Transport Accident Investigation Commission

Briefing for the Incoming Minister of Transport

October 2020

Contents

About the Commission **1**
Our purpose 1
Our legislation 1
Our functions 1
Our place within the national and international transport systems 3
Strategy and corporate structure **4**
Strategic direction and objectives 4
Performance: volume and timeliness measures 5
Corporate structure 6
Current matters **6**
COVID-19: response and recovery 6
Application of new funding 7
Current inquiries 8
The Watchlist 9
Relationship with Ministers **10**
Appendix 1 Commissioners and Executive Team **12**
Commissioners 12
Executive Management Team 14
Appendix 2 Commission contact **16**
Appendix 3 Open inquiries at 20 October 2020 ..... **17**

About the Commission

Our purpose

Our purpose is to help avoid transport accidents by undertaking independent, no-blame investigations

The Transport Accident Investigation Commission (the Commission) is a standing commission of inquiry. Our mandate is to help avoid transport accidents by undertaking independent, no-blame, investigations into certain transport accidents and incidents (occurrences). We publish a report of our findings and recommendations for each occurrence we investigate. The Commission works in the aviation, rail and maritime transport modes.[1]

Our legislation

Our legislation gives effect to international conventions

The Commission's enabling legislation is the Transport Accident Investigation Commission Act 1990 (the Act). We were established so that New Zealand could achieve greater compliance with the Convention on International Civil Aviation (ICAO Convention), particularly Annex 13, which relates to safety-focused accident investigations.

We were given the power to inquire into rail accidents in 1992. Three years later, our mandate was further extended to inquire into maritime accidents to support New Zealand's obligations as a member of the International Maritime Organization (IMO) and the International Convention for the Safety of Life at Sea (SOLAS). The IMO's Maritime Casualty Investigation Code requires an independent agency to investigate maritime accidents and incidents to avoid further occurrences rather than to apportion blame or liability.

The Act prescribes the Commission's purpose, which is 'to determine the circumstances and causes of accidents and incidents with a view to avoiding similar occurrences in the future, rather than to ascribe blame to any person'.[2]

Our functions

Our functions are investigation, inquiry, and publication of findings and recommendations

The transport sector regulators are required under their respective Acts to notify the Commission of certain accidents and incidents ('occurrences'). For each occurrence notified to us, the Commission decides whether to open an inquiry. We must open an inquiry if we believe that an occurrence has (or is likely to have) significant implications for transport safety or an inquiry would allow us to make recommendations that would improve transport safety[3].

---

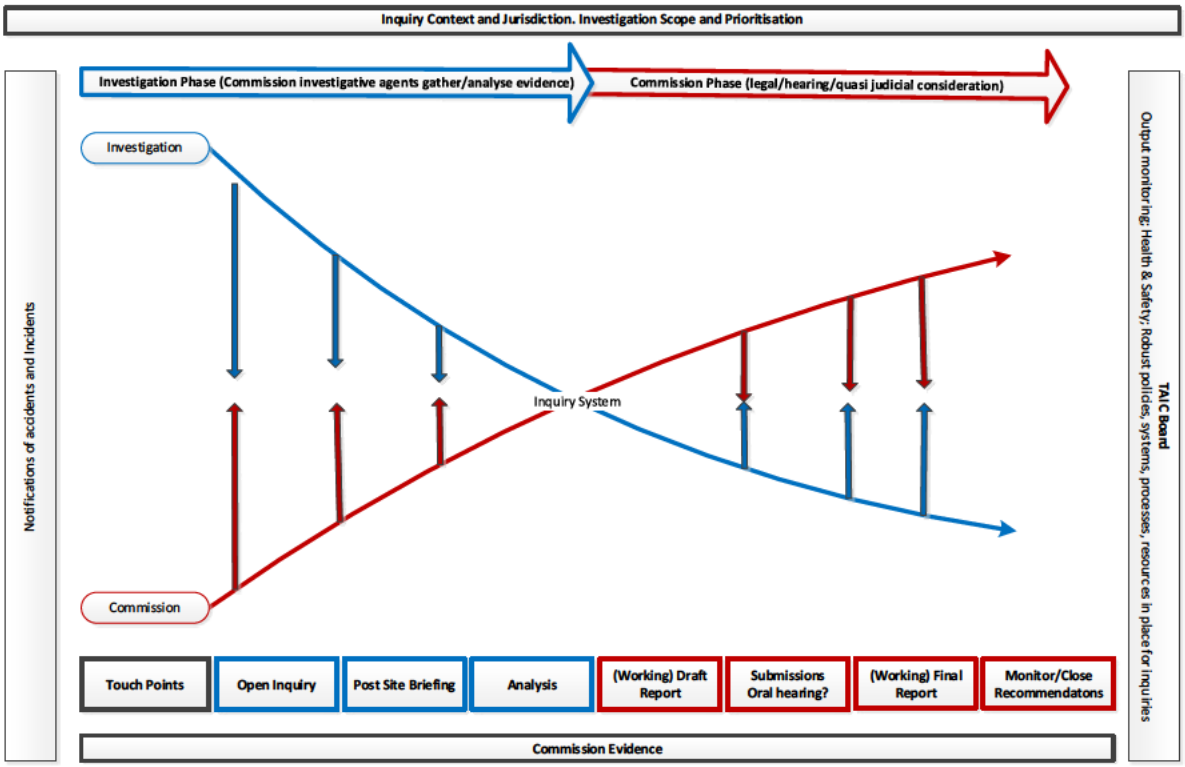
[1] Sections 2 and 8 of the Transport Accident Investigation Commission Act 1990.
[2] Section 4 of the Transport Accident Investigation Commission Act 1990.
[3] Section 13 of the Transport Accident Investigation Commission Act 1990.

Each inquiry has two broad, overlapping phases – investigation and inquiry – followed by publication of findings and recommendations.

In the investigation phase, the Commission co-ordinates and directs the investigation and decides which other parties (if any) should be involved. Using delegated powers, Commission investigation staff gather and analyse evidence on the Commission's behalf.

Under the Act, the Commission has broad investigative powers, including the power of entry and inspection, and the power to seize, remove and protect evidence. We also have powers under the Commissions of Inquiry Act 1908, including the power to require a person to produce any papers, documents, records or things or to summons any person to appear before the Commission. The Act protects the evidence we gather from general disclosure, except for the purposes of the investigation. This includes witness interviews.

In the inquiry phase, the Commission considers evidence gathered by investigators, expert advice, and submissions from consulted people and organisations. We may also hold private or public hearings. The diagram below summarises the activities within the investigation and inquiry phases.



Once we have made our determinations, we publish a full report of the inquiry, including findings and recommendations. The Commission's recommendations are not mandatory.

We are a standing commission of inquiry and an independent Crown entity

As well as being a standing commission of inquiry, the Commission is an independent Crown entity under the Crown Entities Act 2004. It is wholly Crown funded with an annual budget of $7.3 million for 2020/21.

The Commission currently has four members who also act as the Commission's board for the purposes of the Crown Entities Act. Appendix 1 has more information about the Commissioners and the Executive Leadership Team.

Our place within the national and international transport systems

The Commission inquires into system-level safety issues

A single accident or incident triggers an inquiry. The chain of events leading to it may appear to be clear, particularly those facts and factors closest to the occurrence. However, incidents and accidents rarely have a single cause; contributing factors are often complex and reach beyond the accident vehicle and its operation to wider systemic issues. The Commission's attention is on these system-level safety issues. This may include examining the performance of regulators or identity where legislation might be improved.

The Commission directs most recommendations to regulators rather than operators. Regulators are better able to influence and act on the transport system, which is highly complex. Assessing and implementing a recommendation can take a long time, especially if it requires legislative change. Every six months, we collate information from the regulators reporting progress in implementing recommendations.

We operate alongside other transport safety authorities

The Commission operates alongside transport safety authorities (the regulators[4]), which may also investigate transport accidents and incidents. Often, a regulator's focus is to determine whether an operator has complied with regulations and, if not, to establish whether it should take action. Regulators may also be responsible for pursuing health and safety prosecutions under the Health and Safety at Work Act 2015. The Commission's inquiries focus on the safety system as a whole. That may include examining the performance of regulators themselves or where gaps in regulation might lead to safety risk.

Coroners have an interest in transport accidents that result in fatalities. The New Zealand Police investigate an accident on behalf of the Coroner, and may pursue a criminal inquiry.

So multiple parties may investigate a transport occurrence for differing purposes. The Coroners Amendment Act 2016 clarified the roles of Coroners and other authorities that investigate deaths and accidents.

We are part of a global network of transport accident investigation bodies

The Commission is part of a global network of transport accident investigation bodies prepared to meet their States' obligations to conduct independent investigations consistent with international treaties. This includes investigating qualifying accidents or incidents occurring within New Zealand's 12 nautical mile limit, as well as in or above international waters in the case of a New Zealand registered aircraft or ship. The Commission may also support an international agency's investigation of an event with a New Zealand connection.

[4] Maritime New Zealand, the Civil Aviation Authority, and the New Zealand Transport Agency.

Strategy and corporate structure

Strategic direction and objectives

Our aspirational goal is *No repeat accidents – ever!*

The Commission's strategy focuses on a specific outcome expressed as a visionary statement: No repeat accidents – ever! The Commission strives for this goal by identifying safety issues, publishing our findings, and, where appropriate, making recommendations to relevant parties. The Commission is mindful of our business model as an independent Crown entity, and our obligations to operate effectively and efficiently.

The Commission's *Statement of Intent 2018-2022* (SOI, Attachment 1) describes our overarching goal and strategy. We seek to ensure that transport users are safer and travel with confidence. We do this by identifying safety issues through rigorous investigation and inquiry, and transferring the knowledge we gain to transport sector participants so they are able to improve safety systems.

The Commission has two strategic objectives:

- Participants in the transport system know about safety issues.
- Occurrences are independently investigated and the facts uncovered.

The strategy to meet these objectives has three stands:

- We generate information and insight about transport safety through rigorous, evidence-based, and properly focused inquiries.
- We use our information and insight to add to bodies of knowledge about transport safety and influence the transport sector to improve safety.
- We build and maintain resilience to environmental disruptions and external shocks.

Our strategic direction is centred on strengthening human and information capital to enable knowledge transfer

The Commission is operating within an environment where rapid technological change is disrupting the transport system. For the Commission, the information we use in an investigation is increasingly digital and might not be part of the physical evidence found at the site of an occurrence (examples are cloud-based software and data used in navigation systems). The challenge for the Commission is maintaining our ability to make credible determinations in the face of advancing technology — or any other disruption such as a major accident or a natural disaster.

To remain credible and influential, we must be able to:

- adapt to changes in the transport system
- properly identify safety issues
- transfer the knowledge we have gained through investigation
- communicate our findings in a way that influences others to act.

We are responding to this challenge by building resilience, specifically, strengthening human and information capital. Resilience includes having strong systems and processes to support knowledge transfer within and beyond the organisation. Knowledge transfer is about

capturing and organising data and information, and creating and distributing information and knowledge. It can happen from one person to another; or via retrievable form (such as a document, image, or video). Physical assets, people, and processes work together to enable knowledge transfer.

The Commission's focus is on the digital aspects of our Knowledge Transfer System. This is more than IT assets – it includes the people who provide supporting capability and those who can leverage the opportunities for improved organisational performance (for example, trend analysis or video presentation of findings).

The Statement of Intent is due to be refreshed, with the continuing goal of transferring the knowledge gained through our work to make transport safer

The Commission's current SOI covered a period of strategic review and initial planning for a contemporary knowledge transfer system. The document is set to be refreshed for the four-year period beginning 1 July 2021. The Commission's next strategic planning round, due to begin in late 2020, will form the basis of the document.

Strategic direction will not change and we will continue to develop the Knowledge Transfer System. An increase in baseline funding for 2020/21 means we now have the capacity to take a significant step forward in implementation. How we plan to do this is discussed further below (see 'current matters – application of new funding').

The new SOI will also take account of the longer-term effects on the Commission of the COVID-19 pandemic. The 'current matters' section below discusses this further.

Performance: volume and timeliness measures

The volume of the Commission's output is demand driven. We expect to publish 15-25 inquiry reports (including interim reports) each year, spread roughly evenly across the three modes. We aim to close 70 per cent of inquiries within 440 working days, the equivalent of two calendar years. For the most recent year, 2019/2020, rail and maritime inquiries were closed in less than 330 workings days (18 months) on average. Inquiries in the aviation mode took longer than 440 working days to close.

The 70 per cent target recognises that the Commission's casebook always includes some complex inquiries. Complexities arise for various reasons, including the accessibility of the accident site, technical aspects of the occurrence, and the number or depth of the submissions that the Commission must consider as part of an inquiry.

The ideal loading is 30 open domestic cases to maintain the desired throughput. The Commission also expects to assist four to eight overseas investigations. At 20 October 2020, the Commission had 26 domestic inquiries open: 13 aviation, 9 rail, and 4 maritime. We were assisting 4 overseas assist inquiries. A full list of current inquiries is included at Appendix 3.

Corporate structure

The Commission is supported by a small number of investigators and corporate staff

The Commission is required under statute to employ a chief executive.[5] At 30 June 2020, the chief executive had an establishment of 26 permanent staff to support the Commission. Staff numbers are made up of 17 specialist investigators (including the Chief Investigator of Accidents) and nine corporate staff to support the Commission's investigations and Crown entity accountability and governance functions. The number of employees in 2020/21 is due to increase to 31 (discussed further in the section below 'current matters: application of new funding').

Other individuals and organisations also provide investigation and support services

Suitably qualified individuals or institutions, including other state resources and international colleague agencies, provide some investigation support free under memoranda of understanding or fee-for-service contracts. The Commission sometimes also contracts support functions from individuals or firms, such as information technology, human resources, and medical advisory.

Current matters

COVID-19: response and recovery

Operations continued with little disruption during Alert Levels 3 and 4

A significant first step in developing the Knowledge Transfer System was to move all our data and systems to the cloud. This was a significant project, which was completed in February 2020 within budget and on time.

With data and systems in the cloud, we were well placed to continue core operations during the COVID-19 Alert Level 3 and 4 restrictions. Commission meetings continued remotely, and staff were able to work from home with minimal disruption to investigation and support services. Officials deemed the Commission's functions an essential service, so with modifications to some evidence-gathering processes (for example, conducting witness interviews by phone) we were able to progress open inquiries. We opened two inquiries over the lockdown period, one rail and one aviation.

The short-term effects have been reduced notifications and reduced costs

The immediate effect of the pandemic for the transport system was a reduction in transport activity. For the Commission, this meant that over March to June of 2020 we received about 50 per cent fewer notifications of incidents and accidents than for the same period in 2019.

For the 2019/20 year, we opened fewer inquiries than average (11 compared with a five-year average of 14). However, the number of accidents over any given period is always 'lumpy'. It

[5] Transport Accident Investigation Act 1990, Schedule, Clause 21.

is impossible to say how many inquiries we would have opened had the pandemic not occurred.

Costs for the year have reduced because of lower deployment costs and because some overseas travel and training was cancelled or deferred.

Longer term implications of the pandemic for the Commission remain unclear

As with many other organisations, the Commission is watching to see the medium- to long-term effects of the COVID-19 pandemic.

The downturn in transport activity continues, especially in the aviation sector. Reduced activity could mean a corresponding reduction in the number of accidents, but this is not necessarily the case. For example, operators facing financial pressures might be less focused on safety; and reduced activity might result in degradation of operators' skills, leading to increased risk of accidents.

We do not expect the pandemic to change our strategic direction or the purpose of our activities. However, our operating environment is undeniably changing. As we prepare to refresh our SOI for the four-year period beginning July 2021, we will be considering the new environment, and how we operate within it.

Application of new funding

Additional funding from 2020/21 is to be applied to enhancing knowledge transfer

From 2020/21, the Commission receives an increase of baseline funding of approximately $1.9 million per year. Total Crown funding for operating expenditure in 2020/21 is $7.300 million compared with $5.520 million in 2019/20. The funding supports the Commission's Knowledge Transfer System, described above.

Organisational focus will be on managing a period of change as we plan, design, and build systems; bring on new staff; and explore ways to improve how we communicate and influence.

In 2020/21 work is progressing on a Digital Transformation Strategy

Planning began in 2018/19 for an enhanced Knowledge Transfer System, with the development of a Digital Transformation Strategy. The Digital Transformation Strategy has three individual but integrated strategies: a Data Strategy/Information Management and Communications Technology Plan, a Communications Strategy, and a Research Strategy. All three strategies fall within an overarching Digital Transformation Strategy.

The communications strategy was completed by the end of the 2019/20 financial year. We will progress planning and begin implementation in 2020/21.

Current inquiries

Adventure tourism

The Commission is paying attention to accidents and incidents within the adventure tourism sector. Clearly accidents in this sector, as well as having the potential to cause injury and damage, can also harm New Zealand's international reputation and have economic impacts.

We have recently dealt with adventure tourism occurrences in the aviation and maritime modes, as discussed below. We also monitor notifications for occurrences on heritage railways, although these are currently fewer in number as a result of reduced tourism.

Themes in the aviation sector

In the aviation sector, the Commission is aware of anecdotal evidence about potential safety issues in relation to gliding, but did not have the facts to determine a clear trend. Unfortunately, a fatal gliding accident occurred near Taupo in late May in which two people died. We have therefore opened an inquiry into the accident[6] to allow us to look in depth into this area of the aviation sector.

In recent years, the Commission has paid particular attention to accidents involving helicopters. These accidents remain a significant part of the Commission's casebook. At 30 June 2020, five out of 14 open aviation inquiries involved helicopters. The most recent was opened in April 2019.

Themes in the rail sector

In rail, the Commission has concerns with safety for pedestrians and vehicles at level crossings. This has been on the Watchlist since 2016 (the Watchlist is described in more detail below). Over 2019/20, we opened three inquiries involving collisions at level crossings. The inquiries are ongoing and findings yet to be determined.

Another current matter of concern is worksite occurrences. Three inquiries into worksite occurrences were active during 2019/20, with one closed[7]. Our findings from the closed inquiry were about ineffective use of non-technical skills. (Non-technical skills are the 'how' of doing a task, rather than the 'what' – for example communication skills). The Commission has raised the matter of non-technical skills in several rail inquiries. A recommendation on this safety issue remains open[8].

Derailments is a third rail safety concern, for which the Commission published three reports in 2019/20. However, we found no safety issues common to all three occurrences. One further inquiry is continuing.

Themes in the maritime sector

In maritime, inquiries have covered a range of accidents. We have identified no discernible themes, although circumstances have been similar in some cases; for example, we recently closed inquiries into two jet boat accidents

---

[6] AO-2020-002: Schleicher ASK 21 glider, impact with terrain, near Taupo, 31 May 2020
[7] RO-2019-101: Safe-working occurrence, Westfield yard, Ōtāhuhu, Auckland, 24 March 2019
[8] Recommendation 002/12.

International assist

The Commission is assisting Panama's investigation into the loss of the vessel *Gulf Livestock 1* in September 2020. Of the 43 crew members, three were recovered of which only two survived. We opened an inquiry under Section 8 (2)(e) of the Transport Accident Investigation Commission Act 1990 ("to co-operate and co-ordinate with other accident investigation organisations overseas, including taking evidence on their behalf"). To assist the investigation, investigators will seek information from organisations in New Zealand on behalf of Panama's marine safety investigation agency, the Panama Maritime Authority.

The Watchlist

The Watchlist communicates information about high-priority safety issues

Communications about findings and recommendations is a critical way of influencing the sector to enhance safety. In January 2015, the Commission published our first 'Watchlist' of safety issues that we believe need greater attention. The purpose of the Watchlist is to highlight emerging issues of concern to the Commission, as well as safety issues or recommendations that we have highlighted previously but which we consider require further action. The following issues are on the Commission's Watchlist.

Technologies to track and to locate

Technologies to track and to locate was added to the Watchlist in January 2015. Commission inquiries in all three modes have suggested opportunities exist for New Zealanders to get greater benefit from the life-saving technologies available to them. The Commission encourages transport regulators to educate operators of the significant safety advantages of using the most technologically advanced tracking and locating devices that are reasonable and affordable, and to regulate for this in some circumstances.

Recreational boat users: essential skills and knowledge

Recreational boat users: essential skills and knowledge was added to the Watchlist in January 2015. The Commission's view is that the current system is flawed because it relies on users knowing relevant maritime rules, regulations and bylaws, but does not require them to demonstrate such knowledge before taking craft on the water. In 2009, the Commission recommended that the Secretary for Transport address this issue; the recommendation remains open.

Substance use: regulatory environment for preventing performance impairment

Substance use: regulatory environment for preventing performance impairment was added to the Watchlist in January 2015. International research suggests the likelihood and severity of accidents increase if people responsible for performing safety-critical tasks use drugs or alcohol. In the New Zealand air, rail, and maritime accidents investigated by the Commission, the consumption of alcohol or use of other performance impairing substances recurs as a contributing factor or a potential impediment to survival. The Maritime Transport Amendment Act 2017, and a draft Civil Aviation Bill currently progressing through Parliament, go some way to meeting recommendations the Commission has made on this matter.

Robinson helicopters

Robinson helicopters: mast bumping accidents in New Zealand was added to the Watchlist in October 2016 because of accidents investigated by the Commission and the Civil Aviation Authority that involved a phenomenon known as mast bumping. Mast bumping occurs when part of the main rotor blade or rotor hub make contact with the main drive shaft (or mast). The result is often catastrophic and results in in-flight break up. The Commission has made recommendations to the manufacturer and the regulator about mast bumping. The Commission currently has one open inquiry involving Robinson helicopters, shortly due for publication.

Safety at railway level crossings

Safety for pedestrians and vehicles using level crossings was added to the Watchlist in October 2016. Commission inquiries have highlighted that ambiguities in the responsibilities between road and rail authorities are compromising the safety of pedestrians and vehicle users at railway level crossings. This is a particular concern in metropolitan areas with growing patronage, and growing frequency of trains. Other inquiries have shown that the implications for the road-rail interface are sometimes not recognised when changes are made to rail vehicle technology and rail infrastructure. The Commission has open recommendations to the regulator, business operators, and road control authorities to reduce safety risks.

Navigation in pilotage waters

Navigation in pilotage waters was added to the Watchlist in October 2018. Commission inquiries have found miscommunication and a lack of common understanding among the bridge management team, and poor integration of pilots into the bridge team. The Commission has made recommendations about improving standards of pilotage, improving standards of voyage planning, bridge resource management, and about the training and use of electronic chart display and information systems. International agencies have also identified pilotage as a safety issue. The industry has responded well and has made good progress in implementing the recommendations.

Relationship with Ministers

The Commission maintains a 'no surprises' relationship with the Ministers of Transport consistent with statutory independence. Standard elements of the relationship include the:

- receipt of an annual letter of expectations from the Minister, Statement of Intent and Statement of Performance Expectations preparation. Reporting occurs six-monthly against the Statement of Performance Expectations and annually (through you to Parliament) against the Statement of Intent and the Statement of Performance Expectations
- meetings of the Chief Commissioner with the Minister or delegated Associate Minister, every two months or as required
- briefings of the Ministers about significant recent or forthcoming activity.

The Chief Investigator of Accidents notifies stakeholders, including your office, by email when the Commission has opened an inquiry. The notice provides a general indication of the nature of the inquiry, but any opening advice is tentative. In most circumstances, the Commission does not contact your office again until the inquiry report is released (unless the

Commission is consulting with the regulator or Ministry on a matter). Your office receives early advice of the release of a report (including all materials) and is briefed on the release process. Usually the release of a report involves publication on the Commission's website. Where inquiries have generated public interest, we may hold a press conference.

The Commission generally deals with media inquiries about investigations. It is usual for the Minister to maintain an arm's length from the Commission's inquiries, and respond to any media inquiries by noting that an independent body, the Commission, is investigating.

The Commission's communications team will introduce themselves to your press secretary to brief him or her on the Commission's functions and processes.

Appendix 1 Commissioners and Executive Team

The Governor-General, on the recommendation of the Minister of Transport, appoints Commissioners for fixed, renewable terms. Under the Transport Accident Investigation Act 1990, up to five Commissioners may be appointed. There are currently four Commissioners.

Commissioners

Jane Meares (Chief Commissioner)

Jane is a commercial barrister based in Wellington. Jane undertakes a broad range of commercial and public sector advisory work, and holds several board memberships including the deputy chair of the Electoral Commission, chair of Financial Services Complaints Limited, chair of the Ballet Foundation of New Zealand, a member of LINZ's risk and assurance committee and a director of ECNZ.

Jane was first appointed a Commissioner in February 2015, and appointed Chief Commissioner in November 2016. Her term expires on 31 October 2021.

Stephen Davies Howard (Deputy Chief Commissioner)

Stephen is a Wellington-based company director with a wealth of strategic international experience. He holds several board appointments including chair of a Regional Research Institute, Xerra Earth Observation Institute Ltd. Stephen holds a commercial pilot licence and a commercially endorsed Ocean Yachtmaster's certificate.

Stephen was first appointed to the Commission in August 2015 and appointed Deputy Chief Commissioner in October 2018. His term expires on 31 October 2023.

Richard Marchant (Commissioner)

Richard is an Auckland-based barrister who has prosecuted a large number of cases on behalf of government agencies. He is a member of the New Zealand Bar Association and of the Criminal Bar Association, and is a member of the performance review committee of the Ministry of Justice.

Richard was appointed to the Commission in November 2016. His term expires on 30 June 2022.

Paula Rose QSO (Commissioner)

Paula is a Canterbury-based director and safety professional. She was formerly National Manager, Road Policing with NZ Police, and deputy Chair of the Independent Taskforce on Workplace Health and Safety. She holds a number of board positions including WorkSafe NZ.

Paula was appointed to the Commission in May 2017. Her term expires on 30 June 2024.

Executive Management Team

The Executive Management Team comprises a Chief Executive and two general managers.

Lois Hutchinson (Chief Executive)

Lois has 30 years of senior management experience in the state sector. Lois has been with the Commission for almost 15 years. Before that, she was General Manager, Hospital Services at MidCentral District Health Board. She has a Bachelor of Arts degree in philosophy and psychology, a Master's degree in public policy from Victoria University of Wellington and a Master of Science in organisational performance from Cranfield University, UK.

In 2019, the Australian Institute of Health and Safety awarded Lois its first ever international fellowship. The fellowship is in recognition of her successful leadership of TAIC to improve transport safety in New Zealand and internationally.

Cathryn Bridge (Commission General Counsel, General Manager Business Services)

Cathryn is General Counsel to the Commission and leads the legal, finance, human resources, governance and risk functions. Cathryn Bridge has more than twenty years of public management experience in corporate, operational, policy, legal and project roles in Crown entities and public sector departments. She has an Executive Masters of Public Administration from the Australia and NZ School of Government, and an LLB and BA from Victoria University of Wellington.

Harald Hendel (Chief Investigator of Accidents, General Manager Investigation Services)

Harald was recently appointed to the Chief Investigator's role, which he is expected to begin on 1 December 2020. He is a German citizen, although grew up and was educated in New Zealand. He has had nearly 30 years working with Airbus in Germany and France, including senior roles covering risk management, flight operations and safety analysis. Harald has a Masters Degree (with Honours) of Industrial Technology from Massey University.

Redacted under s 9(2)(a) of the OIA

Appendix 2 Commission contact

Chief Executive	Lois Hutchinson
Email:	ceo@taic.org.nz
DDI:	[redacted]
Mobile:	[redacted]

Commission details	
Telephone:	04 473 3112
Fax:	04 499 1510
Physical Location:	Level 16, 80 the Terrace
Postal address:	PO Box 10 323, Wellington 6143
Website:	www.taic.org.nz

Appendix 3 Open inquiries at 20 October 2020

Aviation

Inquiry no.	Description	Occurred
AO-2017-009	Boeing 787-9, Engine abnormality, Auckland	5/12/2017
AO-2017-010	Boeing 787-9, engine abnormality, Auckland	6/12/2017
AO-2018-001	Tandem sky-diving operation, passenger fatality, Lake Wakatipu	10/01/2018
AO-2018-005	Hughes MD600N Helicopter, impact with terrain, North East of Waiouru	14/06/2018
AO-2018-006	Robinson R44 Helicopter, ZK-HTB, collision with lake, Wanaka	21/07/2018
AO-2018-009	Hughes 369D, ZK-HOJ, impact with terrain, Wanaka	18/10/2018
AO-2019-002	Two Q300 aircraft, loss of separation, Wellington Airport	12/03/2019
AO-2019-003	Diamond DA42 aeroplane, impact with terrain, 22 nautical miles south-southeast of Taupo, Kaimanawa Ranges	24/03/2019
AO-2019-005	BK-117 helicopter, impact with water, vicinity of Auckland Island	22/04/2019
AO-2019-006	Cessna 185 and a Tecnam P2002 light aeroplane, mid-air collision, near Hood Aerodrome, Masterton	16/06/2019
AO-2019-007	Airways, outage, Christchurch	1/10/2019
AO-2020-001	Pacific Aerospace Cresco 08-600 aircraft, Impact with terrain, Wairarapa	24/04/2020
AO-2020-002	Schleicher ASK 21 glider, impact with terrain, near Taupo	31/05/2020

Rail

Inquiry no.	Description	Occurred
RO-2019-104	Work train and hi-rail vehicle, potential collision, Taimate	5/06/2019
RO-2019-105	Freight train, derailment, Wellington yard	2/07/2019
RO-2019-106	Passenger train, safe working irregularity, Rolleston	3/09/2009
RO-2019-107	Passenger train, signal passed at danger, Wellington Station	6/11/2019
RO-2019-108	Freight train, level crossing collision with road vehicle, Piako Road	7/12/2019
RO-2020-101	Passenger train and road vehicle, collision, Mulcocks Road level crossing	10/02/2020
RO-2020-102	Freight train and hi-Rail vehicle, collision, Limeworks Road level crossing	24/04/2020
RO-2020-103	Locomotive and bus, Clevely Line level crossing, between Bunnythorpe and Palmerston North	16/09/2020
RO-2020-104	Track occupancy incident involving a Hi-Rail vehicle at Ruakura, near Hamilton	21/09/2020

Maritime

Inquiry no.	Description	Occurred
MO-2018-206	Bulk carrier *Alam Seri*, loss of control and contact with seabed, Port of Bluff	28/11/2018
MO-2019-204	Passenger vessel *Henerata*, capsize, Stewart Island	12/09/2019
MO-2020-201	Fishing vessel *Leila Jo* and bulk carrier *Rose Harmony*, collision, four miles from Lyttelton	12/01/2020
MO-2020-202	Bulk carrier *Funing*, loss of power, near Tauranga harbour	6/07/2020

Overseas assist

Inquiry no.	Description	Occurred
Aviation		
AO-2018-003	PAC 750 XL Aeroplane, engine abnormality requiring engine shut-down and glide landing, Sentani Airport, Jayapura, Papua, Indonesia	21/05/2018
AO-2018-007	New Zealand-manufactured Pacific Aerospace Ltd 750XL aeroplane, landing gear failure, near Dubendorf, Switzerland	17/08/2018
AO-2018-008	PAC 750 XL Aeroplane, flight into terrain, Oksibil Airport, Papua, Indonesia	11/08/2018
AO-2019-008	PAC 750XL, Landing gear collapse, Efogi Airstrip, Central Province	7/10/2019
AO-2019-009	Singapore Airlines Boeing 747 freight aircraft, engine pod strike, Auckland International Airport	10/12/2019
Maritime		
MO-2020-203	*Gulf Livestock 1*, loss of vessel, en route to China	3/09/2020