



Australian Government  
Australian Transport Safety Bureau

**ATSB**

# Annual Report 2019–20

Australia's national transport safety investigator

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# LETTER OF TRANSMITTAL



Australian Government  
Australian Transport Safety Bureau

# ATSB

## Chief Commissioner

24 September 2020

The Hon Michael McCormack MP  
Deputy Prime Minister  
Minister for Infrastructure, Transport and Regional Development  
Parliament House  
CANBERRA ACT 2600

Dear Deputy Prime 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 2020.

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

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Chief Commissioner and Chief Executive Officer

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# Contents

Letter of Transmittal .....	1
List of tables .....	4
List of figures .....	5
Introduction .....	5
<b>SECTION 1</b>	
<b>Chief Commissioner’s review 2019–20</b>	
Chief Commissioner’s review 2019–20 .....	7
<b>SECTION 2</b>	
<b>Agency overview</b>	
Agency overview .....	11
Organisational structure .....	18
Commission and Executive Management team .....	19
Outcome and program structure .....	23
How the ATSB reports .....	23
<b>SECTION 3</b>	
<b>Report on performance</b>	
Report on performance .....	26
Independent ‘no-blame’ investigations of transport accidents and other safety occurrences, and research .....	32
Safety data recording, analysis and research .....	33
Fostering safety awareness, knowledge and action .....	36
Financial performance update .....	41
<b>SECTION 4</b>	
<b>Significant safety investigations</b>	
Aviation .....	42
Rail .....	44
Marine .....	45
<b>SECTION 5</b>	
<b>Formal safety issues and actions</b>	
Formal safety issues and actions .....	46
Safety issues identified through ATSB investigations .....	47
KPI status of safety issues identified in 2019–20 .....	47
Responses to safety issues identified in 2019–20 .....	48

Safety actions .....	56
ATSB recommendations closed in 2019–20 .....	56
Safety recommendations released in 2019–20 .....	61
Safety advisory notices released in 2019–20 .....	64

## **SECTION 6**

### **Financial statements**

Financial statements .....	65
----------------------------	----

## **SECTION 7**

### **Management and accountability**

Management and accountability .....	95
-------------------------------------	----

## **SECTION 8**

### **Appendices**

Appendix A: Other mandatory information .....	102
Appendix B: Entity resource statement 2019–20 .....	107
Appendix C: Executive remuneration .....	108
Appendix D: Management of human resources .....	109
Appendix E: Australian Public Sector (APS) classification and gender.....	110
Appendix F: Employment type by full time and part time status .....	112
Appendix G: Employment type by location .....	113
Appendix H: Indigenous employment.....	114
Appendix I: Employment arrangements of SES and non-SES employees.....	114
Appendix J: Salary ranges by classification level.....	114
Appendix K: Performance pay by classification level .....	115
Appendix L: Accountability authority.....	115
Appendix M: Significant non-compliance with the Finance Law .....	115
Appendix N: Audit committee 2019–20.....	115
Appendix O: Aids to Access .....	116
Appendix P: List of requirements.....	117
Appendix Q: Glossary .....	121
Subject index.....	125

## List of tables

<b>Table 1:</b>	Results against performance criteria .....	27
<b>Table 2:</b>	Performance at a glance 1 .....	28
<b>Table 3:</b>	Performance at a glance 2 .....	29
<b>Table 4:</b>	ATSB performance against key performance indicators.....	29
<b>Table 5:</b>	Summary of financial performance and position.....	41
<b>Table 6:</b>	Number of safety issues identified in 2019–20.....	47
<b>Table 7:</b>	Status of other safety issues identified in 2019–20.....	47
<b>Table 8:</b>	Aviation – Responses to other safety issues identified in 2019–20 .....	48
<b>Table 9:</b>	Marine – Responses to safety issues identified in 2019–20 .....	52
<b>Table 10:</b>	Rail – Responses to other safety issues identified in 2019–20 .....	53
<b>Table 11:</b>	Number of safety actions released in 2019–20 .....	56
<b>Table 12:</b>	Aviation – ATSB recommendations closed in 2019–20 .....	56
<b>Table 13:</b>	Rail – ATSB recommendations closed in 2019–20.....	61
<b>Table 14:</b>	Aviation – Safety recommendations released in 2019–20 .....	61
<b>Table 15:</b>	Rail – Safety recommendations released in 2019–20.....	63
<b>Table 16:</b>	Safety advisory notices released in 2019–20 .....	64
<b>Table 17:</b>	The ATSB’s staffing profile at 30 June 2020.....	97
<b>Table 18:</b>	The ATSB’s salary rates at 30 June 2020 .....	98
<b>Table 19:</b>	Freedom of Information activity.....	105
<b>Table 20:</b>	ATSB resource statement 2019–20 .....	107
<b>Table 21:</b>	Expenses for outcome .....	107
<b>Table 22:</b>	Information about remuneration for key management personnel .....	108
<b>Table 23:</b>	Information about remuneration for other highly paid staff.....	108
<b>Table 24:</b>	All ongoing employees current report period (2019–20).....	109
<b>Table 25:</b>	All non-ongoing employees current report period (2019–20).....	109
<b>Table 26:</b>	All ongoing employees previous report period (2018–19).....	109
<b>Table 27:</b>	All non-ongoing employees previous report period (2018–19).....	110
<b>Table 28:</b>	Australian Public Service Act ongoing employees current report period (2019–20).....	110
<b>Table 29:</b>	Australian Public Service Act non-ongoing employees current report period (2019–20).....	111
<b>Table 30:</b>	Australian Public Service Act ongoing employees previous report period (2018–19).....	111
<b>Table 31:</b>	Australian Public Service Act non-ongoing employees previous report (2018–19).....	112
<b>Table 32:</b>	Australian Public Service Act employees by full-time and part-time status current report period (2019–20).....	112
<b>Table 33:</b>	Australian Public Service Act employees by full-time and part-time status previous report period (2018–19).....	113

<b>Table 34:</b> Australian Public Service Act employment type by location current report period (2019–20).....	113
<b>Table 35:</b> Australian Public Service Act employment type by location previous report period (2018–19).....	113
<b>Table 36:</b> Australian Public Service Act indigenous employment current report period (2019–20) .....	114
<b>Table 37:</b> Australian Public Service Act indigenous employment previous report period (2018–19).....	114
<b>Table 38:</b> Australian Public Service Act employment arrangements current report period (2019–20).....	114
<b>Table 39:</b> Australian Public Service Act employment salary ranges by classification level (minimum/maximum) current report period (2019–20) .....	114
<b>Table 40:</b> Details of accountable authority during the reporting period current report period (2019–20).....	115
<b>Table 41:</b> Significant non-compliance with the Finance Law.....	115
<b>Table 42:</b> Audit committee 2019–20.....	115
<b>Table 43:</b> Aids to access details current report period (2019–20) .....	116

## List of figures

<b>Figure 1:</b> Accident site, showing the engine and propeller location, the left and right wing impact marks and the main wreckage .....	42
<b>Figure 2:</b> CQA air display flight track, showing the first pass in yellow, the second in magenta and the third in red .....	43
<b>Figure 3:</b> Accident site and wreckage of VH-XMJ .....	44
<b>Figure 4:</b> Little Banyan Creek rail bridge .....	44
<b>Figure 5:</b> Damaged containers in bays 52 and 56 .....	45

## Introduction

The *Australian Transport Safety Bureau 2019–20 Annual Report* outlines performance against the outcome and program structure in the *Infrastructure, Regional Development and Cities Portfolio Budget Statements 2019–20*.

### Guide to the report

<b>Section 1</b> Chief Commissioner’s review 2019–20
<b>Section 2</b> Agency overview
<b>Section 3</b> Report on performance
<b>Section 4</b> Significant safety investigations
<b>Section 5</b> Formal safety issues and actions
<b>Section 6</b> Financial statements
<b>Section 7</b> Management and accountability
<b>Section 8</b> Appendices

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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 change over time due to legislative, policy and other developments.



# SECTION 1 – CHIEF COMMISSIONER'S REVIEW 2019–20

## Chief Commissioner's review 2019–20



### Overview

In a time of great uncertainty due to the COVID-19 global pandemic, I am proud to report that in 2019–20 the Australian Transport Safety Bureau (ATSB) has been able to continue our focus on improving transport safety through the independent investigation of accidents and incidents, with minimal impact on our productivity and performance.

With many ATSB investigators and operational support staff having come from aviation, rail and marine transport backgrounds, and continuing to maintain those strong industry links, we have great empathy for operators and their respective workforces who are facing an indeterminate future and challenging road to recovery.

Other than the secondment of some staff to Services Australia, we have not been directly involved in the pandemic relief and recovery efforts. However, in support of the transport industry we have continued to apply our safety knowledge and expertise in carefully monitoring the return to operations of safe and reliable transport.

As an operational agency undertaking an essential service, despite the COVID-19 travel restrictions, the ATSB has and will continue to deploy transport safety investigation teams where and when required across the nation during the course of the pandemic. Further, the ATSB's ICT infrastructure has successfully supported working from home arrangements for our staff. I have worked hard to ensure our staff know that they are supported and feel connected during periods of home-based work and a period of unprecedented uncertainty.

The ATSB has seen a lessening in the number of transport safety occurrences reported to it in the second half of 2019–20, reflective of decreased activity in the aviation industry in particular, due to the COVID-19 pandemic. In addition, we have worked hard as an organisation to reduce the number of active investigations undertaken over time, as we more effectively manage our resources to ensure improved timeliness of report completion.

Nonetheless, during the summer months of 2019–20 we launched a number of complex investigations into significant transport safety accidents, including:

- the collision between two freight trains at Jumperkine, Western Australia
- the collision with terrain of a C-130 Hercules large air tanker near Cooma, New South Wales
- the derailment of an XPT passenger train at Wallan, Victoria
- the mid-air collision between two twin-engined training aircraft near Mangalore, Victoria.

Then in early March we launched our investigation into the collision with terrain of a Cessna 404 twin-engine aircraft, with the loss of life of all five on board, near Lockhart River, in far north Queensland.

That long summer of 2019–20 saw the worst bushfire season in Australia’s living memory, which meant a period of high operational tempo for aerial firefighting across Australia. In response to the subsequent Royal Commission into Natural Disaster Arrangements’ request for information, the ATSB produced a safety analysis of aerial firefighting occurrences in Australia, covering the period July 2000 to March 2020. This research report found that estimates of aerial firefighting activity for the 2019–20 bushfire season were around four times higher than other recent bushfire seasons, with more reported occurrences involving aerial firefighting aircraft in Australia in the financial year covering the last bushfire season (between July 2019 and March 2020) than any financial year since July 2000.

The ATSB will continue to examine aviation firefighting safety occurrences with a systemic safety study to commence in 2020–21.

As the COVID-19 pandemic saw a reduction in transport industry activity and transport safety occurrences, in the later months of the year our focus has been on finalising investigations and publishing their final reports. I am pleased to report for 2019–20, we completed and published 47 complex investigations, compared to 34 completed and published complex investigations in 2018–19.

A number of those completed and published complex investigations have led to meaningful improvements in transport safety, and better understandings of transport safety risks. Examples of safety issues raised by ATSB investigations published during 2019–20 concerned upper torso restraints in light aircraft, container ship cargo planning processes, and procedures and guidance for two-driver train operations.

These published investigations, and our new investigations commenced in 2019–20, are consistent with our Minister’s Statement of Expectations, for the period 15 July 2019 to 30 June 2021, which directs us to focus on transport safety as the highest priority, and to give priority to transport safety investigations that have the potential to deliver the greatest public benefit through improvements to transport safety.

These principles guide us in determining which accidents and incidents to investigate, and how best to direct our time and resources, to ensure the best safety outcome for the greatest public benefit. We focus on the public interest where the safety of passengers and workers is concerned, and also on the significant costs to the national economy that can result from an accident.

## People and capabilities

It is the skills, professionalism and experience of our people, combined with our highly developed technical expertise and analysis capabilities that enable us to undertake those investigations that have the potential to deliver the greatest public benefit. Right across the agency our staff have broad skillsets, expertise and experience relevant to our role as the nation’s transport safety investigator. And nowhere is that expertise more evident than the ATSB’s governing Commission.

I am very pleased to note that in October 2019, Mr Gary Prosser was appointed to the ATSB Commission. Mr Prosser has 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. More recently, Mr Prosser was the Deputy Chief Executive Officer of the Australian Maritime Safety Authority (AMSA), and he has also served as the Secretary General to the International Organization for Marine Aids to Navigation (IALA).

I am equally pleased to note that Mr Chris Manning was in June 2020 reappointed to the ATSB Commission for a further three years. A former Chief Pilot with Qantas Airways, Mr Manning’s work on the Commission has been exemplary, and we are fortunate to have him with us, working to make transport safer in Australia.

Our Commissioner, Ms Carolyn Walsh also had her tenure extended until September 2020 making her the longest-serving ATSB commissioner.

I would also like to acknowledge and thank Mr Noel Hart for his service to the ATSB Commission and his commitment and passion for improving transport safety since he was first appointed as a Commissioner of the

ATSB in July 2009. Mr Hart provided invaluable maritime industry knowledge and experience to countless ATSB investigations.

Also central to the quality of investigations is our ongoing investment in technologies, training and professional development to ensure our investigators have the best available tools and skillsets.

The professional development pathway for our investigators begins with our program of tertiary qualifications the ATSB initiated in partnership with RMIT University in 2019. The inaugural delivery of the Graduate Certificate in Transport Safety Investigation saw 25 participants from both the ATSB and industry gain this coveted tertiary qualification.

The RMIT University partnership will expand to include the development of Graduate Diploma and Masters Programs over time, and is an integral component of our strategy to create a centre of excellence for transport safety investigation in the Asia Pacific region. The ATSB will continue to advance its own safety investigation capabilities through the delivery of these courses, in addition to ensuring that the opportunity exists for industry to do the same.

And we continue to make investments in systems and technologies to ensure our investigators have the best available to effectively undertake their work. Examples include our laser scanning and remotely piloted aircraft systems (RPAS) combined with high accuracy differential GPS data to produce a range of outputs from videos to three-dimensional models of accident sites and vehicles.

## **Influencing safety action, education and collaboration**

Through stakeholder engagement, communication, education and collaboration, the ATSB aims to improve transport safety via influencing safety action. Through our investigations we can identify safety issues but have no powers to make others take safety action. Instead, the ATSB actively engages with stakeholders who are already safety advocates and who may be able to work with us on influencing others to improve safety.

In 2019–20, the ATSB took advantage of a number of key forums and events hosted by industry partners to share priority safety messages and educate key stakeholders as to our role and responsibilities.

In October 2019, we were proud to co-host, alongside the Rail Industry Safety and Standards Board (RISSB) and the Office of the National Rail Safety Regulator (ONRSR), rail safety experts from across the globe at the 29th International Railway Safety Council in Perth.

Also in October, we held our inaugural maritime safety forum, SeaSafe 2019. Following on from the success of our FlySafe 2019 and RailSafe 2019 safety forums delivered in 2018–19, SeaSafe 2019 aligned with the two-day Pacific 2019 International Maritime Exposition in Sydney in order to maximise participation from key stakeholders.

In May 2020, we had planned to host the annual forum of the International Transportation Safety Association (ITSA), for which I am currently the Chair. ITSA is the international network of heads of agencies of independent transport safety investigation authorities from 17 nations, covering aviation, marine, rail and road transport, as well as pipelines and underground infrastructure. This year's forum, which was to have been held in Sydney, was deferred due to the COVID-19 pandemic.

The mission of ITSA is to improve transport safety in each member country by learning from the experiences of others. It is my hope that that mission can be furthered with our next forum some time in 2021, whether that is held in person in Sydney, or virtually.

And while COVID-19 travel restrictions have placed many conferences and forums on hold, the ATSB has enthusiastically embraced virtual conferences and events to share our safety messages.

Sharing of resources and knowledge is central to our collaboration with our colleagues at the Defence Flight Safety Bureau (DFS). In January, we were able to exercise the provisions of our Memorandum of Understanding (MoU) with DFSB when they seconded a representative with expertise in the C-130 aircraft to join our investigation team working on the C-130 large air tanker accident.

The ATSB also has in place memoranda of understanding with a number of industry associations that are in a position to reach out to their members with messaging that is tailored to their working environment.

Another example of cooperation was in November, when the ATSB's communications team hosted media and communications representatives from the AMSA, the Civil Aviation Safety Authority (CASA), Airservices Australia, and the then Department of Infrastructure, Transport, Cities and Regional Development for the first in a series of

regular meetings to share details of communications, media and safety promotion activities across the broader group.

This forum will allow the portfolio agencies to work together on promoting and sharing safety issues and education campaigns, such as the ATSB's 'Don't Push it, Don't Go' campaign, launched in September 2019 to raise awareness of the dangers of visual flight rules (VFR) for pilots flying into instrument meteorological conditions (IMC).

## Outlook

In 2020–21, we will be aligning a new set of performance measures with our Vision 2030 statement. These have been designed to demonstrate our effectiveness against our mission to:

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

Through the revised performance criteria, we are focused on being able to demonstrate the safety action taken in response to our investigations, ensuring that our findings are defensible and timely, and that our resources are being used efficiently.

I intend to publicly release our Vision 2030 statement during 2020–21 at an appropriate time, mindful of and sensitive to the changes occurring within the transport industry.

Another key focus for our agency in 2020–21 will be the replacement of our investigation information management system. This is a significant and essential project utilising cloud technologies and software that will service the ATSB's investigation information management needs for many years. Investigators will be able to access data and upload evidence to the new system anywhere on any device, while the removal of labour-intensive processes promises to improve our productivity.

From bushfires to a global pandemic, 2019–20 has been a year of unprecedented challenge. I am proud of the ATSB's staff who have, time and time again, proven themselves resilient and adaptable during this period of uncertainty. Like all Australians, ATSB staff across the nation have had to adapt to changing circumstances during this pandemic. At a professional level they have remained committed to their work, whether this be from the office, home or deploying to transport accident sites across state borders.

Australia's aviation, rail and marine industries are safer for their efforts.



Greg Hood  
Chief Commissioner

## 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 Department of Infrastructure, Transport, Regional Development and Communications portfolio. Within the portfolio are other important transport agencies, whose roles are 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)
- Office of the National Rail Safety Regulator (ONRSR)
- 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's purpose is to improve the safety of aviation, rail and marine transport through:

- the independent investigation of transport accidents and other safety occurrences
- safety data recording, analysis and research
- fostering safety awareness, knowledge and 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 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 investigation, research and analysis, and fostering public awareness of transport safety.

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, and cooperates more broadly with its overseas counterparts.

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's role

While independent, the ATSB is accountable to Parliament through the Minister for Infrastructure, Transport and Regional Development. 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 of transport safety matters, including notifications of safety occurrences and confidential reporting
- independently conducting 'no-blame' investigations of 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's 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 cooperation with the transport industry and the community for its success in improving safety. The TSI Act requires the ATSB to cooperate with government agencies, private organisations and individuals who have transport safety functions and responsibilities, or who may be affected by the ATSB's 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 2003* (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, as of 1 July 2019, all immediately notifiable matters are reported to the ONRSR, who then report to the ATSB (prior to this date the telephone notifications came to the ATSB first). The written notifications are provided to the ATSB via reporting to the ONRSR. In marine, both immediately reportable and routine reportable matters are reported to the ATSB via AMSA.

Every year the ATSB's notifications team receives more than 16,000 notifications of safety occurrences. 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.

In 2019–20, the ATSB's notifications team received 17,017 aviation notifications, 663 rail notifications and 234 marine notifications in the form of telephone calls, emails and website contact. From those, the team has identified 6,113 aviation and 234 marine accidents, serious incidents and incidents for the year. In rail, all 663 notifications were processed as a reportable matter.

While not all reported occurrences are investigated, the details of each occurrence are retained within the ATSB's occurrence database. These records are a valuable resource, providing a detailed portrait of transport safety in Australia. The ATSB regularly analyses the database to identify emerging trends and issues. The searchable public version of the aviation occurrence database is available on the ATSB website at [www.atsb.gov.au](http://www.atsb.gov.au) 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.

## 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 the investigations of overseas agencies 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 analyses data on all notified accidents and incidents. It conducts research into specific matters of concern that emerge from data analysis, and specific incidents or matters that may be referred by other organisations. The ATSB cooperates with organisations that are best placed to improve safety, such as CASA, Airservices Australia and the DFSB, as well as aircraft manufacturers and operators. The ATSB also works collaboratively with the Department of Infrastructure, Transport, Regional Development and Communications and other safety agencies to assist the Australian Government in implementing transport safety initiatives.

## Marine

The ATSB investigates incidents and accidents 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 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 International Maritime Organization, educational institutions, and maritime administrators in Australia and overseas.

From 1 July 2018, AMSA's regulator role 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's marine jurisdiction continues to be limited to interstate and overseas shipping.

## Rail

As of 1 July 2017, the ATSB became the single national rail safety investigator for all states and territories in Australia.

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

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

## 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 comprise experts across multi-disciplinary engineering fields to conduct forensic analysis of components and structures from aviation, rail and marine occurrences at the ATSB's 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 and recorder recovery

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 technical work necessary for investigations into aviation accidents and incidents. These investigators combine their extensive industry knowledge of the installation, maintenance and repair of aircraft, aircraft systems, structure and surfaces to determine whether any part of the aircraft system contributed to an occurrence.

### 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's 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 from videos to three-dimensional models of accident sites and vehicles.

Since 2010, the ATSB has used FARO Focus 3D laser site scanning equipment. This equipment has allowed accident sites and vehicles to be captured from ground level in high detail, enabling analysis of the accident site and for the development of accurate stakeholder engagement materials such as 3D models and re-creations of accident sequences.



Since 2017, the ATSB's RPAS program has complemented laser scanning, allowing the agency to capture larger areas and angles that would not otherwise have been possible without a helicopter. Under a remotely piloted aircraft operator's certificate (ReOC), issued by CASA, the ATSB operates a fleet of six DJI Phantom 4 series aircraft. These aircraft, located in ATSB's offices across Australia, assist in conducting initial site safety assessments, capture of photogrammetric site mapping data and other on-site evidence collection. Eighteen personnel have been trained to operate these aircraft and gather data.

To support both these 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.

The ATSB is able to post-process data using a variety of software applications, including Pix4DMapper, FARO Scene, Trimble GPS Pathfinder office and Google Earth Pro, facilitating access to highly accurate and useable information.

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

## 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 produced are occurrence investigations, occurrence briefs, safety studies and statistical reports. The ATSB also produces an up-to-date online searchable aviation occurrence database and weekly summaries of marine occurrences and concerns raised via the REPCON (confidential reporting) system.

### 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.

### Statistical publications

The ATSB produces official Australian aviation occurrence statistics each year, and aviation wildlife strike statistics every two years. The ATSB also conducts trend monitoring of all aviation occurrences – the results of which are used to help decide which occurrences the ATSB investigates and which safety studies are conducted. Statistical reports are not conducted under the TSI Act.

### Occurrence briefs

Introduced in 2018, 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.

## Investigation levels

The ATSB's response to reported safety matters is classified by 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 2019–20. Each level presented below (in order) builds on the previous level.

### Short investigations

Short investigations are limited-scope and generally office-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 common accidents and incidents. A short summary report of up to eight pages will be produced, which includes a description of the sequence of events, limited contextual factual information, a short analysis and findings. Findings include safety factors (events and conditions that increase risk) which are 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 10–20 pages, with an expanded analysis to support the broader set of findings that may also include safety factors not relating directly to or contributing to the occurrence(s). 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.

For the purpose of reporting against key deliverables and key performance indicators, 'complex investigations' refer to the combination of 'defined' and 'systemic' investigations.

### **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 (REPCON)**

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 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 be proceeded further. 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 ensure safety action is taken 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 Papua New Guinea.

The ATSB is actively involved in the work of the International Civil Aviation Organization (ICAO), specifically the ICAO Asia Pacific (APAC) Accident Investigation Group (AIG) and the International Maritime Organization (IMO). The ATSB is an active member of ITSA, with Chief Commissioner, Greg Hood as the current Chair. Australia was due to host the annual ITSA meeting in May 2020, however this was postponed due to COVID-19.

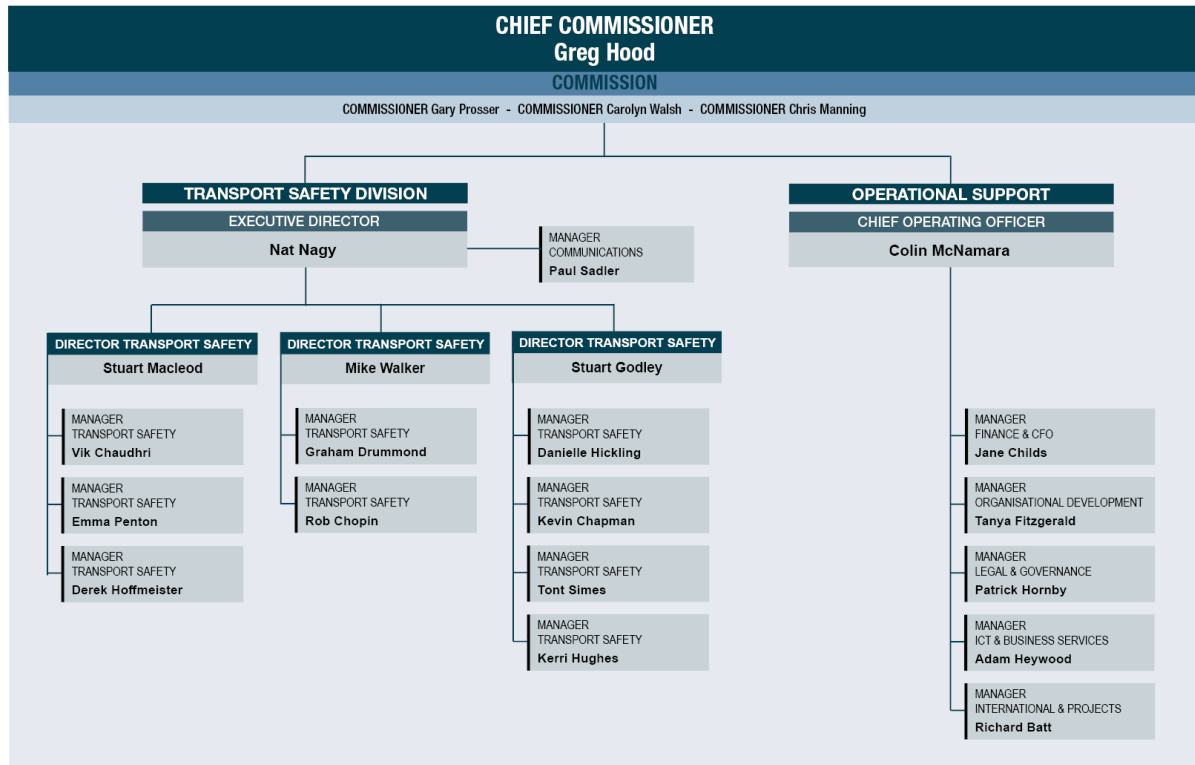
The ATSB continues to make its expertise and resources widely available in support of transport safety. Representatives from Timor-Leste, Taiwan, Philippines, Singapore, Malta, Indonesia and New Zealand visited the ATSB for discussions related to transport safety over this reporting period. In addition, participants from Papua New Guinea, Hong Kong, South Korea, the Maldives, Malaysia, Timor-Leste and Singapore attended specialist investigator training courses at the ATSB.

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



Australian Government  
Australian Transport Safety Bureau



Organisational structure 2019-20

## Commission and Executive Management team

### CHIEF COMMISSIONER AND CHIEF EXECUTIVE OFFICER

#### Mr Greg Hood

Greg Hood is the Chief Commissioner and Chief Executive Officer of the ATSB – Australia's national transport safety investigation agency. Mr Hood was appointed to the role of Chief Commissioner and Chief Executive Officer of the ATSB on 1 July 2016.

In his time as Chief Commissioner, Mr Hood has overseen a number of significant transport safety investigations and report releases across the three modes of aviation, rail and marine.

With almost 40 years' experience across a wide range of operational, training and management roles within the Department of Defence and the civil aviation industry, Mr Hood has been well positioned to drive an innovation agenda at the ATSB. The ATSB's 'Evolution Program' saw enhancements made to its world-leading practices, including streamlined operations, a multidisciplinary teams-based approach to transport safety investigations, and the introduction of remotely piloted aircraft to capture evidence following accidents and other safety occurrences. Mr Hood has signed a partnership agreement between the ATSB and RMIT University to deliver transport safety investigator training at the tertiary level to benefit the Australian transport industry.



Mr Hood began his career as an air traffic controller in the Royal Australian Air Force (RAAF). In the civil aviation industry, Mr Hood has had the unique experience of acting as Director of Aviation Safety at CASA and acting Chief Executive of Airservices Australia, before his appointment as Chief Commissioner and Chief Executive Officer at the ATSB. Mr Hood is the current Chair of the International Transportation Safety Association (ITSA), which is the international network of the heads of independent transport safety investigation agencies from 17 nations.

Mr Hood has a passion for the transport industry in general, and transport safety in particular. As well as being a glider and powered aircraft pilot, he is involved with a number of aviation bodies. He is a Fellow of the Royal Aeronautical Society, a Freeman in the Honourable Company of Air Pilots, and a Life Member of the Qantas Founders Museum.

Before joining the ATSB, Mr Hood was a board member of Safeski Australia and a past president of the Canberra Philharmonic Society. Mr Hood has also served as a member of the business advisory council for World Vision and for several years was a Champion for the St Vincent de Paul CEO Sleepout, raising funds for Australia's homeless.



*ATSB commissioners with the executive management team. Source: ATSB*

## COMMISSIONER

### Ms Carolyn Walsh

Carolyn Walsh has over 35 years' experience in policy development, regulation and safety management at both the Commonwealth and state levels. She has 20 years' experience in the transport sector, initially as Executive Director of Strategy in the New South Wales Office of the Coordinator General of Rail, and then as Chief Executive of the New South Wales Independent Transport Safety and Reliability Regulator.

In addition to her role as a Commissioner of the ATSB, Ms Walsh is currently Chair of the National Transport Commission. She is also a member of the Audit and Risk Committees for the New South Wales Law Enforcement Conduct Commission, New South Wales Public Service Commission, State Transit Authority of New South Wales, Ministry of Health, Western Sydney Local Health District, and the City of Sydney.

Ms Walsh has specialist expertise in safety (both transport and occupational health and safety), risk management and the regulatory framework governing transport operations in Australia.

Ms Walsh has a Bachelor of Economics degree and is a graduate of the Australian Institute of Company Directors. Ms Walsh was appointed as an ATSB Commissioner in 2010.



## 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, Chairman of Airport Coordination Australia, and a Director of the Historical Aircraft Restoration Society Foundation.

Mr Manning was appointed as an ATSB Commissioner in March 2015.



## 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

### Mr Noel Hart

Noel Hart has over 40 years' experience in the shipping, oil and gas industries, including 13 years at sea in senior deck officer positions. His qualifications include a Master Mariner Class One degree, and business administration and MBA certificates.

Mr Hart left his seagoing career to join BP Australia in 1985 and has held management positions with BP Shipping in Melbourne, London and Chicago, in roles including Australasian Regional Shipping Manager, Liquefied Natural Gas and Shuttle Tanker Fleet Manager, Director of Marine and Technical Assurance (UK), and Regional and Commercial Manager (USA).

From 2006 to 2009, he was appointed to the position of General Manager of North West Shelf Shipping Service Company, based in Perth. In this position, Mr Hart was responsible for the safe shipping of liquefied natural gas from north western Australia to Asia and other global customers.

While based in London, Mr Hart was Chairman of the General Purposes Committees of both the Oil Companies International Marine Forum and the Society of International Gas Tanker and Terminal Operators. He also served as Director of the Middle East Navigational Aids Service, and was an alternate director of both the Alaskan Tanker Company and the Marine Preservation Society in the USA, as well as the Australian Marine Oil Spill Centre.

From November 2008 to October 2018, Mr Hart was Chairman of Maritime Industry Australia Ltd – Australia's peak maritime association. In June 2019, he was appointed as a director of the Mid West Ports Authority in Western Australia, and finished his more than 10-year term as a Commissioner with the ATSB in September 2019.



## 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's Chief Operating Officer, Mr McNamara managed a range of corporate functional areas including Human Resources, Organisational Development, Governance and Major Projects. Through his appointment, Mr McNamara continues to play a critical role in contributing to the strategic direction of the agency, 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.



## EXECUTIVE DIRECTOR – TRANSPORT SAFETY

### Mr Nat Nagy

Nat Nagy has been involved in the transport industry since 1996 in a diverse range of operational and leadership roles.

He joined the ATSB following a career as a commercial pilot and air traffic controller. He has held several strategic leadership and transformation roles in Airservices Australia, including General Manager Demand and Capacity Management, and Manager Air Traffic Management Service Support. In these roles, he led the workforce in the National Operations Centre, Aeronautical Information Services, Strategic Initiatives Delivery and Flight Procedures Design business areas. Most recently, Mr Nagy has been a Business Change Manager for Airservices Australia's Accelerate Program where he delivered a program of technological, organisational and cultural change.



Mr Nagy led the operational division of the ATSB across the aviation, rail, and marine domains and has a core focus on the improvement of transport safety across all industries. Mr Nagy finished his tenure with the ATSB in July 2020.



## Outcome and program structure

### 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 three core objectives which arise from the ATSB's 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. Fostering safety awareness, knowledge and 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 provided 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 raises 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 report is based on the guidance for 2019–20 published in May 2020.

This annual report details the ATSB's performance against the program objectives, deliverables and key performance indicators published in the *Infrastructure, Regional Development and Cities Portfolio Budget Statements 2019–20*. 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 2019–20, the ATSB gave priority to transport safety investigations that have the potential to deliver the best safety outcomes for the travelling public. A new Statement of Expectations from the Minister for Infrastructure, Transport and Regional Development, provided to the ATSB in July 2019, sets the direction for the ATSB to give priority to transport safety investigations that have the potential to deliver the greatest public benefit through improvements to transport safety. The evolution in the ATSB's 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. In practice, they are actioned in one of three ways to contribute to the ATSB's functions:

1. A report of an occurrence that suggests a safety issue may exist will be investigated immediately (occurrence investigation). Investigations may lead to the identification/confirmation of the safety issue and evaluation of its significance. It will then set out the case for safety action to be taken in response.
2. A report of an occurrence that does not warrant full investigation may benefit from an office-based short investigation 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's 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. These may be published individually as occurrence briefs.

### Aviation broad hierarchy

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

1. passenger transport – large aircraft
2. passenger transport – small aircraft:
  - a) regular public transport and charter of small aircraft
  - b) humanitarian aerial work (for example, the Royal Flying Doctor Service, search and rescue flights)
3. commercial with passengers (fare-paying and recreation – for example, joy flights)
4. aerial work with participating passengers (for example, news reporters, geological surveys)
5. flying training
6. other aerial work:
  - a) non-passenger carrying work (for example, agriculture, cargo)
  - b) private transport or personal business
7. higher-risk personal recreation/sports aviation/experimental aircraft operations.

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 the ATSB's 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 the ATSB's results against the performance criteria and deliverables set out in the *Portfolio Budget Statements 2019–20* and the *ATSB Corporate Plan 2019–20*. The ATSB's effectiveness in achieving planned outcomes during 2019–20 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 2020, 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.



**Greg Hood**  
Chief Executive Officer

24 September 2020

## Results against performance criteria

**Table 1: Results against performance criteria**

Purpose		
<p>As set out in the <i>Portfolio Budget Statements 2019–20</i> and the <i>ATSB Corporate Plan 2019–20</i>, the ATSB's purpose is to improve the safety of, and public confidence in, aviation, marine and rail transport through:</p> <ul style="list-style-type: none"> <li>➤ the independent 'no-blame' investigation of transport accidents and other safety occurrences</li> <li>➤ safety data recording, analysis and research</li> <li>➤ fostering safety awareness, knowledge and action.</li> </ul>		
Performance criterion	Target	Result
Safety actions completed that address safety issues identified by ATSB investigation reports – critical safety issues.	100%	There were no critical safety issues identified in 2019–20.
Safety actions completed that address issues identified by ATSB investigation reports – all other safety issues.	70%	61% of all other safety issues identified by ATSB investigation reports in 2019–20 were adequately addressed.
Number of active complex investigations in progress at each month's end (12-month rolling average, as at 30 June 2020).	60	Average of 78 active complex investigations in progress at the end of each month.
Average time taken to complete and publish complex investigation reports.	19 months	Average of 27.5 months taken to complete and publish complex investigation reports.
Number of active short investigation in progress at each month's end (12-month rolling average, as at 30 June 2020).	40	Average of 40 active short investigations in progress at the end of each month.
Average time taken to complete and publish short investigation reports.	6 months	Average of 12.3 months taken to complete and publish short investigation reports.
Occurrence briefs completed within one month.	90%	74% of occurrence briefs were completed within one month.
An annual increase in the overall number of safety issues identified from safety studies and complex investigations.	Up to 10%	A 17% annual decrease in the overall number of safety issues identified.
Occurrence and safety study investigations to be initiated on the basis of data-driven analysis.	Up to 15%	19% of all occurrence and safety study investigations were directly linked to SafetyWatch priorities.
Through an annual stakeholder survey, stakeholder respondents recall ATSB safety messaging relevant to their industry.	70%	78% of stakeholder respondents recall ATSB safety messaging.
An increase in the overall number of ATSB social media engagements.	Up to 10%	A 15% increase in social media engagements was recorded.
ATSB safety messages disseminated by independent media channels.	5 per month (average)	On average, 17 safety messages per month were disseminated by independent media channels.

## Performance at a glance

The 2019–20 financial year saw the ATSB continue to focus on improving efficiency and effectiveness. However, due to a high number of large-scale accidents, resourcing pressures continued to impact on the timeliness of investigations. These included:

- Collision with terrain of the C-130 firefighting aircraft near Cooma in January 2020.
- Train derailment near Wallan in February 2020.
- Mid-air collision of two aircraft near Mangalore in February 2020.
- Controlled flight into terrain of a Cessna 402 aircraft at Lockhart River in March 2020.

These challenged the ATSB's capacity to complete investigations in timeframes shorter than those outlined in its key performance indicators. There was also a significant effort made to complete a number of older investigations during the financial year and these being published affected the targets. These investigations included:

- Collision with terrain of a SOCATA TB-10 Tobago aircraft – arranged by Angel Flight near Mount Gambier.
- Collision with terrain following engine power loss of a Cessna 172M north-west of Agnes Water in Queensland.
- Collision with water of a Grumman American Aviation Corp G-73 amphibian aircraft as part of the City of Perth Australia Day Skyworks event.
- Loss of control and collision with terrain involving a Cessna 441 west of Renmark Airport, South Australia.
- Collision with floodwater involving freight train 6792, Banyan Creek in Queensland.
- Loss of containers overboard involving *YM Efficiency* near Newcastle.

Through 2019–20 the ATSB continued to increase the delivery of safety messages to industry and stakeholders. This is demonstrated through stakeholder survey results, increases in social media engagements and importantly, ATSB safety messages being disseminated by media.

In the reporting period, the ATSB also began a review of its current set of deliverables and key performance indicators to determine whether they can be amended to better articulate the agency's evolving services and contributions to transport safety and also to ensure the performance indicators are within the control of the ATSB. During 2020–21, the ATSB will seek to make its performance criteria reflect the best practice recommendations from the ANAO's PGPA Act, Implementation and Corporate Planning audits – *ANAO report 33 2017–18* and *ANAO report 362017-18*.

**Table 2: Performance at a glance 1**

Deliverables	Year	Number of active investigations in progress at each month's end (12-month rolling average, as at 30 June 2020)
<b>Complex investigations</b>		
<i>Aviation</i>	2019–20	60
<i>Marine</i>	2019–20	4
<i>Rail</i>	2019–20	14
<b>Short investigations</b>		
<i>Aviation</i>	2019–20	34
<i>Marine</i>	2019–20	2
<i>Rail</i>	2019–20	3

**Table 3: Performance at a glance 2**

Deliverables	Year	Number completed <sup>1</sup>	Average time
<b>Complex investigations</b>			<b>Average time in months to complete</b>
<i>Aviation</i>	2019–20	38	28
	2018–19	23	25
	2017–18	23	26
<i>Marine</i>	2019–20	4	22
	2018–19	4	26
	2017–18	3	20
<i>Rail</i>	2019–20	5	24
	2018–19	7	19
	2017–18	6	22
<b>Short investigations</b>			
<i>All modes</i>	2019–20	22	12
	2018–19	34	10
	2017–18	39	6
<b>Occurrence briefs</b>			<b>Per cent completed within one month</b>
<i>All modes</i>	2019–20	50	74%
	2018–19	108	35%
	2017–18	40	19%

## Key results

Table 4 summarises the ATSB's performance against key indicators published in the *Portfolio Budget Statements 2019–20*.

**Table 4: ATSB performance against key performance indicators**

	Target	Performance	Page
<b>Key performance indicators</b>			
Safety actions completed that address safety issues identified by ATSB investigation reports:			
> critical safety issues	100%	none identified	46-64
> all other safety issues.	70%	61%	
Number of active complex investigations in progress at each month's end (12-month rolling average, as at 30 June 2020).	60	78	28
Average time taken to complete and publish complex investigation reports.	19 months	27.5 months	29
Number of active short investigations in progress at each month's end (12-month rolling average, as at 30 June 2020).	40	40	28
Average time taken to complete and publish short investigation reports.	6 months	12.3 months	29
Occurrence briefs completed within one month.	90%	74%	29

<sup>1</sup> Includes occurrence, safety issues and research investigations conducted under the TSI Act. The figures do not include assistance to investigations conducted by an external party. Note that previous ATSB annual reports include assistance to investigations conducted by an external party. The figures will, therefore, appear higher in previous annual reports.

	Target	Performance	Page
An annual increase in the overall number of safety issues identified from safety studies and complex investigations.	Up to 10%	Down 17%	33
Occurrence and safety study investigations to be initiated on the basis of data-driven analysis.	Up to 15%	19%	33
Through an annual stakeholder survey, stakeholder respondents recall ATSB safety messaging relevant to their industry.	70%	78%	39
An increase in the overall number of social media engagements.	Up to 10%	15%	37-38
ATSB safety messages disseminated by independent media channels.	5 per month (average)	17 per month (average)	36-39
<b>Deliverables</b>			
Complete and publish reports.	Up to:		
	> 35 complex investigations	47	32
	> 100 short investigations	22	
	> 100 occurrence briefs.	50	
Ensure preparedness for a major accident by reviewing and testing major accident response and management capabilities through participation in one major exercise per year.	One major accident exercise per annum.	Participation in one major exercise with internal audit.	32-33
Provide assistance to investigations overseas in accordance with international arrangements and where resources permit, with a report produced annually addressing the transport safety contribution of this support.	All assistance provided to overseas investigations maintained through an international Accredited Representative register.	ATSB provided assistance to six overseas investigations started in 2019–2020.	39-40
Mature the ATSB's data analysis tools and techniques to enhance the ATSB's proactive capability for determining safety hazards and risks to be used in making assessments about occurrences to investigate and safety studies to commence.		Expanded.	33
Assess, classify and publish summaries of accident and incident occurrences received.	Details of occurrences being investigated are published within one working day.	56%	33- 34
	Summaries of aviation occurrences are ready to be published in the public online database within 10 working days of receipt.	35%	33-34
Assess confidential reports for clarity, completeness and significance for transport safety.	A de-identified summary of the confidential report will be provided to any relevant third party within 10 working days.	19%	33-35
	Within six weeks, advise a responsible party in a position to take safety action in response to the safety concern.	61%	33-35
Publish statistical and trend monitoring publications (including the <i>Aviation Occurrence Statistics Report</i> ).	Five publications.	2	33, 35



	Target	Performance	Page
The ATSB will proactively influence safety awareness in the aviation, rail and marine industries, and among the travelling public, through communication and education activities.	<p>Active engagement at key industry events across the modes.</p> <p>Establishing SafetyWatch priorities.</p> <p>Increasing the accessibility of investigation report content and safety products through its website, mailing lists, use of social media, industry publications and mediums such as video content.</p> <p>Pushing media coverage of ATSB investigations and safety awareness activities.</p>	See detailed report.	36-39
Assist transport safety in the international region, through direct cooperation and the delivery of approved projects and other support activities provided for by program funding agreements, with a publication produced annually addressing the transport safety contribution of these activities.	Delivery of approved projects within program funding allocation.	See detailed report.	39-40

## Independent 'no-blame' investigations of transport accidents and other safety occurrences, and research

This section describes the ATSB's performance against the deliverables relating to the ATSB's role as the independent 'no-blame' transport safety investigator, as published on page 21 of the *ATSB Corporate Plan 2019–20*.

### Deliverables

To meet its objective for improved transport safety, the ATSB has committed to the following independent 'no-blame' investigation of transport accidents and other safety occurrences, and research deliverables:

- Complete and publish up to:
  - 35 complex investigations
  - 100 short investigations
  - 100 occurrence briefs.
- Ensure preparedness for a major accident by reviewing and testing major accident response and management capabilities through participation in one major exercise per annum.
- Provide assistance to investigations overseas in accordance with international arrangements and where resources permit, with a report produced annually addressing the transport safety contribution of this support.

### Aviation investigations

In 2019–20, the ATSB initiated 24 complex safety investigations and 32 short investigations. In addition, 10 external investigations were commenced.

During this reporting period, the ATSB completed 38 complex occurrence investigations, and 16 external investigations. The ATSB also completed 17 short aviation occurrence investigations.

As at 30 June 2020, there were 48 ongoing complex aviation investigations, 27 ongoing short investigations and nine external investigations.

### Marine investigations

In 2019–20, the ATSB initiated one complex and two short occurrence investigations.

During this reporting period, the ATSB completed four complex occurrence investigations, two short occurrence investigations and one external investigation.

As at 30 June 2020, the ATSB continues to investigate four marine occurrences (three as complex investigations, one as a short investigation).

### Rail investigations

In 2019–20, the ATSB initiated four complex rail occurrence investigations and two short rail occurrence investigations.

During this reporting period, the ATSB completed five complex rail occurrence investigations and three short rail occurrence investigations.

As at 30 June 2020, the ATSB continues to investigate 12 rail safety occurrences (11 complex investigations 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. In December 2019, the ATSB conducted a two-stage exercise to simulate the establishment of the ATSB Accident Command Centre (ACC) in response to a marine scenario.

The ATSB also has a *Major Investigation Preparedness Plan* (MIPP). The MIPP 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.

## Safety data recording, analysis and research

This section describes the ATSB's performance against the deliverables set out on page 21 of the *ATSB Corporate Plan 2019–20*.

### Deliverables

To meet its objective for improved transport safety, the ATSB has committed to the following safety data recording, analysis and research deliverables:

- Mature the ATSB's data analysis tools and techniques to enhance the ATSB's proactive capability for determining safety hazards and risks to be used in making assessments about occurrences to investigate, and safety studies to commence.
- Assess, classify and publish summaries of accidents and incident occurrences received. Details of occurrences being investigated are published within one working day. Summaries of aviation occurrences are ready to be published in the public online database within 10 working days of receipt.
- Assess confidential reports for clarity, completeness and significance for transport safety and, where appropriate, advise within six weeks any responsible party in a position to take safety action in response to the safety concern.
- Publish five statistical and trend monitoring publications (including the *Aviation Occurrence Statistics Report*).

In 2019–20, the ATSB continued to analyse occurrence data held in its aviation safety occurrence database as part of Australia's international obligation to determine if preventative safety measures are required.

In addition to these deliverables, the ATSB continued to support active aviation occurrence investigations. During 2019–20, the ATSB completed significant data analysis for most aviation occurrence investigations. This work helped to determine the investigation scope, inform investigation conclusions and safety issue risk assessments, and document past occurrences of similar incidents.

### Data analysis capability

The ATSB continued a data analysis capability expansion program in 2019–20 by:

- initiating the building of a data repository (to be completed in 2020–21) to house copies of all databases used by the ATSB
- participating in feasibility planning with the Bureau of Infrastructure, Transport and Regional Economics for a shared multi-agency aviation data warehouse
- expanding the number of staff trained in Structured Query Language (SQL) and other programs.

### Data and recorder recovery

The ATSB's data and recorder recovery staff maintain support and readiness for the recovery and download 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 and the Civil Aviation Authority of the Philippines – Aircraft Accident Investigation and Inquiry Board to recover data from damaged recording devices.

## Material failure analysis

The ATSB possesses 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 2019–20, transport safety investigators with engineering specialist backgrounds have provided technical input and analysis across a variety of investigations. A selection of tasks included:

- Determination of the existence of pre-existing cracking in the exhaust manifold from the de Havilland DHC-2 Beaver aircraft involved in the collision with water in Jerusalem Bay, NSW (AO-2017-118). The findings prompted the ATSB's release of a safety advisory notice, reinforcing the importance of thorough inspection and maintenance of exhaust systems, and ensuring firewall integrity to limit the risk of carbon monoxide exposure.
- Analysis of a hydraulic cut-off switch from the collision with terrain involving the Airbus Helicopters AS350BA Squirrel, at Hobart Airport, Tasmania (AO-2017-109). Worn components in the switch had the potential to cause intermittent operation and delays in the restoration of the hydraulics system.
- Investigation of a fan blade failure from the engine of an Airbus A330 near Carnarvon, WA (AO-2017-066).
- Engine and propeller examination in support of the ongoing investigation into the Lockheed C-130 firebombing accident, near Cooma, NSW (AO-2020-007).
- Examination of components from the ongoing investigation into a landing gear failure involving a GippsAero GA-8 Airvan on Fraser Island, QLD (AO-2019-045).
- Examination of a rescue hoist cable from an Airbus Helicopters AS 350 B3, which found that improper stowage of the hook assembly was likely contributing to accelerated wear. This resulted the publication of an ATSB safety advisory notice to all helicopter operators involved in winching operations (AO-2020-013-SAN-001).

## Reporting

The ATSB's 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).

Of 78 occurrences investigated, 44 (56 per cent) were processed with summaries published on the ATSB website within one working day of the start of the investigation.

In 2019–20, 35 per cent of aviation occurrence notifications were processed and ready for publication within 10 working days. The average time for publishing was 25 working days.

## Confidential reporting

In 2019–20, the ATSB's Confidential Reporting Scheme (REPCON) received 150 notifications (of which 62 were classified as REPCONs). Of these 150 notifications, 91 concerned aviation (35 REPCONs), 54 concerned rail (24 REPCONs) and five concerned marine (three REPCONs).

Of the 150 notifications, 39 REPCONs were subsequently withdrawn by the reporter or were duplicate reports of the same concern (17 in aviation, 20 in rail, and two in marine).

Of the 29 REPCON reports completed in 2019–20, 19 (66 per cent) 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

The reporter raised a safety concern regarding the PAPI at [Location] aerodrome. The reporter advised that at that time of the year, the wind favours runway 26 for instrument approaches at [Location]. The RNAV instrument approach to this runway has a slope of 3.2 degrees. Airservices Australia has indicated that the 3.2 degree slope is clear of obstacles and safe to use; however the PAPI is set at 4 degrees, which results in four red lights throughout the entire approach. The reporter believed this was a safety issue and the PAPI needed to be immediately aligned with the approach slope or be switched off. Either way a false or nil PAPI is contrary to the appropriate operations for slope indications for RPT aircraft. The reporter advised that they had been requesting a resolution to the issue for some years and believed it necessary to report to ensure it was rectified in the interests of conforming to

regulations and safety. As a result of the REPCON, the regulator advised that based on the information received, the aerodrome operator was contacted and advised that PAPI needs to be realigned to the standard 3 degree slope with the lowest on-slope observed colour transition at 2d 48'. This is a significant change that will need to be completed by theodolite survey in accordance with the commissioning guidance included in CAAP 89T-1. Given the high threshold crossing height for this runway approach it appeared that the light projectors were originally positioned at a distance along the runway to suit a 3 degree slope and were subsequently elevated to 4 degrees after installation. Therefore, they should just be able to adjust the projectors down. The adjustment will need to be assessed and completed by a suitably competent person. In the short term a NOTAM was raised to communicate that the PAPI is not aligned with the approach procedures. Given that there are no RPT jet services the PAPI could also be removed from service, unless the airline prefers the guidance even though it is set too steep.

### Marine

A previous REPCON was re-opened following the reporter's concerns that previously agreed safety actions had not been actioned.

The concern related to the safety of cruise ship operations at [Location] operating without tugs in operation or on standby. The reporter was concerned that the risk assessment process to preclude the use of tugboats was insufficient and did not take into account any human factor error, which is documented to be a cause or contributing factor in 70 per cent of marine incidents. The reporter was further concerned that there was no provision for pilots to drop an anchor at [Location] due to risk of damaging infrastructure. The operator initially advised that the procedures for cruise ships entering and departing [Location] would be reviewed and risk assessed, and the regulator agreed to review those procedures. However, the reporter advised that this process had not yet occurred despite ample time to do so. As a result, the ATSB Marine Commissioner and Chief Commissioner met with the [Location] Harbour Master to discuss the concerns. The Port Authority offered to provide the ATSB with the draft independent report for review, which the ATSB is currently reviewing.

### Rail

The reporter raised a safety concern regarding proposed changes to policy that would see all in-field protection for R1 and R2 track machines operating within a Track Occupancy Authority removed. The reporter advised that the current procedures stated that in-field protection, rail traffic signals (detonators) and/or red boards, must be in place at the limits of the Track Occupancy Authority, where the track is obstructed or otherwise made unsafe for rail traffic. The proposed removal of all in-field protection enables track machines that are working clear of a set of points to potentially reach a set of points without the machine operator receiving any prior warning. A train travelling at road speed could potentially reach the same set of points at the same time, resulting in a train to train collision. As a result of the REPCON, the operator advised that they had developed a Safety Notice, which clarifies the requirements for placing stop signs to delineate the limits of the work on track authority. This notice is also consistent with the reporting party's mentioned local procedure. The operator re-affirmed that the current requirements include the Protection Officer clearly communicating the worksite limits to the operators of track vehicles, and making an assessment to determine if visual delineation of the limits is required. The Safety Notice mandates that, "Where the TOA limits are not defined by facing signals (e.g. clear of a set of points) there is a risk that the track vehicles could foul the adjacent line or depart from the TOA limits without authority."

## Educational publications

In 2019–20, the ATSB completed one education report: *Avoidable accidents – VFR into IMC accidents (second edition)*.

## Statistical reports

In 2019–20, the ATSB published two statistical reports:

- *A Safety Analysis of Aerial Firefighting Occurrences in Australia, July 2000 to March 2020*
- *Aviation Occurrence Statistics 2010 to 2019*.

These reports are available on the ATSB website at [www.atsb.gov.au](http://www.atsb.gov.au).

## Fostering safety awareness, knowledge and action

This section describes the ATSB's performance against the fostering safety awareness, knowledge and action deliverables set out on page 21 of the *ATSB Corporate Plan 2019–20*.

### Deliverables

To meet its objective of improving transport safety, the ATSB has committed to the following fostering safety awareness, knowledge and action deliverables:

- The ATSB will proactively influence safety awareness through communication and education activities including:
  - active stakeholder engagement at key industry events across the three modes
  - promoting the ATSB's SafetyWatch priorities
  - promoting the safety messaging of ATSB investigation reports through the targeted use of its website, email lists, social media channels and supplied content to industry publications and mainstream media
  - facilitating and shaping media coverage of ATSB investigations and safety awareness activities.
- The ATSB will assist with transport safety in the broader international region, through direct cooperation and the delivery of approved projects and other support activities provided for by program funding agreements, with a publication produced annually detailing the transport safety contribution of these activities.

### 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 ensuring 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.

#### SeaSafe 2019

Following on from the success of its FlySafe 2019 and RailSafe 2019 safety forums delivered in 2018–19, the ATSB facilitated the delivery of its inaugural maritime safety forum, SeaSafe 2019.

Strategically aligned with another major maritime industry event in order to maximise participation from key stakeholders, the ATSB delivered the SeaSafe 2019 Marine Safety Forum during the Marine Industry Australia Limited's two-day conference at the Pacific 2019 International Maritime Exposition in Sydney, 9–10 October 2019.

#### Other industry engagement

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. In 2019–20, this was impacted by the COVID-19 pandemic, which saw the majority of planned industry engagements cancelled or postponed until 2020–21.

Due to the pandemic period, the ATSB harnessed video conferencing and other digital technology to continue its engagement with industry at conferences and forums.

In 2019–20, this included participation in the following events:

- Australian Airports Association National Conference
- Australia and New Zealand Societies of Air Safety Investigators Conference
- Australian Aviation Psychology Association Symposium
- Australian Women Pilots' Association Annual Conference
- Civil Security Congress and Exposition
- International Transportation Safety Association Meeting
- Regional Aviation Association of Australia National Convention
- Rail Industry Safety and Standards Board's Rail Safety Conference
- Australian Helicopter Industry Association's RotorTech Conference and Exposition
- Royal Aeronautical Society's Lawrence Hargrave Memorial Lecture
- Safeskies Australia Conference
- Women in Aviation Career's Day
- Women in Aviation/Aerospace Australia Summit.

The ATSB also hosted a number of national and international 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

In 2019–20, the ATSB continued to promote its SafetyWatch initiative. SafetyWatch highlights the broad safety concerns that come from the ATSB's 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:

- too low on approach
- fatigue
- in-flight decision-making
- safe work on track
- data input errors
- non-controlled airspace
- safety risk of RPAS
- marine pilotage.

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

In order to remain contemporary, the ATSB will review its SafetyWatch priority areas and the effectiveness of the initiative during 2020–21.

## 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 2019–20. During the reporting period, the ATSB changed its focus from measuring against the increase of social media followers to measuring the increase in the overall number of engagements with its published content.

Since launching in 2015, the ATSB Facebook page has attracted more than 19,000 followers. This channel has been particularly effective in referring followers to view content published on the ATSB website. In 2019–20, engagement with the ATSB Facebook page increased by 23 per cent, compared to 2018–19.

The ATSB's Twitter account continues to be a key channel for highlighting the release of reports and investigation updates, particularly to the media. Through this social media platform, the ATSB can provide a short safety message along with a link to more information on its website.

By the end of June 2020, the ATSB's Twitter followers had increased to around 9,000, including journalists, transport industry specialists and members of the general public. Engagement with this channel increased by nine per cent compared to 2018–19.

The ATSB also utilises the LinkedIn professional networking social media platform, with more than 10,000 followers – a 100 per cent increase in subscribers across the year. Engagement with this channel decreased 17 per cent when compared against 2018–19.

In May 2019, the ATSB launched its Instagram account, which has since attracted more than 1,500 followers. Engagement with this channel cannot be measured due to no previous analytics, however, engagement during 2019–20 has increased, on average, by 23 per cent, quarter on quarter.

In 2019–20, the ATSB increased its engagement with audiences through videos, which were distributed to media and published across all of its social media channels.

The ATSB's YouTube channel saw a 27 per cent increase in subscribers across the year – the highest percentage increase in six years – and now has almost 1,100. During the reporting period, the ATSB published six videos to support the release of preliminary and final reports across all modes of transport, including:

- In November 2019, the ATSB published a video to promote the safety messaging of the final investigation report into the loss of containers overboard involving *YM Efficiency* (MO-2018-008). This video included aerial vision of the vessel provided by the AMSA, a professional voiceover, still images from the accident report and video commentary from the Investigator In Charge.
- In February 2020, the ATSB published a video to promote the release of the preliminary report into the collision with terrain of a Lockheed C-130 large air tanker during aerial firefighting operations north-east of Cooma, NSW on 23 January 2020, in which three aircrew were fatally injured. The video included drone footage of the accident site, provided by the NSW Police Force, still images from the accident report and video commentary from the ATSB's Chief Commissioner. The video was distributed through the ATSB's social media channels and has been viewed more than 6,800 times on YouTube and more than 15,000 times on Facebook.
- In April 2019, the ATSB published a video to promote the release of the preliminary report into the derailment of XPT ST23, which occurred near Wallan Station, north of Melbourne, Victoria on 20 February 2020. The video, which includes ATSB drone footage, commentary from the Chief Commissioner, and a Google Earth animation of the route taken by the train, has been viewed more than 1,600 times on YouTube and 4,300 times on Facebook.

## 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.

The ATSB's proactive media management activities include media conferences, interviews, media statements, pitches to journalists, opinion pieces and the distribution of pre-recorded content.

Throughout the year, the ATSB utilised its in-house media studio facility to produce and distribute 34 pieces of pre-recorded audio and video content for distribution to national radio and TV outlets.

The ATSB also managed responses to 540 media enquiries during 2019–20.

## 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 2019–20, the ATSB continued to highlight emerging safety issues and trends, using a range of communication channels and activities, for the benefit of industry and the travelling public.

## Website

The [atsb.gov.au](https://www.atsb.gov.au) website continues to be the ATSB's principal communication channel. In 2019–20, the ATSB website supported 2,269,177 page views and 852,537 user sessions.

The ATSB continually evolves its website to meet audience needs and allow for new and emerging technologies, and is a central element of the ATSB's response to the Australian Government's 'digital first' agenda. During 2020–2021, the ATSB will progress towards the introduction of a new website platform.



## 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 [www.atsb.gov.au](http://www.atsb.gov.au).

In 2019–20, the National Aviation Occurrence Database had 6,234 page views.

## Stakeholder survey

Safety education is a critical component of the work of the ATSB, as it fosters safety awareness, knowledge and action. To measure the effectiveness of its engagement and communication with stakeholders, the ATSB distributed its annual stakeholder survey via its website and social media channels. The ATSB also asked several aviation, rail and marine transport associations to help broaden the scope of respondents by disseminating a link to the survey to their members.

Over 740 respondents – a 22 per cent increase in respondents on last year – completed the 2020 online survey, which asked stakeholders 10 questions. The questions focused on the respondent's recollection of ATSB safety products and issues relevant to their industry. The results of this survey continue to help guide the ATSB's future communications and education activities.

## Partnership with the RMIT University

Following an announcement in February 2019, the ATSB's strategic partnership with RMIT University saw one of Australia's leading tertiary institutions offer transport safety investigator qualifications. In July 2019, the first cohort of students began their studies for the Graduate Certificate in Transport Safety Investigation, with the course completed in January 2020. Twenty-two ATSB investigators, one OSTI and one CITS investigator also completed the qualification. A broad range of industry-based personnel also attended.

The partnership provides industry in Australia and throughout the Asia Pacific region with access to high-quality training in transport accident investigation as well as providing a framework to facilitate important transport safety-related research through a credible university-based methodology. The ATSB continues to work with RMIT University on further refinement and collaborative development of the four units for this qualification; the units in the Graduate Diploma are also being designed.

## Regional cooperation

The ATSB has a significant program of regional engagement, underpinned by the ATSB's 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's 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.

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 Papua New Guinea (PNG), consistent with the Memorandum of Understanding on Cooperation in the Transport Sector.

## Indonesia

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

The three main strands of the ATSB–NTSC program of activities include:

- provision of NTSC investigator training and professional development
- guiding and mentoring of NTSC investigators by ATSB investigators
- development of the NTSC transport recorder capability.

Significant ATSB–NTSC achievements under the ITSAP program include:

- a significant number of professional development and training opportunities for NTSC investigators undertaken in Australia across all modes
- increased capability in transport safety fire investigation, with a specific training course delivered to the NTSC and other Indonesian transport safety participants in Jakarta, Indonesia
- well-developed NTSC capability for the download and analysis of aircraft flight data recorder (FDR) and cockpit voice recorder (CVR) 'black boxes'.

Notably, there is also the ongoing cooperation in the context of the Lion Air B373 MAX investigation, which at the time included the ATSB deploying transport safety investigators to assist with the download of data from the FDR and CVRs. This cooperation continued throughout 2019–20 with the ATSB providing investigation analysis and report writing guidance and mentoring to NTSC investigators.

## Papua New Guinea

Under the PNG Memorandum of Understanding on Cooperation in the Transport Sector, the ATSB has an ongoing program of cooperation and capability-building with the PNG Accident Investigation Commission (AIC), PNG's aviation safety investigation agency.

Key elements of the ATSB–AIC program include:

- mentoring and coaching of AIC investigators
- training and professional development for AIC investigators
- technical support for AIC investigations.

## Financial performance update

This section should be read in conjunction with the ATSB's audited financial statements for 2019–20 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 of \$0.84 million for 2019–20, compared to a deficit of \$0.64 million in 2018–19. Excluding depreciation and amortisation, the ATSB realised an underlying deficit of \$0.04 million which compares to a \$0.06 million surplus in 2018–19.

The ATSB's new capital requirements are detailed in its Departmental Capital Budget published in the *2018–19 Portfolio Budget Statements*. Over time, the ATSB's 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 5: Summary of financial performance and position**

	2019–20 \$M	2018–19 \$M
Revenue from Government	20.2	20.2
Own-source income	5.0	6.0
Total income	25.2	26.2
Employee expenses	16.0	16.0
Supplier expenses	7.9	10.1
Depreciation and amortisation	2.2	0.7
Finance Costs	0.1	0.0
Total expenses	26.2	26.8

		2019–20 \$M	2018–19 \$M
Operating surplus/(deficit)		(0.8)	(0.6)
Financial assets	A	8.6	21.9
Non-financial assets	B	11.0	2.6
Liabilities	C	14.4	4.8
Net Assets – A + B – C		5.2	19.6

## SECTION 4 – SIGNIFICANT SAFETY INVESTIGATIONS

### Significant safety investigations

The following is a summary of the significant safety investigations that were completed and published during 2019–20 across aviation, marine and rail.

#### Aviation

##### **Collision with terrain involving SOCATA TB-10 Tobago, VH-YTM, near Mount Gambier Airport, South Australia on 28 June 2017 (AO-2017-069)**

On 28 June 2017, the pilot of a SOCATA TB-10 Tobago aircraft, registered VH-YTM, was conducting a community service flight from Mount Gambier Airport, South Australia, to Adelaide, South Australia. The flight was organised by the charity Angel Flight to transport a passenger for medical treatment and an accompanying family member. The aircraft took off at 1020 Central Standard Time as a private flight operating under visual flight rules. After reaching a height of 300 ft, the aircraft descended and impacted terrain about 70 seconds after take-off. The pilot and both passengers were fatally injured and the aircraft was destroyed.

**Figure 1: Accident site, showing the engine and propeller location, the left and right wing impact marks and the main wreckage**



Source: South Australia Police, annotated by ATSB

The full ATSB investigation report (AO-2017-069) is available on the ATSB website at [www.atsb.gov.au](http://www.atsb.gov.au).

##### **Collision with terrain following an engine power loss involving Cessna 172M, VH-WTQ, 12 NM (22km) north-west of Agnes Water, Queensland on 10 January 2017 (AO-2017-005)**

On 10 January 2017, at about 1030 Eastern Standard Time, a Cessna 172M, registered VH-WTQ, departed Agnes Water aeroplane landing area (ALA), Queensland on a passenger charter flight to a beach ALA on Middle Island. There was a pilot and three passengers on board.

At about 1038, the pilot was conducting an airborne inspection of the beach ALA to ensure that it was suitable for a landing. During the inspection, when the aircraft was at about 60 ft above mean sea level (AMSL), the aircraft's engine had a sudden and total power loss.

After conducting initial checks, the pilot elected to conduct a significant left turn to the beach. During the continued turn, the aircraft impacted the beach with little or no control and a significant descent rate. One of the rear-seat passengers was fatally injured and the other three occupants sustained serious injuries. The aircraft was destroyed.

The full ATSB investigation report (AO-2017-005) is available on the ATSB website at [www.atsb.gov.au](http://www.atsb.gov.au).

## Collision with water involving Grumman American Aviation Corp G-73, VH-CQA, 10 km WSW of Perth Airport, Western Australia on 26 January 2017 (AO-2017-013)

On 26 January 2017, the pilot of a Grumman American Aviation Corp G-73 amphibian aircraft, registered VH-CQA (CQA), was participating in an air display as part of the City of Perth Australia Day Skyworks event. On board were the pilot and a passenger. The pilot of CQA was flying 'in company' with a Cessna Caravan amphibian and was conducting operations over Perth Water on the Swan River, that included low-level passes of the Langley Park foreshore.

After conducting two passes in company, both aircraft departed the display area. The pilot of CQA subsequently requested and received approval to conduct a third pass, and returned to the display area without the Cessna Caravan. During positioning for the third pass, the aircraft departed controlled flight and collided with the water. The pilot and passenger were fatally injured.

**Figure 2: CQA air display flight track, showing the first pass in yellow, the second in magenta and the third in red**



Source: Google Earth, modified by the ATSB

The full ATSB investigation report (AO-2017-013) is available on the ATSB website at [www.atsb.gov.au](http://www.atsb.gov.au).

## Loss of control and collision with terrain involving Cessna 441, VH-XMJ, 4 km west of Renmark Airport, South Australia on 30 May 2017 (AO-2017-057)

On 30 May 2017, a twin-engine Cessna 441 Conquest II (Cessna 441), registered VH-XMJ and operated by AE Charter (trading as Rossair) departed Adelaide Airport, South Australia for a return flight via Renmark Airport, South Australia.

On board the aircraft were:

- an inductee pilot undergoing a proficiency check, flying from the front left control seat
- the chief pilot conducting the proficiency check, and under assessment for the company training and checking role for Cessna 441 aircraft, seated in the front right control seat
- a Civil Aviation Safety Authority (CASA) flying operations inspector, observing and assessing the flight from the first passenger seat directly behind the inductee pilot.

Each pilot was qualified to operate the aircraft.

The flight departed Adelaide at about 1524 local time and flew to the Renmark area for exercises related to the check flight, followed by a landing at Renmark Airport. After a short period of time running on the ground, the aircraft departed from runway 25 at about 1614.

A distress beacon broadcast was subsequently received by the Joint Rescue Coordination Centre and passed on to air traffic services at 1625. Following an air and ground search the aircraft was located by a ground party at 1856 about 4 km west of Renmark Airport. All on board were fatally injured and the aircraft was destroyed.

**Figure 3: Accident site and wreckage of VH-XMJ**



Source: News Corp Australia, annotated by the ATSB

The full ATSB investigation report (AO-2017-057) is available on the ATSB website at [www.atsb.gov.au](http://www.atsb.gov.au).

## Rail

### Collision with floodwater involving freight train 6792, Little Banyan Creek, Queensland on 7 March 2018 (RO-2018-007)

At 0152 on 7 March 2018, freight train 6792, operated by Aurizon, departed Cairns, Queensland, for a journey on Queensland Rail's North Coast Line. A condition affecting the network (CAN) due to wet weather had been declared, and the train crew were required to operate at controlled speed for a significant part of the journey, which meant they were to be able to stop short of an obstruction within half the distance of clear line that was visible ahead.

At 0612, the train rounded the curve prior to the Little Banyan Creek rail bridge, which was under 0.6 m of flowing water. With a sighting distance of about 60 m to the bridge, the train's speed (50 km/h) was significantly in excess of the controlled speed, and the train entered the floodwater. The train crew were not injured, but there was some damage to the train's rolling stock, caused by immersion in water.

**Figure 4: Little Banyan Creek rail bridge**



Source: QR

The full ATSB investigation report (RO-2018-007) is available on the ATSB website at [www.atsb.gov.au](http://www.atsb.gov.au).

## Marine

### **Loss of containers overboard from *YM Efficiency*, 16 NM east-south-east of Newcastle, New South Wales on 1 June 2018 (344-MO-2018-008)**

At about 0035 on 1 June 2018, *YM Efficiency* was en route to Sydney, steaming slowly into strong gale force winds and very rough seas off Newcastle when it suddenly rolled heavily. As a result, 81 containers were lost overboard and a further 62 were damaged. The ship also sustained structural damage to its lashing bridges, superstructure and accommodation ladder. The ship spent a further 5 days at sea before berthing in Sydney on 6 June.

At the time of publication, searches including remote underwater surveys had identified 66 containers with a few washed ashore or close offshore. Five containers have been removed with 15 containers yet to be found. The accident resulted in substantial debris washing ashore on New South Wales beaches.

**Figure 5: Damaged containers in bays 52 and 56**



Source: ATSB

The full ATSB investigation report (344-MO-2018-008) is available on the ATSB website at [www.atsb.gov.au](http://www.atsb.gov.au).

## 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 2019–20, the ATSB identified the following number of safety issues.<sup>2</sup>

**Table 6: Number of safety issues identified in 2019–20**

Safety issue risk	Aviation	Marine	Rail	Total
Critical	0	0	0	0
Other	23	4	27	54
<b>Total</b>	<b>23</b>	<b>4</b>	<b>27</b>	<b>54</b>

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 2019–20* specify, as two of the ATSB's key performance indicators (KPIs), that:

- safety action is taken by stakeholders to address 100 per cent of critical safety issues identified
- safety action is taken by stakeholders to address 70 per cent of all other safety issues identified.

## KPI status of safety issues identified in 2019–20

There were no critical safety issues identified through ATSB investigations in 2019–20.

The breakdown of other safety issues, by transport mode, is summarised in Table 7.

**Table 7: Status of other safety issues identified in 2019–20**

Status of safety issues	Aviation	Marine	Rail	Percentage
Adequately addressed	9	4	15	55%
Partially addressed	1	0	2	6%
Not addressed	1	0	0	2%
No longer relevant	5	0	0	10%
Safety action still pending	7	0	7	27%
<b>Total</b>	<b>23</b>	<b>4</b>	<b>24</b>	<b>100%</b>

<sup>2</sup> Includes safety issues identified through rail investigations conducted on behalf of the ATSB by OTSI NSW and CITS Victoria.

## Responses to safety issues identified in 2019–20

The tables below document each safety issue identified in 2019–20 and its current status assigned by the ATSB, along with the justification for that status.

### Aviation

**Table 8: Aviation – Responses to other safety issues identified in 2019–20**

Safety issue	Status	Status justification
<b>AO-2015-089: In-flight break-up involving Cicaré S.A. CH-7BT helicopter, VH-JEW, near Roy Hill Station, Western Australia, on 28 July 2015</b>		
AO-2015-089-SI-01: The Cicaré 7T/B/BT mandatory service bulletin (BSC007) for the general stabiliser support assembly provided limited guidance for disassembly of the manufactured component and did not stipulate a compliance period within which to perform the inspection nor provide consideration for repeat inspections. This potentially reduced the opportunity to detect the presence of crack initiation and growth in the stabiliser support assembly.	Closed-Adequately addressed	The ATSB is satisfied that, with the inclusion of BSC007 in the maintenance manual and a clear direction to inspect the stabiliser assembly every 100 hours, cracking in this location will likely be identified prior to failure. Additionally, Cicaré have redesigned the component, and all new Cicaré 7 series helicopters will be fitted with the new design, which is also available for retrofit on earlier helicopters.
<b>AO-2017-005: Collision with terrain following an engine power loss involving Cessna 172M, VH-WTQ, 12 NM (22 km) north-west of Agnes Water, Queensland on 10 January 2017</b>		
AO-2017-005-SI-01: The operator normally conducted airborne inspections of the Middle Island aeroplane landing area at about 50–100 ft while flying at normal cruise speed towards an area of water, and its procedures did not ensure the effective management of the risk of an engine failure or power loss when at a low height.	Closed-No longer relevant	Following the accident, the operator ceased flight operations.
AO-2017-005-SI-02: Although the operator's procedures required that actual weights be used for passengers, baggage and other cargo, this procedure was routinely not followed, and pilots relied on estimated weights when calculating an aircraft's weight and balance.	Closed-No longer relevant	Following the accident, the operator ceased flight operations.
AO-2017-005-SI-03: Although the operator's procedures required that baggage and cargo be secured during flight, this procedure was routinely not followed, and the aircraft were not equipped with cargo nets or other means for securing loads in the baggage compartment.	Closed-No longer relevant	Following the accident, the operator ceased flight operations.
AO-2017-005-SI-04: The operator's pilots routinely conducted near-aerobatic manoeuvres during passenger charter flights. However, procedures for these manoeuvres were not specified in the operator's Operations Manual, and there were limited controls in place to manage the risk of these manoeuvres.	Closed-No longer relevant	Following the accident, the operator ceased flight operations.
AO-2017-005-SI-05: There were a significant number and variety of problems associated with the operator's activities that increased safety risk, and the operator's chief pilot held all the key positions within the operator's organisation and conducted most of the operator's flights. Overall, there were no effective mechanisms in place to regularly and independently review the suitability of the operator's activities, which enabled flight operations to deviate from relevant standards.	Closed-No longer relevant	Following the accident, the operator ceased flight operations. Some of the regulatory changes being introduced under Civil Aviation Safety Regulation (CASR) Part 119 and Part 135 may also help address these types of issues in some small passenger transport operators (see Additional safety action).

AO-2017-005-SI-06: Upper torso restraints (UTRs) were not required for all passenger seats for small aeroplanes manufactured before December 1986 and helicopters manufactured before September 1992, including for passenger transport operations. Although options for retrofitting UTRs are available for many models of small aircraft, many of these aircraft manufactured before the applicable dates that are being used for passenger transport have not yet been retrofitted.	Closed-Not addressed	No changes in mandatory requirements for upper torso restraints have occurred, even for air transport operations involving small aircraft for which mandatory service bulletins exist.
AO-2017-005-SI-07: There was no requirement for operators of passenger transport flights in aircraft with six or less seats to provide passengers with a verbal briefing, or written briefing material, on the brace position for an emergency landing or ditching, even for aircraft without upper torso restraints fitted to all passenger seats.	Safety action still pending	
AO-2017-005-SI-08: The Civil Aviation Safety Authority's procedures and guidance for scoping a surveillance event included several important aspects, but it did not formally include the nature of the operator's activities, the inherent threats or hazards associated with those activities, and the risk controls that were important for managing those threats or hazards.	Closed-Adequately addressed	The ATSB is satisfied that the changes introduced by CASA, if consistently implemented, will reduce the risk of this safety issue.
<b>Safety issue</b>	<b>Status</b>	<b>Status justification</b>
<b>AO-2017-013: Collision with water involving Grumman American Aviation Corp G-73, VH-CQA, 10 km WSW of Perth Airport, Western Australia on 26 January 2017</b>		
AO-2017-013-SI-01: The Civil Aviation Safety Authority (CASA) did not have an effective framework to approve and oversight air displays, predominantly due to the following factors: * 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. * 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 * CASA did not have a structured process to ensure that risks were both identified 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.	Safety action still pending	
<b>Safety issue</b>	<b>Status</b>	<b>Status justification</b>
<b>AO-2017-066: Engine failure involving Airbus A330, 9M-XXE, near Carnarvon, Western Australia, on 25 June 2017</b>		
AO-2017-066-SI-01: The Trent 700 blade manufacturing process produced a variation in internal membrane-to-panel acute corner geometry, that, in combination with the inherent high level of blade panel stress, could lead to increased localised stresses in those corner areas and the initiation and propagation of fatigue cracking.	Closed-Adequately addressed	While Roll-Royce are continuing to work on gaining an understanding of the manufacturing processes that may influence the acute corner radius, the ATSB is satisfied that the blade improvements are sufficient on their own to reduce the likelihood of further fatigue crack initiation in Trent 700 fan blades.
AO-2017-066-SI-02: The scheduled inspections recommended by Rolls-Royce to detect cracking in Trent 700 fan blades, were insufficient to detect early onset fatigue cracks in the membrane to panel bond before those cracks could progress to failure.	Closed-Adequately addressed	The likelihood of further fan blade failures has been reduced due to the actions taken by the engine manufacturer, including the enhanced inspection technique with smaller intervals, and the removal of the blades that have an increased probability of failure through stress induced cracking.

Safety issue	Status	Status justification
<b>AO-2017-069: Collision with terrain involving SOCATA TB-10 Tobago, VH-YTM, near Mount Gambier Airport, South Australia, on 28 June 2017</b>		
AO-2017-069-SI-01: Angel Flight did not consider the safety benefits of commercial passenger flights when suitable flights were available.	Safety action still pending	
AO-2017-069-SI-02: Angel Flight had insufficient controls in place, and provided inadequate guidance to pilots to address the additional operational risks associated with community service flights.	Safety action still pending	
AO-2017-069-SI-03: There were limited opportunities for Angel Flight to be made aware of any safety related information involving flights conducted on its behalf.	Closed-Adequately addressed	The combination of the requirement implemented by Angel Flight Australia for pilots to report safety occurrences to the organisation in addition to normal ATSB reporting requirements, and the ongoing introduction of community service flight activity type in BITRE activity and ATSB occurrence databases, will increase the availability of safety information in the community service flight sector.
AO-2017-069-SI-04: The Civil Aviation Safety Authority did not have a system to differentiate between community service flights and other private operations, which limited its ability to identify risks. This hindered the Civil Aviation Safety Authority's ability to manage risks associated with community service flights.	Closed-Adequately addressed	The ATSB notes that through the legislative instrument that came into force in March 2019, CASA now has a system to differentiate between community service flights and other private operations. This will allow CASA to conduct ongoing identification and monitoring of risks associated with community service flights to be able to it to manage and control those risks.
Safety issue	Status	Status justification
<b>AO-2017-098: Pressurisation event involving Airbus A320, PK-AXD, 160 NM (300 km) north of Perth, Western Australia, on 15 October 2017</b>		
AO-2017-098-SI-01: The pre-flight safety briefing and safety information card did not include a clear instruction on how to activate the flow of oxygen from the passenger oxygen masks and that the bag may not inflate when oxygen is flowing. This resulted in some passengers not understanding whether or not there was oxygen flowing in the mask.	Closed-Adequately addressed	AirAsia Indonesia have implemented changes in accordance with the safety issue raised by the ATSB. This included amending its passenger safety briefing cards and passenger announcement to include the instruction that if oxygen masks deploy the passengers must pull down on them firmly, and that the oxygen mask bags may not inflate during use. The action taken is considered to adequately address the safety issue.
Safety issue	Status	Status justification
<b>AO-2018-007: Engine failure involving Airbus Industrie A330-323, registered 9M-MTM, 37 km north of Curtin Airfield, Western Australia on 18 January 2018</b>		
AO-2018-007-SI-01: There were a total of 16 engine malfunction events globally over a 4-year period attributed to modification of the Advantage 70™ engine. The modification increased the engine outer duct gas path temperature, which led to distortion and liberation of the outer transition duct segments.	Safety action still pending	

Safety issue	Status	Status justification
<b>AO-2018-025: Runway excursion and collision with terrain involving Van's RV-6A, VH-OAJ, Somersby, New South Wales, on 18 March 2018</b>		
AO-2018-025-SI-01: The Civil Aviation Advisory Publication for Aeroplane Landing Areas (92-1(1)) did not have guidance for the inclusion of a safe runway overrun area.	Safety action still pending	
Safety issue	Status	Status justification
<b>AO-2019-014: Ground handling event involving Kavanagh B-400 Balloon, VH-LNB, near Coldstream, Victoria, on 16 March 2019</b>		
AO-2019-014-SI-01: Picture This Ballooning's safety risk management processes and practices were not sufficient to facilitate the identification of key operational risks associated with vehicle-assisted deflation.	Closed-Adequately addressed	The ATSB agrees that compliance with the requirements of Part 131 will likely facilitate the identification of key operational risks including those associated with vehicle-assisted deflation. Prior to the introduction of Part 131, the operator's review of their own safety management processes and practices and an annual, industry-wide review will also likely facilitate the identification of key operational risks.
AO-2019-014-SI-02: Picture This Ballooning did not have any procedures for conducting vehicle-assisted deflation.	Closed-Adequately addressed	The ATSB is satisfied that these procedures should significantly reduce the likelihood of basket tipping and personnel injury when conducting a vehicle-assisted deflation.
AO-2019-014-SI-03: The Civil Aviation Safety Authority provided no guidance for operators concerning the risks associated with vehicle-assisted deflation.	Open-Safety action pending	
Safety issue	Status	Status justification
<b>AO-2019-019: Pitch trim runaway and partial loss of control involving Pilatus PC-12/47E, VH-OWJ, near Merredin, Western Australia, on 14 April 2019</b>		
AO-2019-019-SI-01: The similarities between the Trim Interrupt and Flap Interrupt switches and the proximal location of the two switches unnecessarily increased the risk of mis-selection and contributed to the excessive out-of-trim condition.	Closed-Partially addressed	The safety action nominated by Pilatus may result in less need for pilots to use the Trim Interrupt switch (due to more reliable relays) and training guidance may increase the probability of the correct switch being selected in the case of a trim runaway event. However, the two switches do remain identical and co-located, and given the Flap Interrupt switch is no longer required, there is potential for engineering controls to eliminate the mis-selection of the interrupt switches and associated possible loss of control.

## Marine

**Table 9: Marine – Responses to safety issues identified in 2019–20**

Safety issue	Status	Status justification
<b>MO-2017-010: Grounding of the bulk carrier Orient Centaur at Weipa, Queensland on 6 November 2017</b>		
MO-2017-010-SI-01: Tugs were to be available to escort the mini cape-size ships until they had entered the South Channel, where they were stood down. However, the tug masters had not been trained in the specifics of escort towage nor in emergency response.	Closed-Adequately addressed	The action taken by training all pilots and tug masters in emergency response and escort towage adequately address the issue.
MO-2017-010-SI-02: In pre-trial simulations, the risks associated with engine failure during departure were only considered up to when a ship had entered the South Channel. Consequently, the tugs were not in attendance to assist if propulsion was lost.	Closed-Adequately addressed	The action taken by mandating the use of an escort tug from the wharf and throughout the South Channel to Beacon SC4, and additional tug availability, should adequately address the issue.
Safety issue	Status	Status justification
<b>MO-2018-001: Serious injury on board Berge Daisetsu, Portland, Victoria, on 11 January 2018</b>		
MO-2018-001-SI-01: The fall arrest equipment used was incorrectly attached to the workers on the suspended platform. Consequently, had either of them fallen from the platform the equipment would not have worked correctly, resulting in serious or fatal injuries.	Closed-Adequately addressed	The safety actions taken by Berge Bulk Maritime will significantly reduce the likelihood of a similar future occurrence. The training, equipment and machinery changes implemented and progressing should greatly reduce the likelihood of similar issues with working aloft and appropriate use of PPE in the future.
Safety issue	Status	Status justification
<b>MO-2018-008 344: Loss of containers overboard involving YM Efficiency, 16 NM east-south-east of Newcastle, New South Wales, on 1 June 2018</b>		
MO-2018-008-SI-01: The ship's manager's (Yang Ming) cargo-planning process ashore did not ensure that the proposed container stowage plan complied with the stowage and lashing forces requirements of the ship's Cargo Securing Manual. Consequently, compliance with these requirements relied entirely on shipboard checks, made at a late stage, with limited options available for amendments without unduly impacting commercial operations.	Closed-Adequately addressed	The inclusion of lashing forces checks during the shore planning process is a practical means of reducing the risk of unsafe container stowage plans being presented to the ship at a late stage in the container shipping process. Familiarisation and training provided to shore planners should ensure that the outcomes of the lashing forces checks are understood and will allow effective action to be taken at an early stage. This provides assurance that container stowage plans presented to ships are as safe as practically possible.

## Rail

**Table 10: Rail – Responses to other safety issues identified in 2019–20**

Safety issue	Status	Status justification
<b>RO-2016-008: Track worker fatally injured when struck by train W510, Clyde, New South Wales, on 18 June 2016</b>		
RO-2016-008-SI-01: Sydney Trains' work-planning process, involving multiple work groups, did not assure the consideration of worksite safety for all tasks undertaken by each involved party over the duration of the work and when returning the rail infrastructure into service.	Closed-Partially addressed	The ATSB is satisfied that once implemented, all maintenance work parties can complete maintenance work in the planned maintenance windows. There remains an opportunity for maintenance work, such as booking points out and back in to occur outside of the planned maintenance windows. However, it remains the responsibility of the Protection Officer to follow the rules and ensure they protect themselves as required.
RO-2016-008-SI-02: The network rules and procedures require communications to be clear, brief and unambiguous. Network communications by various parties in Sydney Trains were not in accordance with the principles underpinning the network rules.	Closed-Adequately addressed	The ATSB is satisfied that this Audio Monitoring System will improve the safety critical communications as it is used to audit network communications for compliance and to identify improvement opportunities.
RO-2016-008-SI-03: The worksite protection method presented an increased risk, in that track workers might inadvertently exit the worksite, and subsequently be in the immediate vicinity of operational main line rail traffic. Sydney Trains network rules and procedures for a Track Occupancy Authority did not manage the increased risk for the chosen worksite protection method.	Closed-Partially addressed	The action taken by Sydney Trains does not make any change to the TOA network rule, however Sydney Trains seeks to address the risk by bolstering other network rules that require the protection officer to plan and deliver worksite protection arrangements. The more specific instruction decreases ambiguity for the protection officer. Further, the program to improve safety culture, if successful, will provide greater impetus for workers to adhere to the rules.
RO-2016-008-SI-04: The Sydney Trains worksite briefing process did not compel a new work group to seek a worksite protection pre-work briefing when accessing an existing worksite.	Closed-Adequately addressed	The changes in the document NRF014 Worksite Protection Pre-work Briefing make it clear that all workers on a worksite are required to be briefed on both the protection measures and the work to be performed.
Safety issue	Status	Status justification
<b>RO-2017-014: Derailment of grain train 8838N, Narwonah, New South Wales, on 1 October 2017</b>		
RO-2017-014-SI-01: There were track defects identified in the vicinity of the derailment site prior to the derailment. The maintenance of defects in this section of track was not successful in preventing the defects from re-occurring.	Closed-Adequately addressed	The safety action addresses the issue at the location of the derailment and changes have been made to address maintenance issues on a more systemic level.

Safety issue	Status	Status justification
<b>RO-2018-004: Collision of Waratah passenger train A42 with buffer stop at Richmond Station, New South Wales, on 22 January 2018</b>		
RO-2018-004-SI-01: The crash energy management system on the Waratah passenger train A42 reduced the impact force of the collision but not all components performed as designed. The performance of the crash energy management system was significantly limited by the buffer stop at Richmond being incompatible with the front of the Waratah train.	Closed-Adequately addressed	The ATSB notes that the actions taken to examine the behaviour of the CEMS on A42 and the implementation of a compatible buffer stop design, once implemented, should address the safety issue.
RO-2018-004-SI-02: When A42 collided with buffer stop at Richmond Station No. 2 platform, the reinforced concrete end stop of the buffer stop withstood the impact of the collision and prevented the train from crossing into a pedestrian and main road precinct. The two hydro-pneumatic rams on the front of the buffer stop did not perform their intended function. They were not aligned with the front of the Waratah train and instead of absorbing energy from the collision, they penetrated the cavity either side of the front-of-train coupler.	Closed-Adequately addressed	The ATSB notes that the action to replace the buffer stops at Richmond, once implemented, should address the safety issue.
RO-2018-004-SI-03: Sydney Trains' risk management procedures did not sufficiently mitigate risk to the safe operation of trains in circumstances when there were deficiencies in the buffer stop design at Richmond and at other locations.	Closed-Adequately addressed	The ATSB notes that the action initiated by Sydney Trains, once implemented, should address the safety issue.
RO-2018-004-SI-04: Sydney Trains' risk management procedures did not sufficiently mitigate risk to the safe operation of trains in circumstances where the presence of an intermediate train stop at Richmond may have reduced the risk of trains approaching the station at excessive speed.	Open - Safety action still pending	The ATSB notes that the action taken at Richmond has addressed the safety issue. The implementation of ATP, when complete, should address the issue network-wide.
RO-2018-004-SI-05: The rostering of the driver in the days leading up to the incident was inconsistent with Sydney Trains' rostering procedures.	Open - Safety action still pending	
Safety issue	Status	Status justification
<b>RO-2018-007: Collision with floodwater involving freight train 6792, Little Banyan Creek, Queensland, on 7 March 2018</b>		
RO-2018-007-SI-01: Queensland Rail did not have an effective means of ensuring that, during situations such as a condition affecting the network (CAN), network control personnel were aware of the relevant weather monitoring systems that were unserviceable.	Closed-Adequately addressed	The ATSB is satisfied that the safety actions taken by Queensland Rail will reduce the risk of this safety issue.
RO-2018-007-SI-02: Queensland Rail did not have procedures that required network control personnel to actively search for information about track conditions ahead of a train during situations such as a condition affecting the network (CAN), when conditions had the realistic potential to have deteriorated since the last patrol or train had run over the relevant sections.	Closed-Adequately addressed	The ATSB is satisfied that the safety actions taken by Queensland Rail will reduce the risk of this safety issue.
RO-2018-007-SI-03: Queensland Rail did not have any restrictions on the distance or time that controlled speed could be used as a risk control for safe train operation in situations such as a condition affecting the network (CAN). The effectiveness of controlled speed has the significant potential to deteriorate over extended time periods due to its effect on driver workload, vigilance, fatigue and risk perception.	Safety action still pending	
RO-2018-007-SI-04: Aurizon's procedures and guidance for two-driver operation during situations such as a condition affecting the network (CAN) did not facilitate the effective sharing of duties and teamwork to minimise the potential effects of degraded conditions on driver workload and fatigue.	Safety action still pending	



Safety issue	Status	Status justification
<b>RO-2018-010: Track obstruction due to loss of freight from train 7WB3 and subsequent impact of passenger train NT32 with track obstruction near Telegraph Point, New South Wales, on 17 June 2018</b>		
RO-2018-010-SI-01: While the Freight Loading Manual was available to customers, Pacific National did not actively advise them when they had a responsibility identified by the manual. Further, they did not have a process for ensuring that customers complied with the manual's requirements.	Closed-Adequately addressed	The ATSB is satisfied that Pacific National has developed and implemented processes which increase customer awareness of, and compliance with their Freight Loading Manual requirements.
RO-2018-010-SI-02: Pacific National's training course for the loading and securing of freight, and their verification of competency checks for inspection staff, did not include the Freight Loading Manual requirements for non-standard and modified containers.	Closed-Adequately addressed	The ATSB is satisfied that Pacific National has developed and implemented processes to ensure that terminal operators are trained in, and practice their Freight Loading Manual requirements.
Safety issue	Status	Status justification
<b>RO-2018-015: Non-Operation of level crossing protection at Colac, Victoria on 22 September 2018</b>		
RO-2018-015-SI-01: V/Line did not have a documented detailed process for inhibiting and reinstating level crossing protection equipment.	Closed-Adequately addressed	The ATSB is satisfied that the safety action taken by V/Line addresses the safety issue.
Safety issue	Status	Status justification
<b>RO-2018-019: Parting of Metro Trains Melbourne passenger train TD 3817 at Croydon, Victoria on 9 November 2018</b>		
RO-2018-019-SI-01: The wiring error was not detected by Metro Train Melbourne's verification program.	Closed-Adequately addressed	Safety action taken by Metro Trains Melbourne will mitigate the risk of future wiring errors with respect to this modification.
Safety issue	Status	Status justification
<b>RO-2018-020: Signalling irregularity involving train DP41, Eagle Junction, Queensland, on 23 September 2018</b>		
RO-2018-020-SI-01: Queensland Rail did not have a procedure in place to cross-check a master circuit diagram with the existing configuration of the in-field equipment before using the diagram for safety critical work. This removed an opportunity to detect any error in master circuit diagrams.	Closed-Adequately addressed	The ATSB is satisfied that the action taken by Queensland Rail will ensure that any errors with a master circuit diagram will be identified prior to the installation of new equipment.
Safety issue	Status	Status justification
<b>RO-2018-021: Near miss with rail safety worker by trains 89-K and 88-C, near Redfern, New South Wales, on 8 September 2018</b>		
RO-2018-021-SI-01: Sydney Trains' control of the access and egress to the project worksite did not ensure that all workers entering the worksite were identified and received an induction.	Safety action still pending	
Safety issue	Status	Status justification
<b>RO-2019-010: Derailment of freight train 7MB9, Goulburn, New South Wales on 31 March 2019</b>		
RO-2019-010-SI-02: Post-incident inspection of the derailment site identified a number of factors that increased the risk of a derailment in the refuge and main line. ARTC's maintenance activities had identified some but not all of these factors prior to the derailment	Safety action still pending	
RO-2019-010-SI-03: ARTC's network rules did not provide suitable guidance to assess continued safe operation when responding to track circuit faults. Additionally, the network rules permitting signals to be passed at Stop did not require a reduction in speed when the condition of the track was unknown.	Safety action still pending	

## Safety actions

**Table 11: Number of safety actions released in 2019–20**

Safety action type	Aviation	Marine	Rail	Total
Proactive safety action <sup>3</sup>	14	4	21	39
Safety advisory notice	3	0	0	3
Safety recommendation	8	0	1	9
<b>Total</b>	<b>25</b>	<b>4</b>	<b>22</b>	<b>51</b>

## ATSB recommendations closed in 2019–20

There were no marine safety recommendations closed in 2019–20.

### Aviation

**Table 12: Aviation – ATSB recommendations closed in 2019–20**

<b>Investigation</b>	<b>AO-2013-226: In-flight break-up involving de Havilland DH 82A Tiger Moth, VH-TSG, 300 m east of South Stradbroke Island, Queensland, 16 December 2013</b>
<b>Safety issue</b>	Over 1,000 parts were approved by the Civil Aviation Safety Authority for Australian Parts Manufacturer Approval using a policy that accepted existing design approvals without the authority confirming that important service factors, such as service history and life-limits, were appropriately considered.
<b>Number</b>	AO-2013-226-SR-044
<b>Organisation</b>	Civil Aviation Safety Authority
<b>Recommendation</b>	The ATSB recommends that the Civil Aviation Safety Authority takes action to provide assurance that all of the replacement parts that were approved for Australian Parts Manufacturer Approval by the Regulatory Reform Program Implementation team in 2003 have appropriately considered important service factors, such as service history and life limits.
<b>Released</b>	21 January 2016
<b>Final action</b>	18 February 2020
<b>Final action</b>	<p>On 19 April 2016, the ATSB advised that CASA's response did not adequately address the safety issue. CASA has subsequently reviewed its original response to ATSB safety recommendation AO-2013-226-SR-044 and developed an alternative approach to achieving an acceptable level of safety assurance. Consequently, CASA will not be issuing a directive to all CAR 35 design holders to provide CASA with information in relation to APMA approvals as previously advised.</p> <p>...</p> <p>CASA undertook the following activities to make a determination if a reasonable level of safety assurance was already apparent:</p> <ul style="list-style-type: none"> <li>• An evidence-based review of the CASA Service Difficulty Report (SDR) database was conducted to examine the number of APMA part failures. Systemic issues affecting APMA approvals would be consistent with a disproportionately higher rate of premature failure of APMA parts, whether they comprise critical airworthiness parts or not, in comparison with the Original Equipment Manufacturer (OEM) parts they replaced; and</li> <li>• An engineering study of the specific manufacturer of the failed tie-rod parts, J&amp;R Aerospace, was conducted. J&amp;R Aerospace manufactured a significant proportion of all APMA parts in Australia. The study [emphasis added]:             <ol style="list-style-type: none"> <li>a) Reviewed the APMA list of J&amp;R Aerospace parts for any that may be considered critical components likely to be life limited or subject to airworthiness limitations.</li> <li>b) Performed an analysis of a selected sample of those parts to identify the presence of any</li> </ol> </li> </ul>

<sup>3</sup> Only include proactive safety action taken by industry linked to an ATSB-identified safety issue.

	<p>design or service life deficiencies. That included determining if the OEM part, upon which the APMA part was designed to replace, also suffered any similar design or service life deficiencies.</p> <p>c) Sought to establish if there was any evidence of unsafe conditions present in any of the target group of parts.</p> <p>The analysis of the available SDR data indicated that the J&amp;R parts failure rate was 0.3%. The combined failure rate for all other APMA manufacturers was 1.07%. J&amp;R accounted for 56% of all APMA part types manufactured. The sixteen other APMA manufacturers comprised 44% of the total APMA part types manufactured.</p> <p>Further analysis was conducted to determine if the failure rate of all APMA parts was, on average, over represented compared to OEM parts. The analysis determined that the failure rate of APMA parts was not over represented compared to OEM parts. In addition, no individual APMA manufacturer exhibited an unusually high failure rate for any of its manufactured parts compared to the equivalent OEM part.</p> <p>The data indicated that there were no apparent safety issues with any of the APMA parts reviewed. It is CASA's considered view that this provides a reasonable level of safety assurance that parts manufactured under an APMA have appropriately considered service factors, such as service history, life-limits, and airworthiness directives. CASA proposes that the above alternative approach has addressed the safety concern highlighted by the ATSB.</p>
<b>Investigation</b>	<b>AO-2014-190: Further investigation of AO-2009-072 Ditching - IAI Westwind 1124A, VH-NGA, Norfolk Island, 18 Nov 2009</b>
<b>Safety issue</b>	Although air ambulance flights involved transporting passengers, in Australia they were classified as 'aerial work' rather than 'charter'. Consequently, they were subject to a lower level of regulatory requirements than other passenger-transport operations (including in terms of requirements for fuel planning of flights to remote islands).
<b>Number</b>	AO-2014-190-SR-044
<b>Organisation</b>	Civil Aviation Safety Authority
<b>Recommendation</b>	The Australian Transport Safety Bureau recommends that the Civil Aviation Safety Authority continue reviewing the requirements for air ambulance / medical transport operations and address the limitations associated with the current classification of these flights as aerial work rather than air transport.
<b>Released</b>	23 November 2017
<b>Final action</b>	03 February 2020
<b>Final action</b>	<p>In December 2018, Civil Aviation Safety Regulation (CASR) Parts 121, 135 and 133 were introduced. CASR Part 121 outlined requirements for Australian air transport operations for large aeroplanes (that is, aeroplanes with a maximum operational passenger seat configuration of more than 9 or a maximum take-off weight of more than 8,618 kg). Part 135 outlined requirements for Australian air transport operations for smaller aeroplanes, and Part 133 outlined requirements for Australian air transport operations for rotorcraft. These regulations come into force in March 2021.</p> <p>In April 2019, relevant definitions associated with these Parts were amended or introduced. These definitions included the following:  An air transport operation is a passenger transport operation, a cargo transport operation, or a medical transport operation, that:  (a) is conducted for hire or reward; or  (b) is prescribed by an instrument issued under regulation 201.025.</p> <p>A medical transport operation is an operation:  (a) the primary purpose of which is to transport one or more of the following:  (i) medical patients;  (ii) medical personnel;  (iii) blood, tissue or organs for transfusion, grafting or transplantation; or  (b) of a kind prescribed by the Part 119 Manual of Standards for the purposes of this paragraph.</p> <p>passenger transport operation:  (a) means an operation of an aircraft that involves the carriage of passengers, whether or not cargo is also carried on the aircraft; but  (b) does not include the following:  (i) an operation of an aircraft with a special certificate of airworthiness;  (ii) a cost-sharing flight;  (iii) a medical transport operation.</p>

<b>Investigation</b>	<b>AO-2014-190: Further investigation of AO-2009-072 Ditching - IAI Westwind 1124A, VH-NGA, Norfolk Island, 18 Nov 2009</b>
<b>Safety issue</b>	The available regulatory guidance on in-flight fuel management and on seeking and applying en route weather updates was too general and increased the risk of inconsistent in-flight fuel management and decisions to divert.
<b>Number</b>	AO-2014-190-SR-043
<b>Organisation</b>	Civil Aviation Safety Authority
<b>Recommendation</b>	The Australian Transport Safety Bureau recommends that the Civil Aviation Safety Authority continue its work to address the limitations associated with the requirements and guidance for in-flight fuel management.
<b>Released</b>	23 November 2017
<b>Final action</b>	31 October 2019
<b>Final action</b>	<p>On 31 October 2019, CASA provided the following response to the ATSB question and some additional information.</p> <p>CASA Instrument 29/18 will be deleted upon the commencement of the future flight operational CASR Parts in March 2021. Its requirements will be appropriately transcribed into relevant Manuals of Standards.</p> <p>These [in-flight fuel management] requirements are best explained in the context of the existing CASA Instrument 29/18, the contents and requirements of which are being moved to all Manuals of Standards although minor modifications will be made to the content transferred into the Part 121 MOS to accommodate the introduction of an ICAO based isolated aerodromes (and wider alternate aerodromes requirements) policy.</p> <ol style="list-style-type: none"> <li>1. In-flight checks of aircraft fuel quantity, at regular intervals, is required by subsection 6(2) of CASA 29/18.</li> <li>2. For the other 3 matters raised, these requirements are not specifically stated, and do not need to be, as they are inherent in the application of the stated legal requirements of CASA Instrument 29/18. The requirement to conduct regular in-flight fuel checks is phrased to require the PIC to determine whether the usable fuel remaining is sufficient to complete the planned flight. If this flight was planned to involve the use of a decision point, then by necessity the decision point would have to have been calculated and, noting the requirements of section 4 of the instrument in relation to the matters that must be taken into account to calculate usable fuel, meteorological reports and forecasts must be incorporated into any such calculation. Additionally, the requirements of paragraph 7(1)(b) of the instrument for procedures in the event that an in-flight fuel check results in a determination that there is insufficient fuel to complete the flight to the destination aerodrome means that the PIC must calculate a decision point. Additionally, the nature of the legal definition of the term decision point is such that the PIC cannot rely on a pre-flight calculation of where the exact location of the decision point is due to the fact that the definition of the term does not incorporate a time-based component, i.e. the term is not expressed to be a "pre-flight" calculation.</li> </ol>
<b>Investigation</b>	<b>AO-2017-005: Collision with terrain following an engine power loss involving Cessna 172M, VH-WTQ</b>
<b>Safety issue</b>	The Civil Aviation Safety Authority's procedures and guidance for scoping a surveillance event included several important aspects, but it did not formally include the nature of the operator's activities, the inherent threats or hazards associated with those activities, and the risk controls that were important for managing those threats or hazards.
<b>Number</b>	AO-2017-005-SR-026
<b>Organisation</b>	Civil Aviation Safety Authority
<b>Recommendation</b>	The Australian Transport Safety Bureau recommends that the Civil Aviation Safety Authority undertake further work to improve its procedures and guidance for scoping surveillance activities to address this safety issue.
<b>Released</b>	17 October 2019
<b>Final action</b>	04 March 2020
<b>Final action</b>	CASA provided the ATSB a copy of the new Surveillance planning and scoping development form and an example of the new Operator risk profile.

<b>Investigation</b>	<b>AO-2017-005: Collision with terrain following an engine power loss involving Cessna 172M, VH-WTQ</b>
<b>Safety issue</b>	Upper torso restraints (UTRs) were not required for all passenger seats for small aeroplanes manufactured before December 1986 and helicopters manufactured before September 1992, including for passenger transport operations. Although options for retrofitting UTRs are available for many models of small aircraft, many of these aircraft manufactured before the applicable dates that are being used for passenger transport have not yet been retrofitted.
<b>Number</b>	AO-2017-005-SR-027
<b>Organisation</b>	Civil Aviation Safety Authority
<b>Recommendation</b>	The Australian Transport Safety Bureau recommends that the Civil Aviation Safety Authority consider mandating the fitment of upper torso restraints (UTRs) for all seats in small aeroplanes and helicopters, particularly for those aircraft (a) being used for air transport operations and/or (b) for those aircraft where the aircraft manufacturer has issued a mandatory service bulletin to fit UTRs for all seats (or such restraints are readily available and relatively easy to install).
<b>Released</b>	17 October 2019
<b>Final action</b>	21 January 2020
<b>Final action</b>	<p>To inform our approach in improving safety particularly in small air transport operations, CASA recently undertook a sector risk profile for the small aeroplane air transport sector. The sector risk profile considered a wide range of information, including the accident and incident data for these types of aircraft, to develop the most critical 'risks' or safety issues for this sector. The types of restraints used for rear seat passengers was not identified as a 'risk' or safety issue.</p> <p>As a result of the sector risk profile, and other considerations, CASA is proposing to adopt the following safety enhancements to Part 135 operations (small air transport): new</p> <ul style="list-style-type: none"> <li>• training and checking requirements</li> <li>• safety management systems,</li> <li>• consideration of human factors in operations and maintenance.</li> </ul> <p>Furthermore, in addressing an outstanding ATSB safety recommendation, AO-2011-115-SR-050, CASA is removing the option of a generic maintenance schedule (CAR 'Schedule 5') for aircraft in air transport operations. This is currently the subject of a policy making proposal.</p> <p>CASA is of the view some of these safety enhancements are a more appropriate focus of mandatory action.</p> <p>Summary</p> <p>CASA acknowledges fitting upper torso restraints (UTR) has merit and encourages operators to do so. CASA intends to address this recommendation by issuing an Airworthiness Bulletin for the relevant aircraft that will outline the safety benefits of fitting these types of UTR. It will be the responsibility of owners and operators to decide the merits of fitment.</p> <p>CASA is of the view it is better to take a systems approach to making safety enhancements when issuing mandatory action, unless clear safety deficiencies exist. CASA is not convinced that these aircraft are unsafe without UTR restraints. CASA intends to mandate a number of other safety enhancements to small air transport operations.</p>

<b>Investigation</b>	<b>AO-2017-098: Pressurisation event involving AirAsia Indonesia Airbus A320, PK-AXD, 160 NM north of Perth, Western Australia, 15 October 2017</b>
<b>Safety issue</b>	The pre-flight safety briefing and safety information card did not include a clear instruction on how to activate the flow of oxygen from the passenger oxygen masks and that the bag may not inflate when oxygen is flowing. This resulted in some passengers not understanding whether or not there was oxygen flowing in the mask.
<b>Number</b>	AO-2017-098-SR-021
<b>Organisation</b>	AirAsia Indonesia
<b>Recommendation</b>	The ATSB recommends that AirAsia Indonesia take further action to review their current passenger pre-flight safety briefing and safety information card to ensure passengers are provided with additional information in order to better understand how to use their oxygen masks in an emergency.
<b>Released</b>	27 November 2019
<b>Final action</b>	23 June 2020
<b>Final action</b>	The said Safety Information Cards (SIC) have been implemented and distributed on the aircraft. Distribution was conducted on April 27 as stated in the email attached. Please find attached email as the sample for further information regarding SIC distribution to aircraft.
<b>Investigation</b>	<b>AR-2013-107: Engine failures and malfunctions in light aeroplanes: 2009 to 2014</b>
<b>Safety issue</b>	Thicker 7/16 inch diameter through-bolts, fitted to newer Jabiru engines and some retro-fitted engines, have had limited service to date to confirm early indications that they reduce this risk. Retro-fitting engines with thicker through-bolts has only been recommended for aircraft involved in flight training by JSB031 issue 3. Most light aircraft in service with Jabiru engines continue to use 3/8 inch diameter engine through-bolts which, even after upgrades in accordance with Jabiru service bulletins JSB031 issues 1 and 2, remain at an elevated risk of fracturing within the service life of the bolt, leading to an engine failure or malfunction in flight.
<b>Number</b>	AR-2013-107-SR-056
<b>Organisation</b>	Civil Aviation Safety Authority
<b>Recommendation</b>	The Australian Transport Safety Bureau recommends that the Civil Aviation Safety Authority continue to monitor the through-bolt failure rate of Jabiru engines to satisfy themselves of the reliability of the: <ul style="list-style-type: none"> <li>• 7/16 inch diameter bolts, and</li> <li>• any other alternative produced to replace the existing 3/8 inch diameter through-bolt configuration (including newly developed through-bolts incorporating aspects to alleviate the effects of thermal expansion and damp resonant vibrations) to determine if these modifications have sufficiently reduced the risk of an engine failure or malfunction in Jabiru-powered aircraft.</li> </ul>
<b>Released</b>	9 March 2016
<b>Final action</b>	22 November 2019
<b>Final action</b>	CASA accepted this recommendation and provided a response indicating that CASA will take appropriate action to monitor the through-bolt failure rate of Jabiru engines through Airworthiness Direction processes and Service Difficulty Reporting.  CASA has now determined (June 2019) that the continuation of the safety measures in instrument CASA 39/19 (and its predecessors) is warranted for a further period of 3 years. During this period, CASA will continue to monitor the instances of loss-of-engine-power events in relation to the aircraft, to ensure the safety measures in the instrument remain effective. CASA believes that this instrument sufficiently reduced the risk of an engine failure or malfunction in Jabiru-powered aircraft and will continue to monitor for another 3-year period to determine reliability of the 7/16-inch diameter bolts.

## Rail

**Table 13: Rail – ATSB recommendations closed in 2019–20**

<b>Investigation</b>	<b>RO-2017-013: Derailment of acid train 9T90 near Kimburra, Queensland, on 28 September 2017</b>
<b>Safety issue</b>	Anomalies in the magnetic particle inspection procedures likely led to the crack not being detected.
<b>Number</b>	RO-2017-013-SR-007
<b>Organisation</b>	Aurizon
<b>Recommendation</b>	The Australian Transport Safety Bureau recommends that Aurizon addresses the non-use of standard test pieces during magnetic particle inspection.
<b>Released</b>	13 June 2019
<b>Final action</b>	03 December 2019
<b>Final action</b>	Aurizon have published a revised Work Instruction "Inspection and Reconditioning of Wheelsets V2.0", and "MPI Record Sheet for Wheelsets V1.0", both dated 25 November 2019.

## Safety recommendations released in 2019–20

There were no marine safety recommendations released in 2019–20.

## Aviation

**Table 14: Aviation – Safety recommendations released in 2019–20**

<b>Investigation</b>	<b>AO-2017-005: Collision with terrain following an engine power loss involving Cessna 172M, VH-WTQ</b>
<b>Safety issue</b>	The Civil Aviation Safety Authority's procedures and guidance for scoping a surveillance event included several important aspects, but it did not formally include the nature of the operator's activities, the inherent threats or hazards associated with those activities, and the risk controls that were important for managing those threats or hazards.
<b>Number</b>	AO-2017-005-SR-026
<b>Organisation</b>	Civil Aviation Safety Authority
<b>Recommendation</b>	The Australian Transport Safety Bureau recommends that the Civil Aviation Safety Authority undertake further work to improve its procedures and guidance for scoping surveillance activities to address this safety issue.
<b>Released</b>	17 October 2019
<b>Investigation</b>	<b>AO-2017-005: Collision with terrain following an engine power loss involving Cessna 172M, VH-WTQ</b>
<b>Safety issue</b>	Upper torso restraints (UTRs) were not required for all passenger seats for small aeroplanes manufactured before December 1986 and helicopters manufactured before September 1992, including for passenger transport operations. Although options for retrofitting UTRs are available for many models of small aircraft, many of these aircraft manufactured before the applicable dates that are being used for passenger transport have not yet been retrofitted.
<b>Number</b>	AO-2017-005-SR-027
<b>Organisation</b>	Civil Aviation Safety Authority
<b>Recommendation</b>	The Australian Transport Safety Bureau recommends that the Civil Aviation Safety Authority consider mandating the fitment of upper torso restraints (UTRs) for all seats in small aeroplanes and helicopters, particularly for those aircraft (a) being used for air transport operations and/or (b) for those aircraft where the aircraft manufacturer has issued a mandatory service bulletin to fit UTRs for all seats (or such restraints are readily available and relatively easy to install).
<b>Released</b>	17 October 2019

<b>Investigation</b>	<b>AO-2017-013: Collision with water involving Grumman American Aviation Corp G-73, registered VH-CQA, 10 km WSW of Perth Airport, Western Australia on 26 January 2017</b>
<b>Safety issue</b>	The Civil Aviation Safety Authority (CASA) did not have an effective framework to approve and oversight air displays, predominantly due to the following factors: * 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. * 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 * CASA did not have a structured process to ensure that risks were both identified and adequately treated. The combination of these factors significantly increased the likelihood that key safety risks associated with the conduct of the air display were not adequately managed.
<b>Number</b>	AO-2017-013-SR-029
<b>Organisation</b>	Civil Aviation Safety Authority
<b>Recommendation</b>	The Australian Transport Safety Bureau recommends that the Civil Aviation Safety Authority 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.
<b>Released</b>	19 November 2019
<b>Investigation</b>	<b>AO-2017-069: Collision with terrain involving SOCATA TB-10 Tobago, VH-YTM near Mount Gambier Airport, South Australia, 28 June 2017</b>
<b>Safety issue</b>	Angel Flight did not consider the safety benefits of commercial passenger flights when suitable flights were available.
<b>Number</b>	AO-2017-069-SR-015
<b>Organisation</b>	Angel Flight Australia
<b>Recommendation</b>	The Australian Transport Safety Bureau recommends that Angel Flight Australia takes action to enable it to consider the safety benefits of using commercial flights where they are available to transport its passengers.
<b>Released</b>	13 August 2019
<b>Investigation</b>	<b>AO-2017-098 Pressurisation event involving AirAsia Indonesia Airbus A320, PK-AXD, 160 NM north of Perth, Western Australia, 15 October 2017</b>
<b>Safety issue</b>	The pre-flight safety briefing and safety information card did not include a clear instruction on how to activate the flow of oxygen from the passenger oxygen masks and that the bag may not inflate when oxygen is flowing. This resulted in some passengers not understanding whether or not there was oxygen flowing in the mask.
<b>Number</b>	AO-2017-098-SR-021
<b>Organisation</b>	AirAsia Indonesia
<b>Recommendation</b>	The ATSB recommends that AirAsia Indonesia take further action to review their current passenger pre-flight safety briefing and safety information card to ensure passengers are provided with additional information in order to better understand how to use their oxygen masks in an emergency.
<b>Released</b>	27 November 2019
<b>Investigation</b>	<b>AO-2018-007: Engine failure or malfunction involving an Airbus A330, registered 9M-MTM, near Curtin, WA, 18 January 2018</b>
<b>Safety issue</b>	There were a total of 16 engine malfunction events globally over a 4-year period attributed to modification of the Advantage 70™ engine. The modification increased the engine outer duct gas path temperature, which led to distortion and liberation of the outer transition duct segments.
<b>Number</b>	AO-2018-007-SR-021
<b>Organisation</b>	Pratt and Whitney (P & W)
<b>Recommendation</b>	The ATSB recommends that Pratt & Whitney, together with the United States Federal Aviation Administration, take action to maximise incorporation of the redesigned outer transition duct as detailed in Service Bulletin PW4G-100-A72-261.
<b>Released</b>	07 November 2019



<b>Investigation</b>	<b>AO-2018-007: Engine failure or malfunction involving an Airbus A330, registered 9M-MTM, near Curtin, WA, 18 January 2018</b>
<b>Safety issue</b>	There were a total of 16 engine malfunction events globally over a 4-year period attributed to modification of the Advantage 70™ engine. The modification increased the engine outer duct gas path temperature, which led to distortion and liberation of the outer transition duct segments.
<b>Number</b>	AO-2018-007-SR-021
<b>Organisation</b>	Pratt and Whitney (P & W)
<b>Recommendation</b>	The ATSB recommends that Pratt & Whitney, together with the United States Federal Aviation Administration, take action to maximise incorporation of the redesigned outer transition duct as detailed in Service Bulletin PW4G-100-A72-261.
<b>Released</b>	07 November 2019
<b>Investigation</b>	<b>AO-2018-007: Engine failure or malfunction involving an Airbus A330, registered 9M-MTM, near Curtin, WA, 18 January 2018</b>
<b>Safety issue</b>	There were a total of 16 engine malfunction events globally over a 4-year period attributed to modification of the Advantage 70™ engine. The modification increased the engine outer duct gas path temperature, which led to distortion and liberation of the outer transition duct segments.
<b>Number</b>	AO-2018-007-SR-022
<b>Organisation</b>	US Federal Aviation Administration
<b>Recommendation</b>	The ATSB recommends that the United States Federal Aviation Administration, together with Pratt & Whitney, take action to maximise incorporation of the redesigned outer transition duct as detailed in Service Bulletin PW4G-100-A72-261.
<b>Released</b>	07 November 2019
<b>Investigation</b>	<b>AO-2018-025: Runway excursion and collision with terrain involving Van's RV-6A , VH-OAJ, Somersby (ALA), New South Wales, on 18 March 2018</b>
<b>Safety issue</b>	The Civil Aviation Advisory Publication for Aeroplane Landing Areas (92-1(1)) did not have guidance for the inclusion of a safe runway overrun area.
<b>Number</b>	AO-2018-025-SR-012
<b>Organisation</b>	Civil Aviation Safety Authority
<b>Recommendation</b>	The ATSB recommends the Australian Civil Aviation Safety Authority include guidance for the inclusion of a safe runway overrun area in the Civil Aviation Advisory Publication for Aeroplane Landing Areas (92-1(1))
<b>Released</b>	22 October 2019

## Rail

**Table 15: Rail – Safety recommendations released in 2019–20**

<b>Investigation</b>	<b>RO-2018-004: Collision of passenger train 150E with bufferstop at Richmond NSW on 22 January 2018</b>
<b>Safety issue</b>	The rostering of the driver in the days leading up to the incident was inconsistent with Sydney Trains' rostering procedures.
<b>Number</b>	RO-2018-004-SR-020
<b>Organisation</b>	Sydney Trains
<b>Recommendation</b>	The Australian Transport Safety Bureau recommends that Sydney Trains take safety action to ensure that existing procedures regarding adequate rest breaks between shift cycles and start time rotations are reinforced to safeguard against fatigue impairment of train crew.
<b>Released</b>	20 December 2019

## Safety advisory notices released in 2019–20

**Table 16: Safety advisory notices released in 2019–20**

<b>Investigation</b>	<b>AO-2015-089: In-flight break-up involving Cicaré S.A. CH-7BT, VH-JEW, near Roy Hill Station, WA. 28 Jul 2015</b>
<b>Safety issue</b>	N/A
<b>Number</b>	AO-2015-089-SAN-014
<b>Organisation</b>	Mustering and amateur-built helicopter industry
<b>Safety advisory notice</b>	Operating a helicopter within the stated design intent and limitations is essential for safe conduct of flight. The ATSB advises owners/operators of amateur-built experimental aircraft to be fully aware of the risks associated with this category of aircraft and that operation outside the limitations prescribed by the manufacturer, such as the addition of unapproved modifications and use for mustering operations, can produce unexpected stresses on the airframe leading to premature failure of components.
<b>Released</b>	20 December 2019
<b>Investigation</b>	<b>AO-2017-005: Collision with terrain following an engine power loss involving Cessna 172M, VH-WTQ</b>
<b>Safety issue</b>	Upper torso restraints (UTRs) were not required for all passenger seats for small aeroplanes manufactured before December 1986 and helicopters manufactured before September 1992, including for passenger transport operations. Although options for retrofitting UTRs are available for many models of small aircraft, many of these aircraft manufactured before the applicable dates that are being used for passenger transport have not yet been retrofitted.
<b>Number</b>	AO-2017-005-SAN-028
<b>Organisation</b>	Civil Aviation Safety Authority
<b>Safety advisory notice</b>	The Australian Transport Safety Bureau strongly encourages operators and owners of small aeroplanes manufactured before December 1986 and helicopters manufactured before September 1992 to fit upper torso restraints to all seats in their aircraft (if they are not already fitted).
<b>Released</b>	17 October 2019
<b>Investigation</b>	<b>AO-2019-014 Ground handling event involving Kavanagh B-400 Balloon, VH-LNB, near Coldstream, Victoria, on 16 March 2019</b>
<b>Safety issue</b>	N/A
<b>Number</b>	AO-2019-014-SAN-014
<b>Organisation</b>	Commercial Balloon Operators
<b>Safety advisory notice</b>	The ATSB advises all commercial balloon operators utilising vehicle-assisted deflation methods to review their current operational practices in light of the findings in the ATSB investigation report AO-2019-014 with the aim of mitigating the risks associated with the procedure. This review should be conducted with emphasis on: <ul style="list-style-type: none"> <li>• reducing the risks associated with a communications breakdown between the pilot and vehicle driver, and</li> <li>• include a review of the positioning of occupants within the basket to minimise the likelihood of injury if the basket tips during the vehicle assisted deflation.</li> </ul>
<b>Released</b>	29 June 2020

# SECTION 6 – FINANCIAL STATEMENTS



**Australian Government**

**Australian Transport Safety Bureau**

Financial Statements 2019-20

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
- Variance Explanations

### Overview

### Notes to the financial statements:

#### 1. Departmental Financial Performance

- 1.1 Expenses
- 1.2 Own-Source Revenue and gains

#### 2. Departmental 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 Aggregate Assets and Liabilities



## INDEPENDENT AUDITOR'S REPORT

### To the Minister for Infrastructure, Transport and Regional Development

#### Opinion

In my opinion, the financial statements of the Australian Transport Safety Bureau (the Entity) for the year ended 30 June 2020:

- (a) comply with Australian Accounting Standards – Reduced Disclosure Requirements 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 2020 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 2020 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 – Reduced Disclosure Requirements 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.

### **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



Colin Bienke  
Audit Principal

Delegate of the Auditor-General

Canberra  
21 September 2020

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

In our opinion, the attached financial statements for the year ended 30 June 2020 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 non-corporate Commonwealth entity will be able to pay its debts as and when they fall due.



Greg Hood  
Chief Commissioner

21 September 2020



Jane Childs  
Chief Financial Officer

21 September 2020

**Statement of Comprehensive Income**  
for the period ended 30 June 2020

	Notes	2020 \$'000	2019 \$'000	Original Budget \$'000
<b>NET COST OF SERVICES</b>				
<b>Expenses</b>				
Employee benefits	1.1A	(15,978)	(16,029)	(15,770)
Suppliers	1.1B	(7,871)	(10,059)	(8,641)
Depreciation and amortisation	2.2A	(2,229)	(699)	(747)
Finance costs	1.1C	(102)	(6)	(6)
Write-down and impairment of other assets	1.1D	(7)	(15)	-
<b>Total expenses</b>		<b>(26,187)</b>	<b>(26,808)</b>	<b>(25,164)</b>
<b>Own-source income</b>				
<b>Own-source revenue</b>				
Revenue from contracts with customers	1.2A	1,184	1,540	1,383
Other revenue	1.2B	3,843	4,412	2,829
<b>Total own-source revenue</b>		<b>5,027</b>	<b>5,952</b>	<b>4,212</b>
<b>Gains</b>				
Other gains	1.2C	3	2	-
<b>Total gains</b>		<b>3</b>	<b>2</b>	<b>-</b>
<b>Total own-source income</b>		<b>5,030</b>	<b>5,954</b>	<b>4,212</b>
<b>Net cost of services</b>		<b>(21,157)</b>	<b>(20,854)</b>	<b>(20,952)</b>
Revenue from government	1.2D	20,205	20,244	20,205
<b>Deficit after income tax on continuing operations</b>		<b>(952)</b>	<b>(610)</b>	<b>(747)</b>
<b>OTHER COMPREHENSIVE INCOME</b>				
<b>Items not subject to subsequent reclassification to net cost of services</b>				
Changes in asset revaluation surplus		109	(31)	-
<b>Total other comprehensive income</b>		<b>109</b>	<b>(31)</b>	<b>-</b>
<b>Total comprehensive loss</b>		<b>(843)</b>	<b>(641)</b>	<b>(747)</b>

The above statement should be read in conjunction with the accompanying notes.



## Statement of Financial Position

as at 30 June 2020

	Notes	2020 \$'000	2019 \$'000	Original Budget \$'000
<b>ASSETS</b>				
<b>Financial assets</b>				
Cash and cash equivalents	2.1A	145	152	90
Trade and other receivables <sup>1</sup>	2.1B	8,384	21,345	21,482
Accrued revenue		71	78	202
<b>Total financial assets</b>		<b>8,600</b>	<b>21,575</b>	<b>21,774</b>
<b>Non-financial assets<sup>2</sup></b>				
Buildings	2.2A	8,570	-	-
Heritage and cultural	2.2A	16	15	-
Plant and equipment	2.2A	1,085	1,179	1,425
Computer software	2.2A	1,136	1,127	747
Prepayments		225	278	268
<b>Total non-financial assets</b>		<b>11,032</b>	<b>2,600</b>	<b>2,440</b>
Assets held for sale		-	16	-
<b>Total assets</b>		<b>19,632</b>	<b>24,191</b>	<b>24,214</b>
<b>LIABILITIES</b>				
<b>Payables</b>				
Suppliers	2.3A	(569)	(406)	(613)
Other payables	2.3B	(480)	(182)	(232)
<b>Total payables</b>		<b>(1,049)</b>	<b>(588)</b>	<b>(845)</b>
<b>Interest bearing liabilities</b>				
Leases	2.4A	(8,862)	(119)	(143)
<b>Total interest bearing liabilities</b>		<b>(8,862)</b>	<b>(119)</b>	<b>(143)</b>
<b>Provisions</b>				
Employee provisions	4.1A	(4,559)	(4,135)	(4,131)
<b>Total provisions</b>		<b>(4,559)</b>	<b>(4,135)</b>	<b>(4,131)</b>
<b>Total liabilities</b>		<b>(14,470)</b>	<b>(4,842)</b>	<b>(5,119)</b>
<b>Net assets</b>		<b>5,162</b>	<b>19,347</b>	<b>19,095</b>
<b>EQUITY</b>				
Contributed equity		204	13,546	14,881
Reserves		539	430	462
Retained surplus		4,419	5,371	3,752
<b>Total equity</b>		<b>5,162</b>	<b>19,347</b>	<b>19,095</b>

The above statement should be read in conjunction with the accompanying notes.

<sup>1</sup>The comparatives for 2018-2019 have been restated, with a reduction of \$0.293 million to the balances of trade and other receivables and contributed equity, to correct the prior year overstatement. The amounts relate to a movement of funds, further details can be found in the Overview section.

<sup>2</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 2020

Notes	2020 \$'000	2019 \$'000	Original Budget \$'000
<b>CONTRIBUTED EQUITY</b>			
<b>Opening balance</b>			
Balance carried forward from previous period <sup>1</sup>	13,546	13,173	19,184
<b>Adjusted opening balance</b>	<b>13,546</b>	<b>13,173</b>	<b>19,184</b>
<b>Transactions with owners</b>			
<b>Distributions to owners</b>			
Other <sup>1,2</sup> - Appropriation returned	(14,000)	(372)	-
<b>Contributions by owners</b>			
Equity injection <sup>1</sup> - Appropriations	68	329	68
Departmental capital budget <sup>1</sup>	590	416	590
<b>Total transactions with owners</b>	<b>(13,342)</b>	<b>373</b>	<b>658</b>
<b>Closing balance as at 30 June</b>	<b>204</b>	<b>13,546</b>	<b>19,842</b>
<b>RETAINED EARNINGS</b>			
<b>Opening balance</b>			
Balance carried forward from previous period	5,371	5,982	-
<b>Adjusted opening balance</b>	<b>5,371</b>	<b>5,982</b>	<b>-</b>
<b>Comprehensive income</b>			
Deficit for the period	(952)	(610)	(747)
<b>Total comprehensive income</b>	<b>(952)</b>	<b>(610)</b>	<b>(747)</b>
<b>Closing balance as at 30 June</b>	<b>4,419</b>	<b>5,371</b>	<b>(747)</b>
<b>ASSET REVALUATION RESERVE</b>			
<b>Opening balance</b>			
Balance carried forward from previous period	430	461	-
<b>Adjusted opening balance</b>	<b>430</b>	<b>461</b>	<b>-</b>
<b>Comprehensive income</b>			
Other comprehensive income	109	(31)	-
<b>Total comprehensive income</b>	<b>109</b>	<b>(31)</b>	<b>-</b>
<b>Closing balance as at 30 June</b>	<b>539</b>	<b>430</b>	<b>-</b>
<b>Total Equity as at 30 June</b>	<b>5,162</b>	<b>19,347</b>	<b>19,095</b>

The above statement should be read in conjunction with the accompanying notes.

<sup>1</sup> The comparatives for 2018-2019 have been restated to reflect an overstatement of \$0.305 million to the opening balance of contributed equity, a return of \$0.372 million in lapsed funding, a \$0.329 million understatement of Equity injection and a \$0.055 million understatement to the Departmental capital budget. The amounts relate to a movement of funds, further details can be found in the Overview section.

<sup>2</sup> An unspent amount of \$14.0m relating to missing Malaysia Airlines Flight 370 (MH370) was quarantined under section 51 of the Constitution of Australia during 2019-20.

**Cash Flow Statement***for the period ended 30 June 2020*

	Notes	2020 \$'000	2019 \$'000	Original Budget \$'000
<b>OPERATING ACTIVITIES</b>				
<b>Cash received</b>				
Appropriations		18,911	20,005	20,105
Sale of goods and rendering of services		1,362	2,416	1,383
GST received		259	387	-
Other		182	201	-
<b>Total cash received</b>		<b>20,714</b>	23,008	21,488
<b>Cash used</b>				
Employees		(15,245)	(16,483)	(15,670)
Suppliers		(4,181)	(6,432)	(5,818)
Interest payments on lease liabilities		(102)	-	-
Other		(186)	(188)	-
<b>Total cash used</b>		<b>(19,714)</b>	(23,103)	(21,488)
<b>Net cash from/(used by) operating activities</b>		<b>1,000</b>	(95)	-
<b>INVESTING ACTIVITIES</b>				
<b>Cash received</b>				
Proceeds from sales of property, plant and equipment		6	30	-
<b>Total cash received</b>		<b>6</b>	30	-
<b>Cash used</b>				
Purchase of property, plant and equipment		(161)	(836)	(658)
Purchase of computer software		(280)	-	-
<b>Total cash used</b>		<b>(441)</b>	(836)	(658)
<b>Net cash from/(used by) investing activities</b>		<b>(435)</b>	(806)	(658)
<b>FINANCING ACTIVITIES</b>				
<b>Cash received</b>				
Contributed Equity		852	986	658
<b>Total cash received</b>		<b>852</b>	986	658
<b>Cash used</b>				
Repayment of finance leases		-	(23)	-
Principal payments of lease liabilities		(1,424)	-	-
<b>Total cash used</b>		<b>(1,424)</b>	(23)	-
<b>Net cash from/(used by) financing activities</b>		<b>(572)</b>	963	658
<b>Net increase/(decrease) in cash held</b>		<b>(7)</b>	62	-
Cash and cash equivalents at the beginning of the reporting period		152	90	90
<b>Cash and cash equivalents at the end of the reporting period</b>	2.1A	<b>145</b>	152	90

The above statement should be read in conjunction with the accompanying notes.

## Budget Variances Commentary

The explanations provide a comparison of the original budget as presented in the 2019-20 Portfolio Budget Statements (PBS) to the 2019-20 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 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.

Explanations of major variances	Affected line items (and statement)
<p><b>Application of Australian Accounting Standards Board Standard 16 - Leases (AASB16)</b></p> <p>With the application of AASB16 Leases, there was a large shift from supplier expenses to depreciation and interest within the Statement of Financial Position, in relation to the ATSB's office accommodation and vehicle leases. At the time the budget was prepared, the full implications of AASB16 were not known to the ATSB and therefore not predictable.</p>	<p><b>Statement of Comprehensive Income</b></p> <p>Expenses - Suppliers</p> <p>Expenses - Depreciation and amortisation</p> <p>Expenses - Finance costs</p> <p><b>Statement of Financial Position</b></p> <p>Non-financial assets - Buildings</p> <p>Interest-bearing liabilities - Leases</p>
<p><b>Return of Unspent Appropriation - Malaysia Airlines Flight 570</b></p> <p>An unspent amount of \$14.0m relating to missing Malaysia Airlines Flight 370 (MH370) was quarantined and returned to Government under section 51 of the Constitution of Australia during 2019-20.</p>	<p><b>Statement of Financial Position</b></p> <p>Financial assets - Trade and other receivables</p> <p><b>Statement of Contributed Equity</b></p> <p>Distribution to owners - Other</p>
<p><b>Income</b></p> <p>A decrease in funding received in relation to the ATSB's international projects occurred after the original budget was set.</p>	<p><b>Statement of Comprehensive Income</b></p> <p>Own source revenue - Revenue from contracts with customers</p>
<p><b>Other Revenue</b></p> <p>An increase in other revenue is as a result of higher than projected investigation services completed during the financial year. The ATSB receives the services free of charge from the Chief Investigator Transport Safety, Victoria and the NSW Office of Transport Safety Investigations.</p>	<p><b>Statement of Comprehensive Income</b></p> <p>Own source revenue - Other revenue</p>
<p><b>Financial Assets</b></p> <p>The budgeted estimate for cash and accrued revenue is made on a rolling three-year historical trend, which has resulted in an estimate being less than the 2019-20 actual.</p>	<p><b>Statement of Financial Position</b></p> <p>Financial assets - Cash and cash equivalents</p> <p>Financial assets - Accrued revenue</p>
<p><b>Non-Financial Assets</b></p> <p>The ATSB were experienced delays to a whole of agency roll-out of ICT equipment during the second half of the financial year. It is expected the implementation of the new hardware will occur early in 2020-21.</p>	<p><b>Statement of Financial Position</b></p> <p>Non-financial assets - Plant and equipment</p>
<p><b>Non-Financial Assets</b></p> <p>The ATSB progressed a number of smaller inter-related internally developed software projects during 2019-20, which were not included within the initial budget projections.</p>	<p><b>Statement of Financial Position</b></p> <p>Non-financial assets - Computer software</p>

## Budget Variances Commentary (continued)

### Other Payables

The variance between the budget within the PBS and the actual outcome for the 2019-20 financial year, is mainly attributable to the unprojected employee cessation entitlements payable.

### Statement of Financial Position

Payables - Other payables

### Provisions

Employee provisions are higher than expected due to leave transferred in for new staff not budgeted for.

### Statement of Financial Position

Provisions - Employee provisions

### Statement of Changes in Equity

Total equity is greater than projected in the budget mainly due the differences between the actual and budgeted opening balances, with the larger variance identified above.

### Statement of Changes in Equity

### Cash Flow Statement

Variances in the Cash Flow Statement are broadly consistent with the variances explained above for income and expenses.

### Cash Flow Statement

## Overview

### Objective of the Australian Transport Safety Bureau

The Australian Transport Safety Bureau is an Australian Government controlled entity. It is a 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.

### The Basis of Preparation

The financial statements are general purpose financial statements and are required by 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 – Reduced Disclosure Requirements 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

The following new standard was issued prior to the signing of the statement by the Chief Commissioner and Chief Financial Officer, was applicable to the current reporting period and had a material effect on the ATSB's financial statements:

AASB 16 <i>Leases</i>	<p>AASB 16 became effective on 1 July 2019.</p> <p>This new standard has replaced AASB 117 <i>Leases</i>, Interpretation 4 <i>Determining whether an Arrangement contains a Lease</i>, Interpretation 115 <i>Operating Leases—Incentives</i> and Interpretation 127 <i>Evaluating the Substance of Transactions Involving the Legal Form of a Lease</i>.</p> <p>AASB 16 provides a single lessee accounting model, requiring the recognition of assets and liabilities for all leases, together with options to exclude leases where the lease term is 12 months or less, or where the underlying asset is of low value. AASB 16 substantially carries forward the lessor accounting in AASB 117, with the distinction between operating leases and finance leases being retained. The details of the changes in accounting policies, transitional provisions and adjustments are disclosed below and in the relevant notes to the financial statements.</p>
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The following new standards were issued prior to the signing of the statement by the Chief Commissioner and Chief Financial Officer, were applicable to the current reporting period and after a detailed assessment, did not have a material effect on the ATSB's financial statements:

<p>AASB 15 <i>Revenue from Contracts with Customers</i> / AASB 2016-8 <i>Amendments to Australian Accounting Standards – Australian Implementation Guidance for Not-for-Profit Entities</i> and AASB 1058 <i>Income of Not-For-Profit Entities</i></p>	<p>AASB 15, AASB 2016-8 and AASB 1058 became effective 1 July 2019.</p> <p>AASB 15 establishes a comprehensive framework for determining whether, how much and when revenue is recognised. It replaces existing revenue recognition guidance, including AASB 118 <i>Revenue</i>, AASB 111 <i>Construction Contracts</i> and Interpretation 13 <i>Customer Loyalty Programmes</i>. The core principle of AASB 15 is that an entity recognises revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services.</p> <p>AASB 1058 is relevant in circumstances where AASB 15 does not apply. AASB 1058 replaces most of the not-for-profit (NFP) provisions of AASB 1004 <i>Contributions</i> and applies to transactions where the consideration to acquire an asset is significantly less than fair value principally to enable the entity to further its objectives, and where volunteer services are received.</p>
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## Overview (continued)

### *Application of AASB 16 Leases*

The ATSB adopted AASB 16 using the modified retrospective approach, under which the cumulative effect of initial application is recognised in retained earnings at 1 July 2019. Accordingly, the comparative information presented for 2019 is not restated, that is, it is presented as previously reported under AASB 117 and related interpretations.

The ATSB elected to apply the practical expedient to not reassess whether a contract is, or contains a lease at the date of initial application. Contracts entered into before the transition date that were not identified as leases under AASB 117 were not reassessed. The definition of a lease under AASB 16 was applied only to contracts entered into or changed on or after 1 July 2019.

AASB 16 provides for certain optional practical expedients, including those related to the initial adoption of the standard. The ATSB applied the following practical expedients when applying AASB 16 to leases previously classified as operating leases under AASB 117:

- Apply a single discount rate to a portfolio of leases with reasonably similar characteristics;
- Exclude initial direct costs from the measurement of right-of-use assets at the date of initial application for leases where the right-of-use asset was determined as if AASB 16 had been applied since the commencement date; and
- Reliance on previous assessments on whether leases are onerous as opposed to preparing an impairment review under AASB 136 Impairment of assets as at the date of initial application.

As a lessee, the ATSB previously classified leases as operating or finance leases based on its assessment of whether the lease transferred substantially all of the risks and rewards of ownership. Under AASB 16, the ATSB recognises right-of-use assets and lease liabilities for their leases.

On adoption of AASB 16, the ATSB recognised right-of-use assets and lease liabilities in relation to leases of office space and automobiles, which had previously been classified as operating leases.

The lease liabilities were measured at the present value of the remaining lease payments, discounted using the ATSB's incremental borrowing rate as at 1 July 2019. The Entity's incremental borrowing rate is the rate at which a similar borrowing could be obtained from an independent creditor under comparable terms and conditions.

The right-of-use assets were measured as follows:

- a) Office space: measured at an amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments.
- b) All other leases: the carrying value that would have resulted from AASB 16 being applied from the commencement date of the leases, subject to the practical expedients noted above.

### **Impact on transition**

On transition to AASB 16, the ATSB recognised additional right-of-use assets and additional lease liabilities. The impact on transition is summarised below:

<b>Departmental</b>	1 July 2019
	\$'000
Right-of-use assets - property, plant and equipment	10,153
Lease liabilities	(10,153)
Retained earnings	-

## Overview (continued)

The following table reconciles the Departmental minimum lease commitments disclosed in the entity's 30 June 2019 annual financial statements to the amount of lease liabilities recognised on 1 July 2019:

	1 July 2019
	\$'000
Minimum operating lease commitment at 30 June 2019	1,889
Less: short-term leases not recognised under AASB 16	-
Less: low value leases not recognised under AASB 16	-
Plus: effect of extension options reasonably certain to be exercised	8,626
<b>Undiscounted lease payments</b>	<b>10,515</b>
Less: effect of discounting using the incremental borrowing rate as at the date of initial application	(362)
<b>Lease liabilities recognised at 1 July 2019</b>	<b>10,153</b>

### 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 2020 that had the potential to significantly effect the ongoing structure and financial activities of the ATSB.

### COVID-19

The COVID-19 pandemic has had minimal financial and operational impacts on the ATSB for 2019-20. In recognising the potential impacts in to the future, the ATSB continues to identify and implement efficiencies and effectiveness in to its business.

### Prior Year Adjustments

During 2016-17, approval was given to the ATSB to re-profile \$1.764 million of Departmental Capital Budget (DCB) and equity injections. In 2019-20, it was identified that the ATSB had incorrectly reported within the 2018-19 financial statements, an amount relating to the re-profiling of the capital. The opening balance of contributed equity was overstated by an amount of \$0.305 million, which was representative of an amount of funding which had lapsed in the prior financial year. During 2018-19, an additional amount of \$0.372 million lapsed, and was returned to Government.

The ATSB has also adjusted the 2018-19 comparatives for Equity injection and Departmental Capital Budget, to reflect the full appropriations received during 2018-19.

The ATSB received \$0.225 million within Appropriation Act (No. 1) 2019-20 (DCB) and \$0.068 million within Appropriation Act (No. 2) 2019-20 (Equity Injection) totalling \$0.293 million during the 2019-20 financial year. During 2018-19 the ATSB received \$0.055 million within Appropriation Act (No. 1) 2018-19 (DCB) and \$0.329 million within Appropriation Act (No. 2) 2018-19 (Equity Injection) totalling \$0.384 million, during the 2018-19 financial year. All of these amounts were part of the original movement of funds in 2016-17.



## Financial Performance

This section analyses the financial performance of the Australian Transport Safety Bureau for the year ended 30 June 2020.

### 1.1 Expenses

	2020	2019
	\$'000	\$'000
<b>1.1A: Employee benefits</b>		
Wages and salaries	(12,139)	(12,018)
Superannuation		
Defined contribution plans	(1,531)	(1,299)
Defined benefit plans	(572)	(768)
Leave and other entitlements	(1,313)	(1,572)
Separation and redundancies	(317)	(248)
Other Employee Expenses	(106)	(124)
<b>Total employee benefits</b>	<b>(15,978)</b>	<b>(16,029)</b>

#### Accounting Policy

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

### 1.1B: Suppliers

#### Goods and services supplied or rendered

Investigation services	( 3,887)	( 3,797)
Information technology	( 1,659)	( 1,551)
Services from the Department of Infrastructure, Transport, Regional Development and Communications	( 479)	( 531)
Contracted Services	( 478)	( 809)
Travel	( 384)	( 651)
Training and conferences	( 257)	( 186)
Communications	( 162)	( 216)
Audit fees	(104)	(91)
Office rent <sup>1</sup>	( 30)	( 1,663)
Publications and printing	(33)	(62)
Consultants	(22)	(52)
Legal	(16)	(20)
Other	(254)	(239)
<b>Total goods and services supplied or rendered</b>	<b>(7,765)</b>	<b>(9,867)</b>
Goods supplied	(149)	(131)
Services rendered	(7,616)	(9,736)
<b>Total goods and services supplied or rendered</b>	<b>(7,765)</b>	<b>(9,867)</b>
<b>Other suppliers</b>		
Workers compensation expenses	(106)	(192)
<b>Total other suppliers</b>	<b>(106)</b>	<b>(192)</b>
<b>Total suppliers</b>	<b>(7,871)</b>	<b>(10,059)</b>

<sup>1</sup> The ATSB has applied AASB 16 using the modified retrospective approach and therefore the comparative information has not been restated and continues to be reported under AASB 117.

The ATSB does not have any short-term or low-value lease commitments as at 30 June 2020.

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

**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.

	<b>2020</b>	2019
	<b>\$'000</b>	\$'000
<b>1.1C: Finance costs</b>		
Finance leases <sup>1</sup>	-	(6)
Interest on lease liabilities	<b>(102)</b>	-
<b>Total finance costs</b>	<b>(102)</b>	<b>(6)</b>

<sup>1</sup> The ATSB has applied AASB 16 using the modified retrospective approach and therefore the comparative information has not been restated and continues to be reported under AASB 117.

The above lease disclosures should be read in conjunction with the accompanying notes 1.1B, 1.2C, 2.2 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	<b>(5)</b>	(15)
Impairment of non-current assets held for sale	<b>(2)</b>	-
<b>Total write-down and impairment of other assets</b>	<b>(7)</b>	<b>(15)</b>

**1.2 Own-Source Revenue and gains**

	2020	2019
	\$'000	\$'000

**Own-Source Revenue****1.2A: Revenue from contracts with customers**

Rendering of services	1,184	1,540
<b>Total revenue from contracts with customers</b>	<b>1,184</b>	<b>1,540</b>

**Accounting Policy**

Revenue from the sale of goods is recognised when control has been transferred to the buyer.

The ATSB has recognised AASB15 and AASB 1058 with an initial application date of 1 July 2019, using the modified retrospective option, where comparatives for 2019 have not been restated.

AASB 15 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

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, are recognised at the nominal amounts due less any impairment allowance account. Collectability of debts is reviewed at end of the reporting period.

**1.2B: Other revenue**

Resources received free of charge

Remuneration of auditors <sup>1</sup>	51	51
Investigation Services	3,781	3,681
Other	11	680
<b>Total other revenue</b>	<b>3,843</b>	<b>4,412</b>

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

**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.

**1.2 Own-Source Revenue and gains (continued)**

	<b>2020</b>	2019
	<b>\$'000</b>	\$'000
<b>Gains</b>		
<b>1.2C: Other gains</b>		
Sale proceeds	<u>3</u>	2
<b>Total other gains</b>	<u><b>3</b></u>	<u>2</u>

**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	<u>20,205</u>	20,244
<b>Total revenue from Government</b>	<u><b>20,205</b></u>	<u>20,244</u>

**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.

## 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. Employee related information is disclosed in the People and Relationships section.

### 2.1 Financial Assets

	2020	2019
	\$'000	\$'000

#### 2.1A: Cash and cash equivalents

Cash on hand or on deposit	145	152
<b>Total cash and cash equivalents</b>	<b>145</b>	<b>152</b>

#### 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	1	88
<b>Total goods and services receivables</b>	<b>1</b>	<b>88</b>

##### Appropriations receivables

Appropriation receivable	8,311	21,210
<b>Total appropriations receivables</b>	<b>8,311</b>	<b>21,210</b>

##### Other receivables

Statutory receivables	72	47
Receivables from Government <sup>1</sup>	-	-
<b>Total other receivables</b>	<b>72</b>	<b>47</b>
<b>Total trade and other receivables (gross)</b>	<b>8,384</b>	<b>21,345</b>

<b>Total trade and other receivables (net)</b>	<b>8,384</b>	<b>21,345</b>
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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.

<sup>1</sup>. An amount of \$0.293 million was incorrectly recognised within Receivables from Government during 2018-19, and is now correctly reflected within Appropriation receivable for 2019-20. For additional detail please refer to Overview section.

## 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 2020

	Buildings \$'000	Heritage and cultural \$'000	Plant and equipment \$'000	Computer Software <sup>1</sup> \$'000	Total \$'000
<b>As at 1 July 2019</b>					
Gross book value	-	15	2,030	6,653	8,698
Accumulated depreciation, amortisation and impairment	-	-	(850)	(5,526)	(6,376)
<b>Total as at 1 July 2019</b>	-	15	1,179	1,127	2,321
Recognition of right of use asset on initial application of AASB 16	10,153	-	-	-	10,153
<b>Adjusted total as at 1 July 2019</b>	10,153	15	1,179	1,127	12,474
Additions					
Purchase	-	-	151	96	247
Internally developed	-	-	-	186	186
Right-of-use assets	-	-	116	-	116
Revaluations and impairments recognised in other comprehensive income	-	1	108	-	109
Impairments recognised in net cost of services <sup>2</sup>	-	-	(7)	-	(7)
Depreciation and amortisation	-	-	(370)	(273)	(643)
Depreciation on right-of-use assets	(1,583)	-	(3)	-	(1,586)
Other movements					
Reclassification - previously held for sale <sup>3</sup>	-	-	15	-	15
Other movements of right-of-use assets	-	-	(104)	-	(104)
<b>Total as at 30 June 2020</b>	8,570	16	1,085	1,136	10,807
		Heritage and cultural	Plant and equipment	Computer Software	Total
	Buildings \$'000	\$'000	\$'000	\$'000	\$'000
<b>Total as at 30 June 2020 represented by</b>					
Gross book value	10,153	16	1,154	6,935	18,258
Accumulated depreciation, amortisation and impairment	(1,583)	-	(69)	(5,799)	(7,451)
<b>Total as at 30 June 2020</b>	8,570	16	1,085	1,136	10,807
Carrying amount of right-of-use assets	8,570	-	113	-	8,683

<sup>1</sup> The carrying amount of computer software included \$969k internally generated software and \$167k purchased software.

<sup>2</sup> An impairment loss of \$2k was recognised in relation to assets previously identified as held for sale, with the intent of sale no longer existing. Previously on recognition of the planned sale, an impairment loss of \$18k was recognised. During 2020 an additional \$5k of plant and equipment assets were also impaired.

<sup>3</sup> A group of plant and equipment assets previously identified as held for sale were reclassified as a plan of sale was no longer able to be identified.

#### Revaluations of non-financial assets

All revaluations were conducted in accordance with the revaluation policy stated at Note 5.3. An independent valuer, Jones Lang LaSalle Public Sector Valuations Pty Ltd revalued all non-financial assets as at 30 April 2020.

**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 plus transaction costs where appropriate.

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, 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 transferor's accounts immediately prior to the restructuring.

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).

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 owned.

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 application, an impairment review is undertaken for any ROU lease asset that shows indicators of impairment and an impairment loss is recognised against any ROU asset that is impaired. Leased ROU assets continue to be measured at cost after initial recognition in Commonwealth agency, GGS and Whole of Government financial statements.

Revaluations

Following initial recognition at cost, property, plant and equipment (**excluding ROU assets**) are carried at fair value (or an amount not materially different from fair value) less subsequent accumulated depreciation and accumulated impairment losses. Valuations are conducted with sufficient 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 depended 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.

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.

Depreciation rates applying to each class of depreciable asset are based on the following useful lives:

	2020	2019
Plant and equipment	3 to 10 years	3 to 10 years
Computer equipment	4 years	4 years
Office equipment	3 to 10 years	3 to 10 years
Heritage and cultural	100 years	100 years

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.

Impairment

All assets were assessed for impairment at 30 June 2020.

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 were deprived of the asset, its value in use is taken to be its depreciated replacement cost.

Derecognition

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

Heritage and Cultural Assets

The ATSB has a Pegasus Mark II Propellor from a Supermarine Walrus aircraft. The Supermarine Walrus was a British single-engine amphibious biplane reconnaissance aircraft first flown in 1933.

The ATSB has classified this item as a heritage and cultural asset as its primary purpose relates to its heritage and cultural significance.

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.

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

**2.3 Payables**

	2020	2019
	\$'000	\$'000
<b>2.3A: Suppliers</b>		
Trade creditors and accruals	(47)	(292)
Accrued expenses	(522)	(114)
<b>Total suppliers</b>	<b>(569)</b>	<b>(406)</b>

Settlement is usually made within 31 days.

**2.3B: Other payables**

Salaries and wages	(260)	(166)
Superannuation	(33)	(16)
Separations and redundancies	(185)	-
Unearned income	(2)	-
<b>Total other payables</b>	<b>(480)</b>	<b>(182)</b>

**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).

**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 \$2k (2019: Nil).

**2.4 Interest Bearing Liabilities**

	2020	2019
	\$'000	\$'000
<b>2.4A: Leases</b>		
Lease Liabilities		-
Buildings	(8,749)	
Plant and equipment	(113)	
Finance Leases <sup>1</sup>	-	(119)
<b>Total leases</b>	<b>(8,862)</b>	<b>(119)</b>

<sup>1</sup>The ATSB has applied AASB 16 using the modified retrospective approach and therefore the comparative information has not been restated and continues to be reported under AASB 117.

Total cash outflow for leases for the year ended 30 June 2020 was \$1.488m.

**Accounting Policy**

Refer to Overview section for accounting policy on leases.



## 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 2020

	Annual appropriation \$'000	Adjustments to appropriation <sup>1</sup> \$'000	Total appropriation \$'000	Appropriation applied in 2020 (current and prior years) \$'000	Variance <sup>2</sup> \$'000
<b>Departmental</b>					
Ordinary annual services	20,205	1,459	21,664	(20,761)	903
Capital Budget	590	-	590	(441)	149
Other services					
Equity Injections	68	-	68	-	68
<b>Total departmental</b>	<b>20,863</b>	<b>1,459</b>	<b>22,322</b>	<b>(21,202)</b>	<b>1,120</b>

<sup>1</sup> PGPA Act Section 74 receipts.

<sup>2</sup> The variance between appropriations and appropriations applied in 2019-20 is due to a combination of underspends within supplier expenses, accrued supplier invoices and a delay with the finalisation of capital projects .

##### Annual Appropriations for 2019

	Annual appropriation <sup>1</sup> \$'000	Adjustments to appropriation <sup>2</sup> \$'000	Total appropriation \$'000	Appropriation applied in 2019 \$'000	Variance <sup>2</sup> \$'000
<b>Departmental</b>					
Ordinary annual services	20,244	2,646	22,890	(23,127)	(236)
Capital Budget <sup>3</sup>	416	-	416	(836)	(420)
Other services					
Equity Injections	329	-	329	-	329
<b>Total departmental</b>	<b>20,989</b>	<b>2,646</b>	<b>23,635</b>	<b>(23,963)</b>	<b>(327)</b>

<sup>1</sup> PGPA Act Section 74 receipts.

<sup>2</sup> Variances within the supplier expenses is due to accrued expenses from the 2017-18 year being drawdown in 2018-19 from operating funding, in addition to an unspent appropriation from the Departmental Capital Budget.

<sup>3</sup> Departmental Capital Budgets are appropriated through Appropriation Acts (No.1,3,5). They form part of ordinary annual services, and are not separately identified in the Appropriation Acts.

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

	2020 \$'000	2019 \$'000
<b>Departmental</b>		
Appropriation Act (No. 1) 2017-18		1,008
Appropriation Act (No. 2) 2017-18 (Equity Injection)		80
Appropriation Act (No. 1) 2018-19 (DCB)		416
Appropriation Act (No. 2) 2018-19 (Equity Injection)		329
Appropriation Act (No. 1) 2018-19 (Cash at Bank - 30 June)		152
Appropriation Act (No. 1) 2018-19 <sup>1</sup>	14,000	19,377
Appropriation Act (No. 1) 2019-20	7,680	
Appropriation Act (No. 1) 2019-20 (DCB)	563	
Appropriation Act (No. 2) 2019-20 (Equity Injection)	68	
Appropriation Act (No. 1) 2019-20 (Cash at Bank - 30 June)	145	
<b>Total departmental</b>	<b>22,456</b>	<b>21,362</b>

<sup>1</sup> An unspent amount of \$14.0m relating to missing Malaysia Airlines Flight 370 (MH370) was quarantined under section 51 during 2019-20.

### 3.2 Net Cash Appropriation Arrangements

	2020	2019
	\$'000	\$'000
<b>Total comprehensive income less depreciation/amortisation expenses previously funded through revenue appropriations</b>	<b>(38)</b>	58
Plus: depreciation/amortisation expenses previously funded through revenue appropriation	<b>(643)</b>	(699)
Plus: depreciation right-of-use assets	<b>(1,586)</b>	-
Less: principal repayments - leased assets	<b>1,424</b>	-
<b>Total comprehensive income - as per the Statement of Comprehensive Income</b>	<b>(843)</b>	(641)

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 Leases, it does not directly reflect a change in appropriation arrangements.

## People and Relationships

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

	2020	2019
	\$'000	\$'000
<b>4.1A: Employee provisions</b>		
Leave	<b>(4,559)</b>	(4,135)
<b>Total employee provisions</b>	<b>(4,559)</b>	(4,135)

#### 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 provision 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 2020. The estimate of the present value of the liability takes into account attrition rates and pay increases through promotion and inflation.

#### Separation and Redundancy

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.

#### Superannuation

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 other senior executive who the Chief Commissioner considers to be KMP because of their responsibilities and the nature of their work. Key management personnel remuneration is reported in the table below:

	2020	2019
	\$'000	\$'000
Short-term employee benefits	(949)	(924)
Post-employment benefits	(107)	(106)
Other long-term employee benefits	(92)	(92)
<b>Total key management personnel remuneration expenses<sup>1</sup></b>	<b>(1,147)</b>	<b>(1,122)</b>

The total number of KMP that are included in the above table is 3 individuals (2019: 3 individuals).

<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.

#### 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 (2019: Nil).

## 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 2020, the ATSB had no quantifiable contingencies (2019: Nil).

#### Unquantifiable contingencies

At 30 June 2020, the ATSB had no unquantifiable contingencies (2019: 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

	2020	2019
	\$'000	\$'000
<b>5.2A: Categories of financial instruments</b>		
<b>Financial assets at amortised cost</b>		
Cash and cash equivalents	145	152
Trade and other receivables	1	88
<b>Total financial assets at amortised cost</b>	<b>146</b>	<b>240</b>
<b>Total financial assets</b>	<b>146</b>	<b>240</b>
<b>Financial liabilities</b>		
<b>Financial liabilities measured at amortised cost</b>		
Trade creditors	(47)	(292)
Finance leases	-	(119)
<b>Total financial liabilities measured at amortised cost</b>	<b>(47)</b>	<b>(411)</b>
<b>Total financial liabilities</b>	<b>(47)</b>	<b>(411)</b>

## 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).

	2020	2019
	\$'000	\$'000
<b>5.2B: Net gains or losses on financial liabilities</b>		
<b>Financial liabilities measured at amortised cost</b>		
Interest expense	(102)	(6)
<b>Net gains/(losses) on financial liabilities measured at amortised cost</b>	<b>(102)</b>	<b>(6)</b>
<b>Net losses from financial liabilities</b>	<b>(102)</b>	<b>(6)</b>

The net interest expense from financial liabilities not at fair value through profit or loss is \$102k (2019: \$6k).

### 5.3 Fair Value Measurement

#### 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 Jones Lang LaSalle Public Sector Valuations Pty Ltd (JLL) to undertake a revaluation of all plant and equipment assets as at 30 April 2020 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.

#### Fair value measurements at the end of the reporting period

2020	2019
\$'000	\$'000

### 5.3 Fair value measurement

#### Non-financial assets

Heritage and cultural	16	15
Property, plant and equipment	1,085	1,179
	<b>1,101</b>	<b>1,194</b>

## Other information

### 6.1 Aggregate Assets and Liabilities

#### 6.1A: Aggregate assets and liabilities

	2020	2019
	\$'000	\$'000
<b>Assets expected to be recovered in:</b>		
No more than 12 months	8,786	22,069
More than 12 months	10,846	2,415
<b>Total assets</b>	<b>19,632</b>	<b>24,484</b>
<b>Liabilities expected to be settled in:</b>		
No more than 12 months	(4,165)	(2,046)
More than 12 months	(10,305)	(2,796)
<b>Total liabilities</b>	<b>(14,470)</b>	<b>(4,842)</b>



# SECTION 7 – MANAGEMENT AND ACCOUNTABILITY

## Management and accountability

### The Commission

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

The Commission provides guidance on the selection of accidents and other safety incidents to be investigated. The Commission is responsible 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 face-to-face at least four 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 2019–20, the ATSB Senior Leadership Team (SLT) met fortnightly to discuss strategic management issues and priorities. The SLT consisted of the Chief Commissioner, the Executive Director Transport Safety, the Chief Operating Officer, the Directors Transport Safety and the Directors 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 the ATSB's financial and performance reporting responsibilities, risk oversight and management, and system of internal control. The Audit and Risk Committee consists of an independent chair, an independent member and an ATSB management nominee. The Committee held four meetings throughout the financial year, in September and December 2019, and March and June 2020.

In 2019–20, the Committee advised and provided assurance on a range of matters including the ATSB's:

- 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 and *Internal Audit Strategic Plan 2018–20*.

The internal audit program for 2019–20 focused on assuring the ATSB's legislative compliance and performance against its core functions. The program included the following internal audits:

- targeted control review – monitoring safety recommendations
- funding model arrangements
- the ATSB's performance measures
- enterprise risk management.

The Audit and Risk Committee is monitoring the implementation of the recommendations coming out of the Australian National Audit Office's (ANAO) efficiency audit of the ATSB in 2018–19. A copy of the Audit and Risk Committee Charter is available on the ATSB website at [www.atsb.gov.au](http://www.atsb.gov.au).

## Business planning and reporting

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 Corporate Plan, published on the ATSB website. The Annual Plan incorporates the operational priorities, activities, deliverables and key performance indicators for the financial year.

The *ATSB Annual Plan 2019–20* gave priority to:

- safety data recording, analysis and data sharing
- occurrence and safety issue investigations of accidents, serious incidents and other occurrences
- communication and education
- maintaining and enhancing capability and readiness
- strategic projects
- managing ATSB resources.

## Risk management

Consistent with the PGPA Act, the ATSB maintains a risk management framework. The framework includes a Risk Management Policy, Risk Management Strategy, Risk Management Plan and Enterprise Risk Register. The framework is an integral element of the ATSB's broader 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 2019–20, the ATSB focused on risks related to capability, reputation, health and safety, and jurisdictional reach.

During 2019–20, the ATSB undertook a comprehensive review of its risk management framework. The ATSB collaborated with an IT service provider to develop an online risk management system, which will allow risks to be managed and viewed electronically. The system will be rolled out to staff in 2020–21.

## Business continuity plan

The ATSB's 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.

In 2019–20, the ATSB conducted a business continuity exercise to the management framework. COVID-19 has also tested the framework and lessons learnt are being incorporated into revisions.

## Fraud control

In accordance with the PGPA Act, the ATSB maintains a fraud management framework which includes a Fraud Policy and Strategy Statement and a Fraud Control 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's staff awareness program incorporates activities for existing and new staff.

The Audit and Risk Committee and the Commission receive regular reports on fraud risks and the implementation of controls and treatments. The Committee and the Commission review the Fraud Control Plan to ensure the ATSB has appropriate processes and systems in place to capture, and effectively investigate, fraud-related information.

## Ethical standards

During the reporting period, the ATSB continued to demonstrate its commitment to promoting ethical standards and behaviours relating to workplace and employment.

Initiatives for 2019–20 included:

- providing information on the APS values, Employment Principles and Code of Conduct in induction packages and during training sessions
- promoting the APS Values, Employment Principles and Code of Conduct through individual performance development plans
- providing staff with access to information on ethical standards via the ATSB's intranet and the Australian Public Service Commission's (APSC) website
- providing staff with guidance on Public Interest Disclosure policy and procedures
- ensuring all staff review their conflict of interest declarations twice a year
- providing staff with information and guidance on bullying and harassment policy and procedures
- providing staff with training on the ATSB's fraud control policy and procedures and acceptance of gifts and benefits policy
- promoting the APS Values, Employment Principles and Code of Conduct in recruitment and selection activity.

## Staff management

The ATSB's workforce planning capability is maturing and is an integral component of the ATSB's planning cycle. Ensuring we have a workforce that is flexible, engaged and has the capabilities to meet our emerging business requirements remains our priority.

During 2020, the ATSB dedicated significant time and resources to managing our response to the COVID-19 crisis, ensuring up-to-date information was available to decision makers and employees, and supports were in place for all of our employees regardless of their work location.

Initiatives for 2019–20 included:

- a review of our human resource systems, processes and internal procedures to ensure consistency with best practice and contemporary management principles
- the adoption of regular performance and career conversations throughout the performance and development cycle
- leadership development opportunities, including 360-degree feedback
- the expansion of coaching methods
- health and wellbeing sessions and plans
- providing data and research to support better workplace conditions and arrangements.

## Staffing profile

In accordance with workforce planning projections, the ATSB's staffing profile has remained relatively stable, from 101 at the end of June 2019 to 104 by the end of June 2020. The associated staff turnover rate was approximately 11 per cent. Table 17 displays the ATSB staff numbers, by classification, as at 30 June 2020.

**Table 17: The ATSB's staffing profile at 30 June 2020**

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	2		4
Senior Executive Service (SES)				2		1	2
EL 2		5	2	27		1	34
EL 1		9		18		2	27
APS 6		8	3	14		1	25
APS 5		7		4		2	11
APS 4				1		1	1
<b>Total</b>		<b>29</b>	<b>6</b>	<b>67</b>	<b>2</b>	<b>8</b>	<b>104</b>

This total is comprised of the following employment arrangements:

- ninety-eight staff (representing all non-SES employees) covered by the enterprise agreement
- two SES employees covered by section 24(1) determinations, established in accordance with the ATSB's SES remuneration policy
- four 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 104 SES and non-SES employees, 77 employees were based in Canberra, 13 based in Brisbane, three based in Adelaide, five based in Perth, five based in Melbourne and one based in Sydney.

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

- options for home-based work
- ability to work part-time
- flexible working arrangements
- access to different leave types
- influenza vaccinations and health checks
- access to the Employee Assistance Program.

### Indigenous employees

At 30 June 2020, the ATSB had no employees who identified as Indigenous.

### Salary rates

Table 18 displays the salary rates supporting the above employment arrangements at 30 June 2020.

**Table 18: The ATSB's salary rates at 30 June 2020**

Substantive classification	Lower(\$)		Upper(\$)
<b>Statutory office holders</b>	As determined by the remuneration tribunal		
<b>EL2</b>	121,484		149,310
<b>EL1</b>	102,190		123,887
<b>APS 6</b>	79,774		94,893
<b>APS 5</b>	73,574		79,442
<b>APS 4</b>	65,903		71,613

\* Maximums include transport safety investigator and respective supervisor salaries, representing a \$2,083–\$10,652 increase on standard APS 6–EL2 rates.

\*\* Senior executive remuneration for the 2019–20 financial year is captured and presented through Table 22: Information about remuneration for key management personnel.

### Training and development

The ATSB is committed to building a strong, capable and resilient workforce. It does so by embracing greater opportunities for learning through on-the-job activities (70%), relational learning through peers and networks (20%) and blended training (10%).

During 2019–20, the ATSB procured and implemented a learning management system. ATSB courses have been identified and prioritised for transition from face-to-face delivery to self-paced online delivery through the new learning management system. The ATSB now has a strong platform for the delivery of learning and development opportunities for staff into the future.

Initiatives for 2019–20 included:

- 22 transport safety investigators completed the Graduate Certificate in Transport Safety Investigation through our partnership with RMIT University
- the ATSB continued to make enhancements to its training resources and materials, and provided over 17 different face-to-face training courses to employees throughout the year
- an induction course for new Commissioners was developed and implemented
- 18 managers and employees undertaking a workplace coaching program

- a new learning management system was procured and implemented, and this system integrates with the electronic performance management system
- 11 self-paced online courses available for employees in the learning management system.

## 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's 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 in the ATSB's 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 2019–20, three new consultancy contracts were entered into involving total actual expenditure of \$23,775 (GST Inclusive). There were no ongoing consultancy contracts carried over from the 2018–19 year.

Annual reports contain information about actual expenditure on contracts for consultancies. Information on the value of contracts and consultancies is available from the AusTender website at [www.tenders.gov.au](http://www.tenders.gov.au)

## Australian National Audit Office access clauses

There were no contracts during 2019-20 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 2019-20.

## 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's website at [www.finance.gov.au](http://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.

The ATSB's expenditure on legal services for 2019–20 was \$121,768 comprising:

- \$19,099 on external legal services
- \$102,669 on internal legal services.

## External scrutiny and participation

### Coronial Inquests

Findings for one coronial inquest that the ATSB had previously participated in was handed down in 2019–20.

#### **Loss of control involving Cessna Aircraft Company U206G, VH-FRT Caboolture Airfield, Queensland, on 22 March 2014 (AO-2014-053)**

The ATSB attended two hearings of an inquest conducted by State Coroner Terry Ryan in 2018. The inquest was into a matter involving a Cessna U206G aircraft, registered VH-FRT, that was being used for tandem parachuting operations at Caboolture Airfield, Queensland. On 22 March 2014, the aircraft took off from Caboolture Airfield with a pilot, two parachuting instructors and two tandem parachutists on board.

Shortly after take-off, witnesses at the airfield observed the aircraft climb to about 200 ft above ground level before it commenced a roll to the left. The left roll steepened and the aircraft then adopted a nose-down attitude until impacting the ground in an almost vertical, left-wing low attitude. All the occupants on board were fatally injured. A post-impact, fuel-fed fire destroyed the aircraft.

The ATSB identified that the aircraft aerodynamically stalled at a height from which it was too low to recover control prior to collision with terrain. The reason for the aerodynamic stall was unable to be determined. Extensive fire damage prevented examination and testing of most of the aircraft components. Consequently, a mechanical defect could not be ruled out as a contributor to the accident.

A number of safety issues were also identified by the ATSB. These included findings associated with occupant restraint, modification of parachuting aircraft and the regulatory classification of parachuting operations.

The current classification of parachuting as a private operation means there are fewer risk controls than for other similar aviation activities that also involve payment for carriage. Prospective tandem parachutists should be aware that accident data indicates that parachuting is less safe than other aviation activities, such as scenic flights.

The ATSB released its findings on 23 June 2017. The full ATSB investigation report (AO-2014-053) is available on the ATSB's website at [www.atsb.gov.au](http://www.atsb.gov.au).

The Coroner handed down his findings on Tuesday 20 March 2020. The Coroner agreed with the ATSB's finding that shortly after take-off, and for reasons that could not be determined, the aircraft aerodynamically stalled at a height from which the pilot was unable to recover prior to collision with terrain. In making the finding the Coroner acknowledged the limited evidence available to determine that it was a seat slide or some other event.

The Coroner supported the recommendations of the ATSB that CASA introduce appropriate "risk control" measures in respect of parachuting operations that provide "increased assurance of aircraft serviceability, pilot competence and adequate regulatory oversight".

### Senate Rural and Regional Affairs and Transport Legislation Committee

#### **Collision with terrain involving SOCATA TB-10 Tobago, VH-YTM, near Mount Gambier Airport, South Australia, on 28 June 2017 (AO-2017-069)**

In August 2019, the ATSB published its final report into a collision with terrain involving an Angel Flight community service flight near Mount Gambier Airport in June 2017. The pilot and both passengers were fatally injured. The occurrence is highlighted in section 4 of this report: Significant Safety Investigations.

Following the release of the investigation, the Senate Rural and Regional Affairs and Transport Legislation Committee commenced an inquiry into the ATSB's report. The Committee published its report in October 2019 and the Australian Government provided its response in November. The Australian Government noted the Committee had recognised the expert analysis conducted by the ATSB in examining Angel Flight operations. The Australian Government further acknowledged that while the Committee provided comment on whether non-passenger operations should have been included in the ATSB's main calculations of risk, the government noted the ATSB's focus on passenger carrying operations is consistent with the government's Statement of Expectations for the ATSB.

The Committee did not have any recommendations for the ATSB.

### **Productivity Commission**

In 2019, the Productivity Commission commenced an inquiry into the National Transport Regulatory Reforms involving rail, marine and heavy road vehicles. The ATSB participated in the inquiry, making two submissions and appearing in person before the Commission.

The ATSB's involvement concerns its jurisdiction for investigating rail accidents and incidents, and inconsistencies with the funding arrangements from states and territories. The Commission also received submissions advocating a role for the ATSB in heavy road vehicles and domestic commercial vessels.

The Productivity Commission provided its report to the Australian Government in April 2020. The government has 25 sitting days from receipt of the report to table the report in both houses of parliament.

### **Joint Committee of Public Accounts and Audit**

In November 2019, the ATSB gave evidence to an inquiry by the Joint Committee of Public Accounts and Audit (JCPAA) into Efficiency and Effectiveness audit reports by the ANAO. In 2019, the ANAO finalised a report into the efficiency of the ATSB, finding the ATSB had established key elements of an overall framework to promote efficient investigation processes. The ANAO also found that the ATSB's efficiency had been declining with its use of resources, but acknowledged a number of actions that had already been taken by the ATSB to make improvements, including formalising aspects of its program-managed approach to investigations.

JCPAA concluded in its final report handed down in June 2020:

The Committee recognises that several programs and governance structures have been put in place both during and following the audit process. As such, results in relation to timeframes have yet to be fully realised. The Committee acknowledges the efforts of the ATSB regarding benchmarking and the prioritisation of investigative resourcing.

## SECTION 8 – APPENDICES

### Appendix A: Other mandatory information

#### Work health and safety

The ATSB seeks to safeguard the health and safety of its employees, contractors and visitors by providing and maintaining a safe working environment, with the aim to prevent work-related injuries and illness, and support employee wellbeing.

The ATSB monitored and reviewed the rehabilitation management system in 2019–20 as part of our commitment to continuous improvement.

In 2019–20 no notifiable incidents occurred under Part 3 or Part 5 of the *Work Health and Safety Act 2011*. One compensation claim was accepted by Comcare and efficiently managed, through the application of the ATSB's rehabilitation management system.

Initiatives under the ATSB's health and wellbeing program are developed in consultation with employees and the Work Health Safety and Wellbeing Committee. Initiatives for 2019–20 included:

- continued availability of the Employee Assistance Program for employees and their families
- resilience and mental health awareness sessions
- training for first aid officers including Mental Health First Aid for managers
- workstation assessments, including providing special equipment to prevent injury and to support recovery for illness or injury
- early intervention support to employees
- support for employees requiring reasonable adjustments
- facilitation of flexible working arrangements
- influenza vaccinations
- staff access to employee-initiated cycling or walking activities
- work health and safety induction programs delivered to all new employees.

#### Advertising and market research

During 2019–20, the ATSB spent \$1,232 (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's 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 sub-lease office accommodation arrangements with the Department of Infrastructure, Transport, Regional Development and Communications, the ATSB's environmental management system complies with ISO 14001:2004 – the international standard for environmental management systems. The system is focused on the ATSB's office-based activities in Canberra. Initiatives are applied at regional office premises, where appropriate.



The ATSB has contracted 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 further limited its energy use through various initiatives that focus on improving the energy efficiency of the property portfolio, including:

- operating a virtualised and cloud IT infrastructure environment
- using seven per cent 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 per cent recycled paper for internal use
- conserving energy, water, paper and other natural resources, yet 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 2019–20.

## Diversity and inclusion

During 2019–20, the ATSB focused on initiatives to provide an inclusive workforce diverse in background, thinking and experiences, including:

- a sourcing strategy to attract more people from diverse backgrounds into a career as a transport safety investigator
- employee participation at APS-wide diversity networks and forums
- a diversity and inclusion champion who provided mentoring and advice across our Portfolio.

## Disability Reporting Mechanism

The *National Disability Strategy 2010–2020* is Australia's overarching framework for disability reform. It acts to ensure the principles underpinning the *United Nations Convention on the Rights of Persons with Disabilities* are incorporated into Australia's policies and programs that affect people with a disability, their families and carers.

All levels of government will continue to be held accountable for the implementation of the strategy through biennial progress reports to the Council of Australian Governments. Progress reports can be found at [www.dss.gov.au](http://www.dss.gov.au).

Disability reporting is included in the Australian Public Service Commission's State of the Service reports and APS Statistical Bulletin. These reports are available at [www.apsc.gov.au](http://www.apsc.gov.au).

## 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 (IPS). Information including an Agency Plan showing what information it published, is available on the ATSB website at [www.atsb.gov.au](http://www.atsb.gov.au).

Detailed information about the FOI Act is available via the Office of the Australian information Commissioner (OAIC) website at [www.oaic.gov.au](http://www.oaic.gov.au) and the Federal Register of Legislation website at [www.legislation.gov.au](http://www.legislation.gov.au)

## How to lodge a request for information

Information about how to make an application under the FOI Act can be found on the ATSB's website at [www.atsb.gov.au](http://www.atsb.gov.au)

A request for access to documents made under the FOI Act 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  
PO Box 967  
CIVIC SQUARE ACT 2608

Phone: (02) 6122 1601

Email: [FOI-ATSB@atsb.gov.au](mailto: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 five 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.

It is important to note that 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 under subparagraph 38(1)(b)(i) of the FOI Act.

## Freedom of Information

In 2019–20, the ATSB received nine FOI requests.

**Table 19: Freedom of Information activity<sup>4</sup>**

2019–20	Numbers
<b>Requests</b>	
On hand at 1 July 2019 (A)	0
New requests received (B)	9
Requests withdrawn (C)	5
Requests transferred in full to another agency (D)	0
Requests on hand at 30 June 2020 (E)	0
Total requests completed at 30 June 2020 (A+B-C-D-E)	4
<b>Action on requests</b>	
Access in full	1
Access in part	2
Access refused	1
Access transferred in full	0
Request withdrawn	5
2019–20	Numbers
<b>Response times (excluding withdrawn)</b>	
0–30 days	4
31–60 days	0
61–90 days	0
90+ days	0
<b>Internal review</b>	
Requests received	0
Decision affirmed	0
Decision amended	0
Request withdrawn	0
<b>Review by Office of the Australian Information Commissioner</b>	
Applications received	0
<b>Administrative Appeals Tribunal (AAT) review of FOI decisions</b>	
Applications received	0

## 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

<sup>4</sup> These statistics cannot be compared directly with the deadlines set in the *Freedom of Information Act 1982*, as the FOI Act provides for extensions of time to allow for consultation with third parties, negotiation of charges and other issues.

- 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 [www.atsb.gov.au](http://www.atsb.gov.au).

Under section 8C of the FOI Act, 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](http://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](mailto:atsbinfo@atsb.gov.au)

## Functions and decision-making powers

The ATSB's 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 [www.legislation.gov.au](http://www.legislation.gov.au)

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 2019–20

**Table 20: ATSB resource statement 2019–20**

	Actual available appropriation for 2019–20 \$'000 (a)	Payments made 2019–20 \$'000 (b)	Balance remaining 2019–20 \$'000 (a) - (b)
<b>Ordinary Annual Services<sup>1</sup></b>			
Departmental appropriation <sup>2</sup>	43,207	21,202	22,005
<b>Total</b>	<b>43,207</b>	<b>21,202</b>	<b>22,005</b>
<b>Total ordinary annual services A</b>	<b>43,207</b>	<b>21,202</b>	<b>22,005</b>
<b>Other services</b>			
Departmental non-operating			
Equity injections	477	-	477
<b>Total</b>	<b>477</b>	<b>-</b>	<b>477</b>
<b>Total other services B</b>	<b>477</b>	<b>-</b>	<b>477</b>
<b>Total net resourcing and payments for the Australian Transport Safety Bureau</b>	<b>43,684</b>	<b>21,202</b>	<b>22,482</b>

1 Appropriation Act (No. 1) 2019–20 and includes prior year departmental appropriation and section 74 Retained Revenue Receipts.

2 Includes an amount of \$0.590m in 2019–20 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 fostering safety awareness, knowledge and action.

**Table 21: Expenses for outcome**

	Budget* 2019–20 \$'000 (a)	Actual Expenses 2019–20 \$'000 (b)	Variation 2019–20 \$'000 (a) - (b)
<b>Program 1.1: Australian Transport Safety Bureau</b>			
Departmental expense			
Departmental appropriation <sup>1</sup>	21,588	21,539	49
Expenses not requiring appropriation in the Budget year	3,576	4,648	(1,072)
<b>Total for Program 1.1</b>	<b>25,164</b>	<b>26,187</b>	<b>(1,023)</b>
<b>Total expenses for Outcome 1</b>	<b>25,164</b>	<b>26,187</b>	<b>(1,023)</b>

\* Full year budget, including any subsequent adjustment made to the 2019–20 Budget at Additional Estimates.

1 Departmental Appropriation combines Ordinary annual services (Appropriation Act Nos. 1 and 5) and Retained Revenue Receipts under section 74 of the PGPA Act.

	2018–19	2019–20
Average Staffing Level (number)	106	101

## Appendix C: Executive remuneration

**Table 22: Information about remuneration for key management personnel<sup>5</sup>**

Name	Position title	Short-term benefits			Post-employment benefits	Other long-term benefits		Total remuneration
		Base salary	Bonuses	Other benefits and allowances	Superannuation contributions	Long service leave	Other long-term benefits	
G Hood	Chief Commissioner	419,744	-	5949	20,588	9,444	32,185	487,910
N Nagy	Executive Director	276,777	-	5949	42,373	6,227	21,223	352,549
C McNamara	Chief Operating Officer	234,195	-	5949	43,667	5,269	17,957	307,037

**Table 23: Information about remuneration for other highly paid staff**

Total remuneration bands	Number of other highly paid staff	Short-term benefits			Post-employment benefits	Other long-term benefits		Termination benefits	Average total remuneration
		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	
\$225,001 - \$245,000	2	148,530	-	42,595	34,510	3,342	11,389	-	240,366
\$245,001 - \$270,000	-	-	-	-	-	-	-	-	-
\$270,001 - \$295,000	-	-	-	-	-	-	-	-	-
\$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 -	-	-	-	-	-	-	-	-	-

<sup>5</sup> An additional table about remuneration for senior executives (including total remuneration bands) is not required, as all senior executive remunerations within the ATSB have been detailed through the above table.

## Appendix D: Management of human resources

**Table 24: All ongoing employees current report period (2019–20)**

	Male			Female			Indeterminate			Total
	Full-time	Part-time	Total Male	Full-time	Part-time	Total Female	Full-time	Part-time	Total Indeterminate	
NSW	1	-	1	-	-	-	-	-	-	1
QLD	12	-	12	-	1	1	-	-	-	13
SA	3	-	3	-	-	-	-	-	-	3
TAS	-	-	-	-	-	-	-	-	-	-
VIC	4	-	4	1	-	1	-	-	-	5
WA	4	-	4	1	-	1	-	-	-	5
ACT	38	-	38	23	4	27	-	-	-	65
NT	-	-	-	-	-	-	-	-	-	-
External Territories	-	-	-	-	-	-	-	-	-	-
Overseas	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>62</b>	<b>-</b>	<b>62</b>	<b>25</b>	<b>5</b>	<b>30</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>92</b>

**Table 25: All non-ongoing employees current report period (2019–20)**

	Male			Female			Indeterminate			Total
	Full-time	Part-time	Total Male	Full-time	Part-time	Total Female	Full-time	Part-time	Total Indeterminate	
NSW	-	-	-	-	-	-	-	-	-	-
QLD	-	-	-	-	-	-	-	-	-	-
SA	-	-	-	-	-	-	-	-	-	-
TAS	-	-	-	-	-	-	-	-	-	-
VIC	-	-	-	-	-	-	-	-	-	-
WA	-	-	-	-	-	-	-	-	-	-
ACT	4	-	4	4	-	4	-	-	-	8
NT	-	-	-	-	-	-	-	-	-	-
External Territories	-	-	-	-	-	-	-	-	-	-
Overseas	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>4</b>	<b>-</b>	<b>4</b>	<b>4</b>	<b>-</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>8</b>

**Table 26: All ongoing employees previous report period (2018–19)**

	Male			Female			Indeterminate			Total
	Full-time	Part-time	Total Male	Full-time	Part-time	Total Female	Full-time	Part-time	Total Indeterminate	
NSW	1	-	1	-	-	-	-	-	-	1
QLD	14	-	14	-	1	1	-	-	-	15
SA	3	-	3	-	-	-	-	-	-	3
TAS	-	-	-	-	-	-	-	-	-	-
VIC	1	-	1	1	-	1	-	-	-	2
WA	4	-	4	-	-	-	-	-	-	4
ACT	37	-	37	27	5	32	1	-	1	70
NT	-	-	-	-	-	-	-	-	-	-
External Territories	-	-	-	-	-	-	-	-	-	-
Overseas	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>60</b>	<b>-</b>	<b>60</b>	<b>28</b>	<b>6</b>	<b>34</b>	<b>1</b>	<b>-</b>	<b>1</b>	<b>95</b>

**Table 27: All non-ongoing employees previous report period (2018–19)**

	Male			Female			Indeterminate			Total
	Full-time	Part-time	Total Male	Full-time	Part-time	Total Female	Full-time	Part-time	Total Indeterminate	
NSW	-	-	-	-	-	-	-	-	-	-
QLD	-	-	-	-	-	-	-	-	-	-
SA	-	-	-	-	-	-	-	-	-	-
TAS	-	-	-	-	-	-	-	-	-	-
VIC	-	-	-	-	-	-	-	-	-	-
WA	-	-	-	-	-	-	-	-	-	-
ACT	3	1	4	2	-	2	-	-	-	6
NT	-	-	-	-	-	-	-	-	-	-
External Territories	-	-	-	-	-	-	-	-	-	-
Overseas	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>-</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6</b>

## Appendix E: Australian Public Sector (APS) classification and gender

**Table 28: Australian Public Service Act ongoing employees current report period (2019–20)**

	Male			Female			Indeterminate			Total
	Full-time	Part-time	Total Male	Full-time	Part-time	Total Female	Full-time	Part-time	Total Indeterminate	
SES 3	-	-	-	-	-	-	-	-	-	-
SES 2	1	-	1	-	-	-	-	-	-	1
SES 1	1	-	1	-	-	-	-	-	-	1
EL 2	27	-	27	4	2	6	-	-	-	33
EL 1	16	-	16	8	-	8	-	-	-	24
APS 6	13	-	13	8	3	11	-	-	-	24
APS 5	4	-	4	5	-	5	-	-	-	9
APS 4	-	-	-	-	-	-	-	-	-	-
APS 3	-	-	-	-	-	-	-	-	-	-
APS 2	-	-	-	-	-	-	-	-	-	-
APS 1	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>62</b>	<b>-</b>	<b>62</b>	<b>25</b>	<b>5</b>	<b>30</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>92</b>



**Table 29: Australian Public Service Act non-ongoing employees current report period (2019–20)**

	Male			Female			Indeterminate			Total
	Full-time	Part-time	Total Male	Full-time	Part-time	Total Female	Full-time	Part-time	Total Indeterminate	
SES 3	-	-	-	-	-	-	-	-	-	-
SES 2	1	-	1	-	-	-	-	-	-	1
SES 1	-	-	-	-	-	-	-	-	-	-
EL 2	-	-	-	1	-	1	-	-	-	1
EL 1	1	-	1	1	-	1	-	-	-	2
APS 6	1	-	1	-	-	-	-	-	-	1
APS 5	-	-	-	2	-	2	-	-	-	2
APS 4	1	-	1	-	-	-	-	-	-	1
APS 3	-	-	-	-	-	-	-	-	-	-
APS 2	-	-	-	-	-	-	-	-	-	-
APS 1	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>4</b>	<b>-</b>	<b>4</b>	<b>4</b>	<b>-</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>8</b>

**Table 30: Australian Public Service Act ongoing employees previous report period (2018–19)**

	Male			Female			Indeterminate			Total
	Full-time	Part-time	Total Male	Full-time	Part-time	Total Female	Full-time	Part-time	Total Indeterminate	
SES 3	-	-	-	-	-	-	-	-	-	-
SES 2	-	-	-	-	-	-	-	-	-	-
SES 1	1	-	1	-	-	-	-	-	-	1
EL 2	27	-	27	5	2	7	-	-	-	34
EL 1	14	-	14	9	-	9	1	-	1	24
APS 6	13	-	13	8	3	11	-	-	-	24
APS 5	5	-	5	5	1	6	-	-	-	11
APS 4	-	-	-	1	-	1	-	-	-	1
APS 3	-	-	-	-	-	-	-	-	-	-
APS 2	-	-	-	-	-	-	-	-	-	-
APS 1	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>60</b>	<b>-</b>	<b>60</b>	<b>28</b>	<b>6</b>	<b>34</b>	<b>1</b>	<b>-</b>	<b>1</b>	<b>95</b>

**Table 31: Australian Public Service Act non-ongoing employees previous report period (2018–19)**

	Male			Female			Indeterminate			Total
	Full-time	Part-time	Total Male	Full-time	Part-time	Total Female	Full-time	Part-time	Total Indeterminate	
SES 3	-	-	-	-	-	-	-	-	-	-
SES 2	1	-	1	-	-	-	-	-	-	1
SES 1	-	-	-	-	-	-	-	-	-	-
EL 2	-	-	-	1	-	1	-	-	-	1
EL 1	2	-	2	-	-	-	-	-	-	2
APS 6	-	-	-	-	-	-	-	-	-	-
APS 5	-	-	-	1	-	1	-	-	-	1
APS 4	-	1	1	-	-	-	-	-	-	1
APS 3	-	-	-	-	-	-	-	-	-	-
APS 2	-	-	-	-	-	-	-	-	-	-
APS 1	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>-</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6</b>

## Appendix F: Employment type by full-time and part-time status

**Table 32: Australian Public Service Act Employees by full-time and part-time status current report period (2019–20)**

	Ongoing			Non-Ongoing			Total
	Full-time	Part-time	Total Ongoing	Full-time	Part-time	Total Non-Ongoing	
SES 3	-	-	-	-	-	-	-
SES 2	-	-	-	1	-	1	1
SES 1	1	-	1	-	-	-	1
EL 2	31	2	33	1	-	1	34
EL 1	25	-	25	2	-	2	27
APS 6	21	3	24	1	-	1	25
APS 5	9	-	9	2	-	2	11
APS 4	-	-	-	1	-	1	1
APS 3	-	-	-	-	-	-	-
APS 2	-	-	-	-	-	-	-
APS 1	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
<b>Total</b>	<b>87</b>	<b>5</b>	<b>92</b>	<b>8</b>	<b>-</b>	<b>8</b>	<b>100</b>

**Table 33: Australian Public Service Act employees by full-time and part-time status previous report period (2018–19)**

	Ongoing			Non-Ongoing			Total
	Full-time	Part-time	Total Ongoing	Full-time	Part-time	Total Non-Ongoing	Total
SES 3	-	-	-	-	-	-	-
SES 2	-	-	-	1	-	1	1
SES 1	1	-	1	-	-	-	1
EL 2	32	2	34	1	-	1	35
EL 1	24	-	24	2	-	2	26
APS 6	21	3	24	-	-	-	24
APS 5	10	1	11	1	-	1	12
APS 4	1	-	1	-	1	1	2
APS 3	-	-	-	-	-	-	-
APS 2	-	-	-	-	-	-	-
APS 1	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
<b>Total</b>	<b>89</b>	<b>6</b>	<b>95</b>	<b>5</b>	<b>1</b>	<b>6</b>	<b>101</b>

## Appendix G: Employment type by location

**Table 34: Australian Public Service Act employment type by location current report period (2019–20)**

	Ongoing	Non-Ongoing	Total
NSW	1	-	1
QLD	13	-	13
SA	3	-	3
TAS	-	-	-
VIC	5	-	5
WA	5	-	5
ACT	65	8	73
NT	-	-	-
External Territories	-	-	-
Overseas	-	-	-
<b>Total</b>	<b>92</b>	<b>8</b>	<b>100</b>

**Table 35: Australian Public Service Act employment type by location previous report period (2018–19)**

	Ongoing	Non-Ongoing	Total
NSW	1	-	1
QLD	15	-	15
SA	3	-	3
TAS	-	-	-
VIC	2	-	2
WA	4	-	4
ACT	70	6	76
NT	-	-	-
External Territories	-	-	-
Overseas	-	-	-
<b>Total</b>	<b>95</b>	<b>6</b>	<b>101</b>

## Appendix H: Indigenous employment

**Table 36: Australian Public Service Act indigenous employment current report period (2019–20)**

	<i>Total</i>
Ongoing	-
Non-Ongoing	-
<b>Total</b>	-

**Table 37: Australian Public Service Act indigenous employment previous report period (2018–19)**

	<i>Total</i>
Ongoing	1
Non-Ongoing	-
<b>Total</b>	<b>1</b>

## Appendix I: Employment arrangements of SES and non-SES employees

**Table 38: Australian Public Service Act employment arrangements current report period (2019–20)**

	<i>SES</i>	<i>Non-SES</i>	<i>Total</i>
Section 24.1 Determination	2	-	2
Enterprise Agreement	-	98	98
<b>Total</b>	<b>2</b>	<b>98</b>	<b>100</b>

## Appendix J: Salary ranges by classification level

**Table 39: Australian Public Service Act employment salary ranges by classification level (minimum/maximum) current report period (2019–20)**

	<i>Minimum Salary (\$)</i>	<i>Maximum Salary (\$)</i>
SES 3	-	-
SES 2	277,267	277,267
SES 1	234,610	234,610
EL 2	121,484	149,310
EL 1	102,190	123,887
APS 6	79,774	94,893
APS 5	73,574	79,442
APS 4	65,903	71,613
APS 3	-	-
APS 2	-	-
APS 1	-	-
Other	-	-
<i>Minimum/Maximum range</i>	-	-

## Appendix K: Performance pay by classification level

### Australian Public Service Act employment performance pay by classification level current report period (2019–20)

A table detailing performance pay by classification level for the reporting period (2019-20) has been removed as it is not applicable for the ATSB.

## Appendix L: Accountable authority

**Table 40: Details of accountable authority during the reporting period current report period (2019–20)**

Period as the accountable authority or member within the reporting period			
Name	Position Title/Position held	Date of Commencement	Date of cessation
Greg Hood	Chief Commissioner/CEO	1 July 2016	30 June 2021

## Appendix M: Significant non-compliance with the Finance Law

**Table 41: Significant non-compliance with the Finance Law**

Description of non-compliance	Remedial Action
N/A	-

## Appendix N: Audit committee 2019-20

**Table 42: Audit committee 2019-20**

Member name	Qualifications, knowledge, skills or experience (include formal and informal as relevant)	Number of meetings attended / total number of meetings	Total annual remuneration
Clare Kitcher	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.	4/4	12,100.00
Andrew Fleming	Bachelor of Arts (Hons) Mathematics, Exeter University, UK Fellow, Institute of Chartered Accountants in England and Wales Fellow of the Australian Institute of Company Directors (FAICD) Fellow of the Australian Institute of Management (FAIM) Certified Finance & Treasury Professional (CFTP), Finance & Treasury Association	2/4	10,450.00
Cheryl-Anne Navarro	F CPA MBA	2/4	0.00
Nat Nagy	ATSB Executive Director Transport Safety	4/4	0.00

## Appendix O: Aids to access

**Table 43: Aids to access details current report period (2019–20)**

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)	<a href="http://www.atsb.gov.au">www.atsb.gov.au</a>

## Appendix P: List of requirements

The list below outlines compliance with key annual performance reporting information, as required in section 17AJ(d) of the *Public Governance, Performance and Accountability Rule 2014*.

PGPA Rule Reference	Part of Report	Description	Requirement	Page
<b>17AD(g)</b>	<b>Letter of transmittal</b>			
17AI	-	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	1
<b>17AD(h)</b>	<b>Aids to access</b>			
17AJ(a)	-	Table of contents.	Mandatory	2-6
17AJ(b)	-	Alphabetical index.	Mandatory	125-128
17AJ(c)	-	Glossary of abbreviations and acronyms.	Mandatory	121-124
17AJ(d)	-	List of requirements.	Mandatory	117-120
17AJ(e)	-	Details of contact officer.	Mandatory	6
17AJ(f)	-	Entity's website address.	Mandatory	6
17AJ(g)	-	Electronic address of report.	Mandatory	6
<b>17AD(a)</b>	<b>Review by accountable authority</b>			
17AD(a)	-	A review by the accountable authority of the entity.	Mandatory	7-10
<b>17AD(b)</b>	<b>Overview of the entity</b>			
17AE(1)(a)(i)	-	A description of the role and functions of the entity.	Mandatory	11-17
17AE(1)(a)(ii)	-	A description of the organisational structure of the entity.	Mandatory	18-22
17AE(1)(a)(iii)	-	A description of the outcomes and programmes administered by the entity.	Mandatory	23
17AE(1)(a)(iv)	-	A description of the purposes of the entity as included in corporate plan.	Mandatory	11-12
17AE(1)(aa)(i)	-	Name of the accountable authority or each member of the accountable authority.	Mandatory	115
17AE(1)(aa)(ii)	-	Position of the accountable authority or each member of the accountable authority.	Mandatory	115
17AE(1)(aa)(iii)	-	Period as the accountable authority or member of the accountable authority within the reporting period.	Mandatory	115
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
<b>17AD(c)</b>	<b>Report on the Performance of the entity</b>			
	<i>Annual performance Statements</i>			
17AD(c)(i); 16F	-	Annual performance statement in accordance with paragraph 39(1)(b) of the Act and section 16F of the Rule.	Mandatory	26-31
<b>17AD(c)(ii)</b>	<b>Report on Financial Performance</b>			
17AF(1)(a)	-	A discussion and analysis of the entity's financial performance.	Mandatory	41
17AF(1)(b)	-	A table summarising the total resources and total payments of the entity.	Mandatory	107
17AF(2)	-	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.	41

<b>17AD(d)</b>		<b>Management and Accountability</b>			
		<i>Corporate Governance</i>			
17AG(2)(a)	-	Information on compliance with section 10 (fraud systems).	Mandatory	96	
17AG(2)(b)(i)	-	A certification by accountable authority that fraud risk assessments and fraud control plans have been prepared.	Mandatory	1	
17AG(2)(b)(ii)	-	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	1	
17AG(2)(b)(iii)	-	A certification by accountable authority that all reasonable measures have been taken to deal appropriately with fraud relating to the entity.	Mandatory	1	
17AG(2)(c)	-	An outline of structures and processes in place for the entity to implement principles and objectives of corporate governance.	Mandatory	95-101	
17AG(2)(d) – (e)	-	A statement of significant issues reported to Minister under paragraph 19(1)(e) of the Act that relates to non-compliance with Finance law and action taken to remedy non-compliance.	If applicable, Mandatory	N/A	
		<i>Audit Committee</i>			
17AG(2A)(a)	-	A direct electronic address of the charter determining the functions of the entity's audit committee.	Mandatory	95	
17AG(2A)(b)	-	The name of each member of the entity's audit committee.	Mandatory	115	
17AG(2A)(c)	-	The qualifications, knowledge, skills or experience of each member of the entity's audit committee.	Mandatory	115	
17AG(2A)(d)	-	Information about the attendance of each member of the entity's audit committee at committee meetings.	Mandatory	115	
17AG(2A)(e)	-	The remuneration of each member of the entity's audit committee.	Mandatory	115	
		<i>External Scrutiny</i>			
17AG(3)	-	Information on the most significant developments in external scrutiny and the entity's response to the scrutiny.	Mandatory	100-101	
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 Auditor-General (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	
		<i>Management of Human Resources</i>			
17AG(4)(a)	-	An assessment of the entity's effectiveness in managing and developing employees to achieve entity objectives.	Mandatory	97-99	
17AG(4)(aa)	-	Statistics on the entity's employees on an ongoing and non-ongoing basis, including the following: (a) statistics on full-time employees; (b) statistics on part-time employees; (c) statistics on gender; (d) statistics on staff location.	Mandatory	109-110	
17AG(4)(b)	-	Statistics on the entity's APS employees on an ongoing and non-ongoing basis; including the following: Statistics on staffing classification level; Statistics on full-time employees; Statistics on part-time employees; Statistics on gender; Statistics on staff location; Statistics on employees who identify as Indigenous.	Mandatory	97-98, 110-114	
17AG(4)(c)	-	Information on any enterprise agreements, individual flexibility arrangements, Australian workplace agreements, common law contracts and determinations under subsection 24(1) of the <i>Public Service Act 1999</i> .	Mandatory	97-98	
17AG(4)(c)(i)	-	Information on the number of SES and non-SES employees covered by agreements etc identified in paragraph 17AG(4)(c).	Mandatory	98	
17AG(4)(c)(ii)	-	The salary ranges available for APS employees by classification level.	Mandatory	98	



17AG(4)(c)(iii)	-	A description of non-salary benefits provided to employees.	Mandatory	98
17AG(4)(d)(i)	-	Information on the number of employees at each classification level who received performance pay.	If applicable, Mandatory	98
17AG(4)(d)(ii)	-	Information on aggregate amounts of performance pay at each classification level.	If applicable, Mandatory	97-98
17AG(4)(d)(iii)	-	Information on the average amount of performance payment, and range of such payments, at each classification level.	If applicable, Mandatory	97-98
17AG(4)(d)(iv)	-	Information on aggregate amount of performance payments.	If applicable, Mandatory	97-98
<b>Assets Management</b>				
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
<b>Purchasing</b>				
17AG(6)	-	An assessment of entity performance against the <i>Commonwealth Procurement Rules</i> .	Mandatory	99
<b>Consultants</b>				
17AG(7)(a)	-	A summary statement detailing the number of new contracts engaging consultants entered into during the period; the total actual expenditure on all new consultancy contracts entered into during the period (inclusive of GST); the number of ongoing consultancy contracts that were entered into during a previous reporting period; and the total actual expenditure in the reporting year on the ongoing consultancy contracts (inclusive of GST).	Mandatory	99
17AG(7)(b)	-	A statement that <i>"During [reporting period], [specified number] new consultancy contracts were entered into involving total actual expenditure of \$[specified million]. In addition, [specified number] ongoing consultancy contracts were active during the period, involving total actual expenditure of \$[specified million]."</i>	Mandatory	99
17AG(7)(c)	-	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	99
17AG(7)(d)	-	A statement that <i>"Annual reports contain information about actual expenditure on contracts for consultancies. Information on the value of contracts and consultancies is available on the AusTender website."</i>	Mandatory	99
<b>Australian National Audit Office Access Clauses</b>				
17AG(8)	-	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 Auditor-General 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	N/A
<b>Exempt contracts</b>				
17AG(9)	-	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	99
<b>Small business</b>				
17AG(10)(a)	-	A statement that <i>"[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."</i>	Mandatory	99
17AG(10)(b)	-	An outline of the ways in which the procurement practices of the entity support small and medium enterprises.	Mandatory	99
17AG(10)(c)	-	If the entity is considered by the Department administered by the Finance Minister as material in nature—a statement that <i>"[Name of entity] recognises the importance of ensuring that small businesses are paid on time. The results of the Survey of Australian</i>	If applicable, Mandatory	N/A

		<i>Government Payments to Small Business are available on the Treasury's website."</i>		
		<b>Financial Statements</b>		
17AD(e)	-	Inclusion of the annual financial statements in accordance with subsection 43(4) of the Act.	Mandatory	65-94
		<b>Executive Remuneration</b>		
17AD(da)	-	Information about executive remuneration in accordance with Subdivision C of Division 3A of Part 2-3 of the Rule.	Mandatory	108
<b>17AD(f)</b>		<b>Other Mandatory Information</b>		
17AH(1)(a)(i)	-	If the entity conducted advertising campaigns, a statement that <i>"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."</i>	If applicable, Mandatory	102
17AH(1)(a)(ii)	-	If the entity did not conduct advertising campaigns, a statement to that effect.	If applicable, Mandatory	102
17AH(1)(b)	-	A statement that <i>"Information on grants awarded by [name of entity] during [reporting period] is available at [address of entity's website]."</i>	If applicable, Mandatory	103
17AH(1)(c)	-	Outline of mechanisms of disability reporting, including reference to website for further information.	Mandatory	103
17AH(1)(d)	-	Website reference to where the entity's Information Publication Scheme statement pursuant to Part II of FOI Act can be found.	Mandatory	103
17AH(1)(e)	-	Correction of material errors in previous annual report.	If applicable, mandatory	N/A
17AH(2)	-	Information required by other legislation.	Mandatory	102-106

## Appendix Q: Glossary

Accident	An investigable matter involving a transport vehicle occurs when: <ul style="list-style-type: none"> <li>➤ a person dies, or suffers serious injury, as a result of an occurrence associated with the operation of the vehicle</li> <li>➤ the vehicle is destroyed, or seriously damaged, as a result of an occurrence associated with the operation of the vehicle</li> <li>➤ any property is destroyed, or seriously damaged, as a result of an occurrence associated with the operation of the vehicle.</li> </ul>
Accident Investigation Commission (AIC)	The Papua New Guinea Government institution responsible for the investigation of safety deficiencies in aviation transport.
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.
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.
Amateur-built aircraft	Aircraft not built in a factory but for the user's personal use or recreation. May include ultra-light, original design, plans built, kit built or experimental aircraft.
AMSA	Australian Maritime Safety Authority.
ARTC	Australian Rail Track Corporation.
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.
Australian Accredited Representative	An Australian representative who is appointed in the case of safety occurrences involving Australian-registered aircraft outside Australian territory, normally an ATSB investigator.
AUV	Autonomous underwater vehicle.
Blood-borne pathogen	A blood-borne agent causing disease that can be spread by blood contamination.
CASA	Civil Aviation Safety Authority.
Catastrophic accident	A sudden disastrous investigable matter involving a transport vehicle.
Charter	Operations that involve the carriage of cargo or passengers, but do not involve scheduled flights. The lack of scheduled flights, and fixed departure and arrival points, distinguishes charter operations from regular public transport operations.
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.
Commercial air transport	High-capacity regular public transport (RPT) flights, low-capacity RPT flights, charter flights and medical transport.
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 style="list-style-type: none"> <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>
COAG	Council of Australian Governments.
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.
CVR (black box)	Cockpit voice recorder.
DCV	Domestic Commercial Vessel as defined by the <i>Marine Safety (Domestic Commercial Vessel) National Law Act 2012</i> .
Defined Interstate Rail Network (DIRN)	The DIRN is comprised of over 10,000 route kilometres of standard gauge interstate track linking the capital cities of mainland Australia.
Directly Involved Party (DIP)	Those individuals or organisations that were directly involved in a transport safety occurrence or may have influenced the circumstances that led to an occurrence. This also includes those whose reputations are likely to be affected following the release of the investigation report.

ETOPS	Extended twin operations—a rule that allows twin-engine airliners to fly long-distance routes that were previously off-limits to twin-engine aircraft. There are different levels of ETOPS certification. Each one allows aircraft to fly on routes that have a certain amount of flying time from the nearest suitable airport.
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.
Flight data recorder (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.
General aviation (GA)	General aviation covers: <ul style="list-style-type: none"> <li>➤ aerial work operations (including aerial agriculture, aerial mustering, search and rescue, and aerial survey)</li> <li>➤ flying training</li> <li>➤ private aviation</li> <li>➤ business and sports (including gliding) aviation—VH, or foreign-registered.</li> </ul>
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.
Human factors	Human factors is the multi-disciplinary 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.
ICAO	International Civil Aviation Organization.
Immediately reportable matter	A serious transport safety matter that covers occurrences such as: <ul style="list-style-type: none"> <li>➤ accidents involving death</li> <li>➤ serious injury</li> <li>➤ destruction or serious damage of vehicles or property</li> <li>➤ when an accident nearly occurs.</li> </ul>
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
ITSAP	The Australian Government's Indonesia Transport Safety Assistance Package
JACC	Joint Agency Coordination Centre.
Less complex investigations	Those rated at level 4 or level 5 under the ATSB's rating scheme.
LOSA	Loss of separation assurance.
LSA	Light sport aircraft.
MAIFA	Marine Accident Investigators Forum in Asia.
Minor injury	An injury sustained by a person, in an accident, that was not fatal or serious and does not require hospitalisation.
Multi-modal	Across the three 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.
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: <ul style="list-style-type: none"> <li>➤ operations conducted for the purposes of 'serial work other than 'flying training' and 'agricultural operations'</li> <li>➤ operations classified as other aerial work—including aerial surveying, aerial 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.</li> </ul>
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.
PGPA Act	<i>Public Governance, Performance and Accountability Act 2013.</i>
PIF	Post-impact fire.
Pilotage	Use of licensed coastal pilots to guide ships through designated areas.
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.
RAAus	Recreational Aviation Australia.
Recreational aviation	Aircraft being used for recreational flying that are registered by a recreational aviation administration organisation.
REEFVTS	Great Barrier Reef and Torres Strait Vessel Traffic Service. A coastal vessel traffic service which has been put in place by the Australian and Queensland Governments to improve safety and efficiency of vessel traffic, as well as to protect the environment.
Regular public transport (RPT)	Refers to aircraft that transport passengers and/or cargo according to fixed schedules and fixed departure/arrival points, in exchange for monetary reward. These services can be further divided into low- and high-capacity aircraft: <ul style="list-style-type: none"> <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>
REPCON	The aviation confidential reporting scheme.
REPCON Marine	The marine confidential reporting scheme.
Reportable safety concern	Any matter that endangers or could endanger a transport vehicle.
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: <ul style="list-style-type: none"> <li>➤ ATSB safety action</li> <li>➤ non-ATSB safety action.</li> </ul>
Safety advisory notice	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 style="list-style-type: none"> <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.
SAR	Search and rescue.
SATCOM	Satellite communication.
Serious incident	An incident involving circumstances indicating an accident nearly occurred.
Serious injury	An injury which is sustained by a person in an accident and involves one or more of the following: <ul style="list-style-type: none"> <li>➤ requires hospitalisation for more than 48 hours, commencing within seven days from the date the injury was received</li> <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 tendon damage</li> <li>➤ involves injury to any internal organ</li> <li>➤ involves second or third degree burns, or any burns affecting more than five per cent of the body surface</li> <li>➤ involves verified exposure to infectious substances or injurious radiation.</li> </ul>
Short investigation	Short, factual, office-based investigations of less complex safety occurrences rated at level 5 under the ATSB's rating scheme.
SIIMS	Safety investigation information management system.
SOLAS	Safety of life at sea.

SPAD	Signal passed at danger.
Spectral analysis	Detailed analysis of the pilot's radio transmissions, background engine sounds and warnings.
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 Civil Aviation Safety Authority (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.
STAR	Standard arrival route.
Statutory agency	A body or group of persons declared by an Act to be a statutory agency for the purposes of the <i>Public Service Act 1999</i> .
Systemic failure	A breakdown in the system as a whole.
Transport safety matter	As defined by the <i>Transport Safety Investigation Act 2003</i> , these matters consist of occurrences in which: <ul style="list-style-type: none"> <li>➤ the transport vehicle is destroyed</li> <li>➤ the transport vehicle is damaged</li> <li>➤ the transport vehicle is abandoned, disabled, stranded or missing in operation</li> <li>➤ a person dies as a result of an occurrence associated with the operation of the transport vehicle</li> <li>➤ a person is injured or incapacitated as a result of an occurrence associated with the operation of the transport vehicle</li> <li>➤ any property is damaged as a result of an occurrence associated with the operation of the transport vehicle</li> <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 affected, the safety of the operation of the transport vehicle</li> <li>➤ something occurred that affected, is affecting, or might affect transport safety.</li> </ul>
TSI Act	<i>Transport Safety Investigation Act 2003</i> .
ULB	Underwater locator beacon.

## Subject index

### A

Administrative Arrangements Order (AAO), 106  
 advertising, 102  
 aircraft  
   licensed maintenance engineers, 14  
 Airservices Australia, 9, 11, 13, 34  
 airspace, non-controlled, 37  
 APS values, 97  
 Asia Pacific region, 9, 16, 39  
 ATSB Accident Command Centre (ACC), 33  
*ATSB Annual Plan 2019–20*, 96  
*ATSB Commission Governance Manual*, 95  
*ATSB Corporate Plan 2019–20*, 26, 32, 33, 36  
 ATSB Facebook page, 37  
 ATSB investigations  
   complex, 7, 8, 16, 32,  
   defined, 16,  
   efficiency, 28, 95, 101,  
   independent, 'no-blame', 11, 12, 23, 32, 107  
   major, 16, 32, 33,  
   occurrence investigations, 15, 24, 32, 33,  
   priorities for, 23, 24,  
   program-managed approach to, 101  
   quality of, 9  
   safety issues identified through, 47  
   short, 15, 16, 32  
 ATSB investigators  
   specialist skills, 14  
 ATSB National Aviation Occurrence Database, 39  
 ATSB recommendations, 46  
   closure of, in 2019–20, 56, 61  
   release of, in 2019–20, 61–63  
 ATSB Work Health Safety and Wellbeing Committee, 102  
 Audit and Risk Committee, 95, 96, 115  
 AusTender, 99  
 Australian Maritime Safety Authority (AMSA), 8, 9, 11, 12,  
 13, 38,  
 Australian National Audit Office (ANAO)  
   access clauses, 99  
   best practice recommendations, 28  
   operational efficiency audit, 95  
 Australian Transport Safety Bureau (ATSB)  
   accessing, 116  
   accountable authority, 26, 115  
   annual performance statement, 26  
   annual report, 5, 6, 23, 99  
   business planning and reporting, 96  
   Chief Commissioner, 7, 17, 19, 23, 35, 38, 95, 108, 115  
   Chief Executive Officer, 19, 23,  
   Chief Operating Officer, 22, 95, 108  
   Commission, 8, 11, 95, 96,  
   Commissioners, 20–21, 95, 98  
   communications by, 9, 10, 37, 38  
   Corporate Plan, 96  
   decision-making powers, 106  
   deliverables, 32, 36,  
   education, 9, 38  
   efficiency, improving, 28  
   Executive Director, 22, 95, 108, 115  
   executive management team, 19,  
   final reports, 8, 38, 95  
   financial performance update, 41

functions, 11, 23, 24, 36, 95, 104, 106,  
 independence of, 11  
 key results, 29–31  
 management and accountability, 95  
 media, 38  
 mission, 10, 23  
 notifications to, 11, 12, 23, 34  
 objectives, 12, 23, 96  
 organisational structure, 18  
 outcome and program structure, 5, 23  
 overview, 11  
 performance, report on, 26  
 performance at a glance, 28–29  
 primary function, 11  
 purpose, 11  
 records held by, 105–106  
 reporting by, 23  
 reporting to, 24  
 risk management, 96  
 role, 11–12  
 social media, 28, 36, 37, 38, 39,  
 timeliness performance, 28  
 Twitter account, 37,  
 vision, 10  
 website, 12, 13, 16, 34, 36, 37, 38, 39, 46, 96  
 aviation  
   ATSB recommendations closed, 56–61  
   ATSB recommendations released, 61–63  
   broad hierarchy, 24  
   KPI status of safety issues, 47  
   occurrence database, 13, 15, 24, 39  
   occurrence statistics, 15, 39  
   responses to safety issues, 48–51  
   safety investigations, 13–14  
   terrain collisions, 8, 28, 34, 38, 42, 43, 100  
   wildlife strikes, 15, 35  
*Aviation Occurrence Statistics Report*, 33

### B

'black box' data recovery and analysis, 14, 40  
 Bureau of Infrastructure, Transport and  
   Regional Economics, 33  
 business continuity plan, 96

### C

C-130 Hercules  
   collision with terrain, 8, 9, 28, 34, 38  
 Cessna 172M  
   collision with terrain, 28, 42, 48, 58, 59, 61, 64  
 Cessna 404  
   collision with terrain, 8  
 Cessna 441  
   collision with terrain, 28, 43  
 Chief Commissioner, 19  
   Chief Commissioner's Review  
   2019–20, 7–10  
 Civil Aviation Safety Authority (CASA), 9, 11, 15, 43, 100  
 classification process, 25  
 collision with terrain, 8, 28, 34, 38, 42, 43, 100  
 Comcare, 102  
 Commonwealth Procurement Rules, 99  
 confidential reporting scheme (REPCON), 15, 16, 34, 35,  
   aviation matters, 34–35  
   marine matters, 35  
   rail matters, 35  
 consultants, 99

Convention on International Civil Aviation (Chicago Convention 1944)  
 Aircraft Accident and Incident Investigation (Annex 13), 13, 17  
 coronial inquests, 100  
 Council of Australian Governments  
 2011 national maritime reforms, 13

## D

data analysis capability, 33  
 data and recorder recovery, 14, 33  
 data recording, analysis and research, 23, 33  
 deliverables, 33  
 reporting, 34  
 Defence Flight Safety Bureau (DFSB), 9  
 Department of Finance, 23,  
 Department of Infrastructure, Transport,  
 Cities and Regional Development, 9  
 disability reporting, 103  
 diversity and inclusion, 103  
 domestic commercial vessels (DCVs), 13, 101

## E

ecologically sustainable development, 102  
 educational publications, 35  
 Employee Assistance Program, 98, 102  
 employment  
 APS classification, 110-112  
 APS employment type, 113  
 full-time and part-time, 112-113  
 gender, 110-112  
 Indigenous employment, 98, 114  
 ongoing employees, 112-113  
 SES and non-SES employees, 114  
 Energy Efficiency in Government Operations (EEGO) policy, 102 Appendix A  
 entity resource statement 2019–20, 107 Appendix B  
 environmental performance reporting, 102 Appendix A  
 ethical standards, 96-97,  
 Executive Director, 22, 95, 108, 115  
 executive management team, 19  
 executive remuneration, 108  
 exempt contracts, 99  
 external scrutiny and participation, 100

## F

fatigue  
 human factors, 14, 54, 63  
 priority area, 37  
 fatigue cracks, 49, 54  
 financial performance update, 41  
 financial statements, 41, 65-94  
 FlySafe safety forum, 9, 36  
 formal safety issues and actions, 46  
 fraud control, 95, 96  
 freedom of information, 103, 104, 105  
*Freedom of Information Act 1982* (FOI Act), 103  
 freight train 6792  
 collision with floodwater, 8, 44, 54  
 freight trains  
 collision, 8

## G

grant programs, 103  
 Grumman American Aviation Corp G-73

collision with water, 28, 43, 49, 62

## H

helicopters  
 collision with terrain, 34  
 winching, 34  
 human factors, 14, 122  
 human resources management, 97, 109

## I

ICAO Asia Pacific Accident Investigation Group, 17, 39  
 independent, 'no-blame' investigations, 10, 11  
 expenses for outcome 1,  
 objective, 23  
 outcome 1, 107 Appendix B  
 results, 27  
 role, 32  
 Indigenous employees, 98  
 Indonesia,  
 Australian Government Indonesia  
 Transport Safety Assistance Package (ITSAP), 16, 39, 40  
 National Transportation Safety Committee, 40  
 in-flight break-up, 48, 56, 64  
 in-flight decision-making, 37  
 Infrastructure, Transport, Cities and Regional  
 Development portfolio, 6, 9, 11, 13, 102 Appendix A  
 international cooperation, 16  
 International Maritime Organization (IMO), 17  
 International Transportation Safety Association (ITSA), 8, 17  
 investigation levels, 15  
 investigations *see* ATS B investigations

## K

key performance indicators,  
 amended, 28  
 deliverables, 16  
 performance, 28, 29  
 safety issues, KPI status of, 47

## L

legal services and expenditure, 99  
 Legal Services Directions 2017, 99  
 level of response, 25

## M

major accident preparedness, 32  
*Major Investigation Preparedness Plan* (MIPP), 33  
 mandatory occurrence reporting, 12  
 marine  
 broad hierarchy, 24  
 KPI status of safety issues, 47  
 pilotage, 37  
 recommendations, 56  
 safety investigations, 32  
 safety issues, 47  
 Marine Accident Investigators Forum in Asia, 389  
 market research, 102 Appendix A  
 material failure analysis, 14, 34  
 Memoranda of Understandings (MOU) DFSB, 9



**N**

National Disability Strategy 2010–2020, 103 Appendix A  
 National Transport Commission, 11  
 National Transport Regulatory Reform, 101  
 ‘no-blame’, 11, 23, 27, 32

**O**

occurrence briefs, 15  
 occurrence database, 13, 24, 33, 39  
 occurrence investigations, 15, 23, 24, 32, 33  
 occurrence statistics, 15, 33, 35, 39  
 Office of the National Rail Safety Regulator  
 (ONRSR ), 9, 11, 12, 14  
 Outcome 1  
   expenses for, 107 Appendix B  
 outside participation, arrangements for, 106 Appendix A

**P**

Papua New Guinea, 16  
   Accident Investigation Commission,  
   MOU on Cooperation in the Transport  
   Sector, 39, 40  
 Parachuting, 100  
 performance pay  
   classification level, by, 115 Appendix K  
*Portfolio Budget Statements 2019–20*, 10, 23, 26, 27, 29, 41,  
 47  
 Productivity Commission  
   National Transport Regulatory Reform, 101  
 public benefit, greatest, 8, 10, 11, 23  
*Public Governance, Performance and  
 Accountability Act 2013*, 23, 26  
*Public Governance, Performance and  
 Accountability Rule 2014*, 117 Appendix P  
 purchasing, 99

**R**

rail  
   ATSB recommendations released,  
   2019–20, 61, 62  
   broad hierarchy, 24  
   confidential reporting, 16, 35  
   derailments, 8, 28, 38, 53, 55, 61  
   KPI status of safety issues, 47  
   responses to safety issues, 47  
   significant safety investigations, 44  
   track obstruction, 55  
 RailSafe safety forum, 9, 36  
 Recreational Aviation Australia,  
 regional cooperation, 33  
 Remotely Piloted Aircraft Operator’s  
   Certificate 20  
 remotely piloted aircraft systems (RPAS), 9, 14, 15  
   safety risks, 37  
 reportable matters, 12, 13, 24  
 risk management, 95  
 Royal Melbourne Institute of Technology  
 (RMIT) University  
   Diploma of Transport Safety  
   Investigation,  
   Graduate Certificate in Transport Safety  
   Investigation,  
   partnership with, 39, 98

**S**

safety actions, 2019–20, 56  
 safety advisory notice (SAN), 46  
   release of, in 2019–20, 64  
 safety awareness, knowledge and action,  
   fostering, 11, 23, 36, 39, 107  
 safety education, 11, 13, 24, 36, 39  
 safety issues, 46  
   ATSB investigations, identified  
   through, 47  
   responses to, 48, 52, 53  
   KPI status of, 47  
 safety recommendations *see* ATSB  
 recommendations  
 safety studies, 15, 32  
   research and safety issues,  
 SafetyWatch, 37  
 salary  
   ranges, 114  
   rates, 98  
 SeaSafe marine safety forum, 36  
 site surveys, 14  
 small and medium enterprises (SME),  
   procurement initiatives to support, 99  
 SOCATA TB-10 Tobago,  
   collision with terrain, 28, 42, 50, 62, 100  
 social media, 37  
 specialist investigation capabilities, 14  
 staffing profile, 97  
 stakeholder survey, 39  
*Statement of Expectations*, 8, 11, 23, 100  
 statistical and trend publications,  
 statistical reports, 35  
 statistics aviation occurrences, 15, 30–37

**T**

training and development, 98  
 transport industry  
   cooperation with, 12  
   engagement and events, 36–40  
   MOUs with associations,  
   specialists,  
*Transport Safety Investigation Act 2003*  
 (TSI Act), 11, 128  
*Transport Safety Investigation Regulations  
 2003* (TSI Regulations), 12  
 transport safety investigators, *see* ATSB investigators  
 twin-engined training aircraft  
   mid-air collision, 8, 28

**V**

‘Vision 2030’ statement, 10

**W**

Wellbeing, 97, 102  
 work health and safety, 95  
*Work Health and Safety Act 2011*, 102

**X**

XPT passenger train  
 derailment, 8, 38

**Y**

YM Efficiency  
 loss of containers, 28, 38, 45, 52



