aviation Administration (FAA), 78, 86 finance law compliance, 142 financial performance, 52, 103–106 entity resource statement, 133–134 summary report, 146 financial statements, 96–101 auditor's report, 93–94 Chief Commissioner and Chief Financial Officer statement, 95
exempt, 125  Convention on International Civil Aviation Aircraft Accident and Incident Investigation (Annex 13), 9, 15, 50 coronial inquests, 126 corporate governance, 120–122, see also senior executives  Corporate Plan, 24, 33, 35, 40, 121 performance measures see performance  Council of Australian Governments national maritime reforms, 10  D  data analysis capacity, 35 data and recorder recovery, 35–36 data recording, analysis and research, 6, 20, 35–36	F Federal Aviation Administration (FAA), 78, 86 finance law compliance, 142 financial performance, 52, 103–106 entity resource statement, 133–134 summary report, 146 financial statements, 96–101 auditor's report, 93–94 Chief Commissioner and Chief Financial Officer statement, 95 financial performance, 103–106
exempt, 125  Convention on International Civil Aviation Aircraft Accident and Incident Investigation (Annex 13), 9, 15, 50 coronial inquests, 126 corporate governance, 120–122, see also senior executives  Corporate Plan, 24, 33, 35, 40, 121 performance measures see performance  Council of Australian Governments national maritime reforms, 10  D  data analysis capacity, 35 data and recorder recovery, 35–36 data recording, analysis and research, 6, 20, 35–36 datasets, 6, 22	F Federal Aviation Administration (FAA), 78, 86 finance law compliance, 142 financial performance, 52, 103–106    entity resource statement, 133–134    summary report, 146 financial statements, 96–101    auditor's report, 93–94    Chief Commissioner and Chief Financial Officer statement, 95    financial performance, 103–106    financial position, 107–111
exempt, 125  Convention on International Civil Aviation Aircraft Accident and Incident Investigation (Annex 13), 9, 15, 50 coronial inquests, 126 corporate governance, 120–122, see also senior executives  Corporate Plan, 24, 33, 35, 40, 121 performance measures see performance Council of Australian Governments national maritime reforms, 10  D  data analysis capacity, 35 data and recorder recovery, 35–36 data recording, analysis and research, 6, 20, 35–36 datasets, 6, 22 decision-making powers of ATSB, 132	F Federal Aviation Administration (FAA), 78, 86 finance law compliance, 142 financial performance, 52, 103–106    entity resource statement, 133–134    summary report, 146 financial statements, 96–101    auditor's report, 93–94    Chief Commissioner and Chief Financial Officer statement, 95    financial performance, 103–106    financial position, 107–111    funding, 112–113
exempt, 125  Convention on International Civil Aviation Aircraft Accident and Incident Investigation (Annex 13), 9, 15, 50 coronial inquests, 126 corporate governance, 120–122, see also senior executives  Corporate Plan, 24, 33, 35, 40, 121 performance measures see performance  Council of Australian Governments national maritime reforms, 10  D  data analysis capacity, 35 data and recorder recovery, 35–36 data recording, analysis and research, 6, 20, 35–36 datasets, 6, 22 decision-making powers of ATSB, 132 Defence Flight Safety Bureau (DFSB), 9,	F Federal Aviation Administration (FAA), 78, 86 finance law compliance, 142 financial performance, 52, 103–106    entity resource statement, 133–134    summary report, 146 financial statements, 96–101    auditor's report, 93–94    Chief Commissioner and Chief Financial Officer statement, 95    financial performance, 103–106    financial position, 107–111    funding, 112–113    managing uncertainties, 116–118
exempt, 125  Convention on International Civil Aviation Aircraft Accident and Incident Investigation (Annex 13), 9, 15, 50 coronial inquests, 126 corporate governance, 120–122, see also senior executives  Corporate Plan, 24, 33, 35, 40, 121 performance measures see performance  Council of Australian Governments national maritime reforms, 10  D  data analysis capacity, 35 data and recorder recovery, 35–36 data recording, analysis and research, 6, 20, 35–36 datasets, 6, 22 decision-making powers of ATSB, 132 Defence Flight Safety Bureau (DFSB), 9, defined investigations, 14, 28–29, 31, 32	F Federal Aviation Administration (FAA), 78, 86 finance law compliance, 142 financial performance, 52, 103–106    entity resource statement, 133–134    summary report, 146 financial statements, 96–101    auditor's report, 93–94    Chief Commissioner and Chief Financial Officer statement, 95    financial performance, 103–106    financial position, 107–111    funding, 112–113    managing uncertainties, 116–118    overview, 102
exempt, 125  Convention on International Civil Aviation Aircraft Accident and Incident Investigation (Annex 13), 9, 15, 50 coronial inquests, 126 corporate governance, 120–122, see also senior executives  Corporate Plan, 24, 33, 35, 40, 121 performance measures see performance Council of Australian Governments national maritime reforms, 10  D  data analysis capacity, 35 data and recorder recovery, 35–36 data recording, analysis and research, 6, 20, 35–36 datasets, 6, 22 decision-making powers of ATSB, 132 Defence Flight Safety Bureau (DFSB), 9, defined investigations, 14, 28–29, 31, 32 definitions (glossary), 151–155	F Federal Aviation Administration (FAA), 78, 86 finance law compliance, 142 financial performance, 52, 103–106    entity resource statement, 133–134    summary report, 146 financial statements, 96–101    auditor's report, 93–94    Chief Commissioner and Chief Financial Officer statement, 95    financial performance, 103–106    financial position, 107–111    funding, 112–113    managing uncertainties, 116–118    overview, 102    people and relationships, 114–115
exempt, 125  Convention on International Civil Aviation Aircraft Accident and Incident Investigation (Annex 13), 9, 15, 50 coronial inquests, 126 corporate governance, 120–122, see also senior executives  Corporate Plan, 24, 33, 35, 40, 121 performance measures see performance  Council of Australian Governments national maritime reforms, 10  D  data analysis capacity, 35 data and recorder recovery, 35–36 data recording, analysis and research, 6, 20, 35–36 datasets, 6, 22 decision-making powers of ATSB, 132 Defence Flight Safety Bureau (DFSB), 9, defined investigations, 14, 28–29, 31, 32	F Federal Aviation Administration (FAA), 78, 86 finance law compliance, 142 financial performance, 52, 103–106     entity resource statement, 133–134     summary report, 146 financial statements, 96–101     auditor's report, 93–94     Chief Commissioner and Chief Financial Officer statement, 95     financial performance, 103–106     financial position, 107–111     funding, 112–113     managing uncertainties, 116–118     overview, 102     people and relationships, 114–115 fly-in fly-out operations, 22 FlySafe forums, 41 fraud control, iii, 120, 122
exempt, 125  Convention on International Civil Aviation Aircraft Accident and Incident Investigation (Annex 13), 9, 15, 50 coronial inquests, 126 corporate governance, 120–122, see also senior executives  Corporate Plan, 24, 33, 35, 40, 121 performance measures see performance Council of Australian Governments national maritime reforms, 10  D  data analysis capacity, 35 data and recorder recovery, 35–36 data recording, analysis and research, 6, 20, 35–36 datasets, 6, 22 decision-making powers of ATSB, 132 Defence Flight Safety Bureau (DFSB), 9, defined investigations, 14, 28–29, 31, 32 definitions (glossary), 151–155 Department of Defence, 41, see also Defence Flight	F Federal Aviation Administration (FAA), 78, 86 finance law compliance, 142 financial performance, 52, 103–106     entity resource statement, 133–134     summary report, 146 financial statements, 96–101     auditor's report, 93–94     Chief Commissioner and Chief Financial Officer statement, 95     financial performance, 103–106     financial position, 107–111     funding, 112–113     managing uncertainties, 116–118     overview, 102     people and relationships, 114–115 fly-in fly-out operations, 22 FlySafe forums, 41 fraud control, iii, 120, 122 freedom of information, 128–131
exempt, 125  Convention on International Civil Aviation Aircraft Accident and Incident Investigation (Annex 13), 9, 15, 50 coronial inquests, 126 corporate governance, 120–122, see also senior executives  Corporate Plan, 24, 33, 35, 40, 121 performance measures see performance Council of Australian Governments national maritime reforms, 10  D  data analysis capacity, 35 data and recorder recovery, 35–36 data recording, analysis and research, 6, 20, 35–36 datasets, 6, 22 decision-making powers of ATSB, 132 Defence Flight Safety Bureau (DFSB), 9, defined investigations, 14, 28–29, 31, 32 definitions (glossary), 151–155 Department of Defence, 41, see also Defence Flight Safety Bureau (DFSB)	F Federal Aviation Administration (FAA), 78, 86 finance law compliance, 142 financial performance, 52, 103–106     entity resource statement, 133–134     summary report, 146 financial statements, 96–101     auditor's report, 93–94     Chief Commissioner and Chief Financial Officer statement, 95     financial performance, 103–106     financial position, 107–111     funding, 112–113     managing uncertainties, 116–118     overview, 102     people and relationships, 114–115 fly-in fly-out operations, 22 FlySafe forums, 41 fraud control, iii, 120, 122 freedom of information, 128–131     contact officer, 129
exempt, 125  Convention on International Civil Aviation Aircraft Accident and Incident Investigation (Annex 13), 9, 15, 50 coronial inquests, 126 corporate governance, 120–122, see also senior executives  Corporate Plan, 24, 33, 35, 40, 121 performance measures see performance  Council of Australian Governments national maritime reforms, 10  D  data analysis capacity, 35 data and recorder recovery, 35–36 data recording, analysis and research, 6, 20, 35–36 datasets, 6, 22 decision-making powers of ATSB, 132 Defence Flight Safety Bureau (DFSB), 9, defined investigations, 14, 28–29, 31, 32 definitions (glossary), 151–155 Department of Defence, 41 , see also Defence Flight Safety Bureau (DFSB) Department of Finance, 21	F Federal Aviation Administration (FAA), 78, 86 finance law compliance, 142 financial performance, 52, 103–106     entity resource statement, 133–134     summary report, 146 financial statements, 96–101     auditor's report, 93–94     Chief Commissioner and Chief Financial Officer statement, 95     financial performance, 103–106     financial position, 107–111     funding, 112–113     managing uncertainties, 116–118     overview, 102     people and relationships, 114–115 fly-in fly-out operations, 22 FlySafe forums, 41 fraud control, iii, 120, 122 freedom of information, 128–131

resourcing for investigations, 10, 14 external, 33 see also financial statements - funding independent, 25, 27, 33-34 level of response, 23 G levels, 14 see also short investigations; defined investigations; systemic investigations; major glossary, 151-155 investigations Gold Coast Airport, 34 occurrence investigations, 4, 13, 14, 26, 28, 33, 35 GovCMS content management system, 48, overseas, 9 governance see corporate governance, senior executives priorities, 21 GPS data, 11, 12, 35 resourcing hierarchy, 22-23 Graduate Certificate in Transport Safety Investigation significant safety investigations, 3, 28, 53-59 (RMIT University), 49 systemic, 14, 25, 26, 28, 29, 31, 32, 46, 58 grant programs, 128 timeliness, 25, 31 see also aviation safety; marine safety; rail safety; health and safety see work health and safety reports and products; safety issues investigators, 34, 36, 37, 123 Heavy Haul Rail 2023 conference, 43 ratio to investigations, 26, 30, 31 helicopter incidents and accidents, 35, 53, 125 training, 31 hot air ballooning operations, 4, 22, 44 human resources see staff management K key management personnel, 134-135 remuneration, 115 independent investigations, 3, 6, 20, 25, 27, 33-34 key performance indicators, 21 Independent Review of Australia's Domestic Commercial Vessel Safety Legislation, Delivery Costs performance against, 25 and Charging Options, 126 see also performance Indigenous employees, 124, 140-141 L Indonesia, 7, 15, 49 Indonesia Transport Safety Assistance Package, 49 large-scale accidents, 26, industry see transport industry laser scanning, 12 information and communication technology, 127 learning and development see training and information briefs, 15 development Information Commissioner reviews (FOI activity), 130 legal services and expenditure, 125 information publication scheme, 229 legislative framework, iii, 6 see also Transport Safety Investigation Act 2003 internal audit arrangements, 120-121 letter of transmittal, iii International Civil Aviation Organization (ICAO), 15, 35, 49,50 licensed aircraft maintenance engineers, 12 Asia Pacific Accident Investigation Group, 15, 49 M Marine Investigators Forum, 49 international engagement, 7, 15, 49 major accident preparedness, 34 International Maritime Organization, 9, 51 Major Investigation Preparedness Plan, 34 Casualty Investigation Code, 9 major investigations, 14 International Transportation Safety Association (ITSA), management and accountability, 120-122 15, 43 mandatory reporting, 8 internet address, ii, 2, 3, 8, 48, 121, 128, 129, 131, 145 Marine Accident Investigators Forum in Asia, 49 investigations marine safety accredited representative investigations, 33 accidents, serious incidents and incidents, 59 active, 25, 30, 31, 35, 41 confidential reporting, 38 changes to published findings, 4, 25, 32 data recording, analysis and research, 11, 36 completion of older investigations, 31 investigations, 9-10, 33 confidential reporting see REPCON occurrence notifications, 8 defined investigations, 14, 28-29, 31, 32 safety actions released, 68-70 definition adjustments, 31 safety advisory notices released, 90

safety issues, 61, 68-69	Р
safety recommendations closed, 84	Papua New Guinea, 7, 15, 49, 50
safety recommendations released, 87–88	performance, 24–52
maritime reforms, 10	against key performance criteria, 25
market research, 127	against key indicators, 27–32
material failure analysis, 11, 37	data recording, analysis and research, 35–39
media content and responses, 45–46	financial see financial performance
Memorandum of Understanding on Cooperation in the Transport Sector (Australia–PNG), 49, 50	independent 'no-blame' investigations, 33–34
Minister responsible, 7	influencing safety action, 40–52
Statement of Expectations, 3, 7, 21	performance at a glance, 26
Ministry of Transport (Thailand) Aircraft Accident and Incident Investigation Commission, 35	performance criteria, 24, 25 performance pay, 124
mission statement, 6	plans and planning
Moorabbin Airport, 34	Annual Plan, 3, 121
• *	business continuity plan, 121
N	Fraud Control and Corruption Plan, 122
National Anti-Corruption Commission Act 2022, 122	Major Investigation Preparedness Plan, 34
National Aviation Occurrence Database, 49	Strategic Plan, 3, 5, 121, 122
National Disability Strategy, 128	Portfolio Budget Statement, 1, 21, 24, 24, 26, 27, 52, 61
National Transport Commission, 6	portfolio membership and agencies, 6
New South Wales Office of Transport Safety Investigations (OTSI), 10, 33, 61, 62	preparedness see exercises; major accident preparedness
New South Wales Rural Fire Service (RFS), 56, 62, 63, 85	procurement see purchasing
nonsalary benefits, 124	programs see outcome and program
non-towered airports, 4, 44	Public Governance, Performance and Accountability Act
notifiable incidents (work health and safety), 127	2013, iii, 21, 24, 95, 102
	Public Service Act 1999, 132
0	publications see reports and products
objectives of ATSB, 7, 20, 21 see also performance	purchasing, 124
occurrence briefs, 4, 13, 22, 33, 38	purpose statement, 6, 25
occurrence datasets see ATSB national occurrence database, National Aviation Occurrence Database	R
occurrence investigations, see investigations – occurrence investigations	Rail Industry Safety and Standards Board (RISSB), 42, 57, 71
occurrence notifications, 4, 13, 14, 20, 21, 26, 28, 29, 33, 35, 65	Rail Safety Conference, 42 rail safety,
office location, 102	accidents, serious incidents and incidents, 57–58
Office of the National Rail Safety Regulator, 8, 10, 39, 71	advisory notices released, 90
Office of Transport Safety Investigations see New South Wales Office of Transport Safety Investigations	campaigns, 48, 53 conferences, 42, 43
Operating Guidelines for Air	confidential reporting see REPCON
Tanker Operations, 62, 63	investigations, 9
ore trains, 4, 26, 58, 75	occurrence notifications, 8
organisational structure, 16	
outcome and program structure, 20	safety advisory notices released, 90 safety issues, 70–76
expenses for outcome, 134	•
performance results see performance	safety recommendations closed, 84
outside participation, 132	safety recommendations released, 88
overseas investigations, 7, 9	Railway Operational Procedural Manual, 75
overview of ATSB, 6–15	records held by ATSB, 131
	recreational aviation, 22
	Recreational Aviation Australia, 35

recruitment, 127	short investigations, 14, 22, 31, 32, 33
regional cooperation see international engagement	median time, 31
remotely piloted aircraft systems, 12,22	significant safety investigations, 3, 28, 53–59
remuneration,	Singapore, 50
committee members, 143	site surveys, 12
highly paid staff, 135	small business participation in procurement, 125
key management personnel, 115, 134	social media, 45
non-salary benefits, 124	specialist investigation capabilities, 11-12
performance pay, 124	data recovery and performance, 11
salary ranges by classification level, 141	human factors, 11
senior executives, 134–135	licensed engineers, 12
statutory office holders, 123	material failure analysis, 11
see also enterprise agreement	site survey, 12
REPCON, 4, 13, 15, 38–39	staffing
reportable matters, 8, 15, 21	average staffing level, 134
reporting requirements, ATSB, 21, 120	diversity and inclusion, 122
reports and products, 3, 4, 15, 60	employment arrangements, 141
confidential reports see REPCON	locations, 140
reporting targets and performance, 38	recruitment, 127
response arrangements see major accident	remuneration see remuneration
preparedness	staff management, 122–123
Review of Operations and Financial	staff profile and statistics, 123
Sustainability of Australia's Transport Safety and	training and development see training – for staff
Investigatory Bodies, 5	stakeholder engagement, 12, 40–44, 121 see also
risk management, 120, 121	collaboration; international engagement
RMIT University, 40, 41, 49	Statement of Expectations, 3, 7, 21
Graduate Certificate and Diploma in Transport Safety Investigation, 49	statutory office holders, 123
role and functions of ATSB, 6, 20, 129, 132	Strategic Plan 2022–23, 3, 5, 121, 122
Royal Flying Doctor Service, 22	Sydney Airport, 34, 38
Hoyar Frying Doctor Scrvice, 22	systemic investigations, 14, 25, 26, 28, 29, 31, 32, 46, 58
S	Т
safety actions, 13, 14, 57, 58, 60, 76	TasRail, 57, 71, 72, 73
safety advisory notices, 54, 60, 89–90	technical facilities,
safety at work see work health and safety	
safety education campaigns and messaging, 46–48, 53	terminology (glossary), 151–155 Thailand, 35, 49
safety issues, 60	
addressed through action, 25, 27	TrackSAFE Foundation Rail Safety Week, 48
safety recommendations closed,	TrackSAFE National Level Crossing Safety Forum, 42, 44
safety recommendations released,	TrackSAFE National Level Crossing Safety Forum, 42 training
classification, 60	3
KPI status of, 61	for staff, 122, 123
identified, 61	for external and regional bodies, 49,
	trains sao rail safatu
responses to, 27, 62–76	trains see rail safety
responses to, 27, 62–76 safety studies, 13, 14, 22	Transport Accident Investigation Commission New
•	Transport Accident Investigation Commission New Zealand, 35
safety studies, 13, 14, 22	Transport Accident Investigation Commission New
safety studies, 13, 14, 22 SafetyWatch, 4, 44	Transport Accident Investigation Commission New Zealand, 35 transport agencies, 6, 7, 9, 35 <i>see</i> also Australian
safety studies, 13, 14, 22 SafetyWatch, 4, 44 salaries see remuneration	Transport Accident Investigation Commission New Zealand, 35 transport agencies, 6, 7, 9, 35 <i>see</i> also Australian Transport Safety Bureau (ATSB), Australian Maritime
safety studies, 13, 14, 22 SafetyWatch, 4, 44 salaries see remuneration senior executives	Transport Accident Investigation Commission New Zealand, 35 transport agencies, 6, 7, 9, 35 <i>see</i> also Australian Transport Safety Bureau (ATSB), Australian Maritime Safety Agency transport industry, 4, 5, 7–8 cooperation with, 7–8
safety studies, 13, 14, 22 SafetyWatch, 4, 44 salaries see remuneration senior executives key management personnel, 115, 134	Transport Accident Investigation Commission New Zealand, 35 transport agencies, 6, 7, 9, 35 see also Australian Transport Safety Bureau (ATSB), Australian Maritime Safety Agency transport industry, 4, 5, 7–8

Transport Safety Investigation Act 2003, iii , 6, 8, 13,14, 20, 21, 60, 120, 129, 132

Transport Safety Investigation Regulations 2021, 4, 8, 21

#### V

Victorian Chief Investigator Transport Safety (CITS), 10, 33 V/Line, 70

#### W

waste management, 128
website, ii , 2, 3, 8, 48, 121, 128, 129, 131, 145
address, ii, 145
work health and safety, 120, 122, 123, 14
Employee Assistance Program, 124
Health and Wellbeing Strategy, 122
Investigations, 127
notifiable incidents, 127
WHS and Wellbeing Committee, 127
workforce see staff

