



Office of the Chief Investigator  
Transport Safety Investigations

# Accident Investigations- What should Operators expect?

21 September 2021

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## Outline

- Background and legislation
- Decision to investigate
- What Operators should expect
- Some of our investigations
- Questions



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## Chief Investigator

### The position

- *Transport Integration Act 2010 - S.179*  
There is to be a Chief Investigator Transport Safety
- GIC appointment for up to 5 years
- Minimum Qualifications are specified in *the Act*

### The object - *TIA* s.180

- To improve transport safety by providing independent, no-blame investigation of transport safety matters.



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## Chief Investigator

### Functions - *TIA* s.181(1)

- Investigate transport safety matters / marine safety matters
- Report results to Minister

### Independence - *TIA* s.194

- Minister can direct the CI to conduct an investigation (*TIA* s.191),
- but is not subject to the direction and control of the Ministers (*TIA* s.194)



## What do we do?

- Conduct “no-blame” investigations of transport safety matters / marine safety matters
- We do this under State legislation (*Transport (Compliance & Miscellaneous) Act 1983* and *Transport (Safety Schemes Compliance and Enforcement) Act 2014*)
- Or under delegations from ATSB Commissioner under Commonwealth legislation *Transport Safety Investigation Act 2003* (Cwlth)
- Report results to Minister (or to ATSB Commission) which are then published on the internet
- Primary purpose is **to identify those factors that contributed to an incident and make recommendations for improvements to prevent a re-occurrence.**





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## The Office

- 7 Staff members
- Comprising Chief and Business Manager
- Manager Technical and Investigation Support
- 2 Senior Rail Investigator
- 2 Senior Marine Investigators



## ATSB

### Australian Transport Safety Bureau

- The ATSB is an independent Commonwealth Government statutory Agency.
- The ATSB is governed by a Commission and is independent of transport regulators, policy makers and service providers.
- The ATSB aims to improve safety in the aviation, marine and rail transport through independent investigation of transport accidents and occurrences.
- The ATSB conducts transport safety investigations in accordance with the *Transport Safety Investigation Act 2003* (Cwlth).





## Legislative Provisions

- Mandatory reporting of incidents
- Powers to collect evidentiary materials and conduct interviews
- Information gathered is strictly confidential
- Reports cannot be used in Civil or Criminal proceedings
- Consultation must occur before publication of the report







## Comparison of provisions

### Comparison of provisions in the Transport Acts (Vic) and the TSI Act 2003 (Cwlth)

Section	Provision	Section	Provision
S.6 & S.8 T(SSC & E) Act 2014	Enter public transport premises (rail or bus) for investigative purposes: without consent / Under a search warrant / with consent.	S.33 / 34 / 35 / 40 / 41	Enter special premises (accident site or vehicle):without consent or warrant/ with consent / Telephone or fax
S.16 T(SSC & E) Act 2014	Securing a site or restricting access to rolling stock, bus or vessel.	S.44	Securing accident sites: Secure perimeter of an accident site
S.17 T(SSC & E) Act 2014	Directions for the protection of evidence.	S.43	Protection orders by Chief Commissioner; Specified thing or specified class of things must not be removed or interfered with.
S.8 T(SSC & E) Act 2014	For investigative purposes in public transport premises: Inspect, inquire, measure, test, search, photograph, take samples, make copies	S.36/S.45	Powers after entering premises; search, photograph, make copies, examine, operate equipment, remove material (Receipt will be issued). Keeping and testing evidence
S.84 AB T(C & M) Act 1983	Require person to attend and answer questions.	S.32 / 47	Require person to attend and answer questions. Self-incrimination not an excuse.
S.22 & S.23 T(SSC & E) Act 2014	Require production of documents and related items answer questions. Self-incrimination not an excuse	S.32/ 47	Produce specified evidential material.
S.85C / 85E T(C & M) Act 1983	Limitations on disclosure or access to information: Person must not disclose information obtained during consultation. CI may authorize non-staff members to have access to information.	S.60 / 62	Limitations on disclosure or access to information: Offence for staff members to disclose restricted information. ATSB may authorize non-staff members to have access to restricted information.
OBR	No requirements	S.48 -53	OBR Information: Offence to copy or disclose OBR information
S.85 T(C & M) Act 1983	Reports to be given to Minister	S.25	ATSB must publish reports
S.85A T(C & M) Act 1983	Consultation before report is finalized	S.26	Consultation before report is finalized
S. 85DA T(C & M) Act 1983	Reports not admissible in evidence in civil or criminal proceedings	S.27	Reports not admissible in evidence



## Decision to Investigate

### Decision principles

- Significance of failures of safety systems
- The potential for safety system improvement
- Passenger fatalities and/or serious injuries
- Public profile of incident
- Environmental impact
- Part of an identifiable trend
- Risks associated with not investigating



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## What to expect

- CITS investigators to attend site to collect evidence – witness statements, site measurements, event recorders and cctv .....
- Formal request for information concerning the bus and the driver (information protected)
- Interviews with driver and potentially Operator and other parties
- Commence report drafting
- Circulate draft report to directly involved parties
- Update report with any factual corrections
- Submit final report to Minister for Public Transport
- Provide advance notice of publication
- Publication



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## Investigations - Bus

### Level Crossing Collision freight train and road coach

- Driver stopped the coach foul of the crossing
- Boom barriers had been damaged 20 times in previous 6 years



#### Level crossing collision between freight train 5KQ7 and a road coach

Norlane, Victoria, on 2 April 2020



ATSB Transport Safety Report  
Rail Occurrence Investigation (Defined)  
RQ-2020-004  
Final – 26 January 2021





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## Investigations - Rail

### Train-Truck Collision Kerang

- Vehicle driver awareness / complacency
- Level crossing protection systems
- Road marking and signage
- Rollingstock structural standards





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## Investigations - Rail

### Collision between MTM Train and V/Line Train at Altona

The rules pertaining to passing a permissive signal at stop place sole reliance on the train driver to provide separation between trains by line-of-sight observation.

The marker lights on the Comeng train did not meet the requirements of the standard



Australian Government  
Australian Transport Safety Bureau

#### Collision between V/Line train 8280 and MTM train 6502

Altona, Victoria | 22 August 2014



Investigation

ATSB Transport Safety Report  
Rail Occurrence Investigation  
RO-2014-016  
Final – 6 July 2016





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## Investigations - Tram

### Tram – multiple tram to tram collisions

- Driver task alertness
- Rostering / fatigue
- Training and supervision



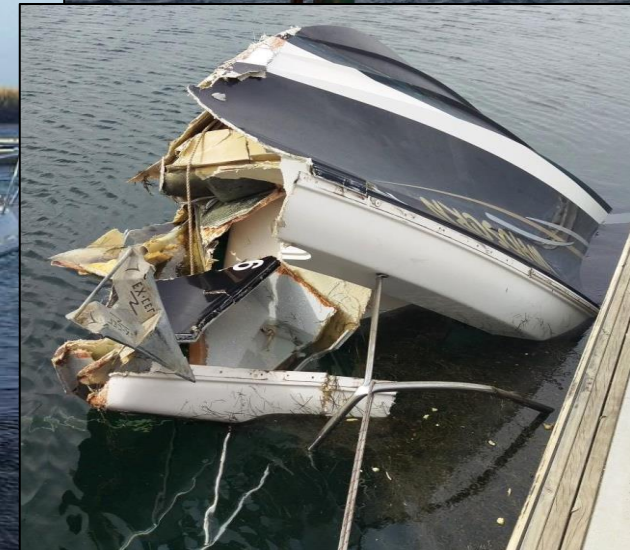


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## Investigations - Marine

### Who Cares West Channel – Collision with Beacon

- The performance of the lighting systems on № 6 and № 7 beacons was probably affected by coverage of the solar cells by bird droppings
- The outage of the lights on № 6 and № 7 beacons was not detected by the local port manager. The monitoring and inspection systems that were in place did not assure a reliable level of beacon light availability







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## Investigations - Marine

### Norwegian Star

Successive failures of excitation for Azipod propulsion

- Vessel operation with one propulsion unit
- Modifications and failures of the modification to the propulsion systems.





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## Current Investigations

- Derailment of XPT ST23, Wallan, Victoria, on 20 February 2020
- Collision of passenger train 8185 with level crossing gates, Lydiard Street North, Ballarat, Victoria, on 30 May 2020
- Derailment of Pacific National freight train 4MC2, and collision with V/Line train, at Barnawartha, Victoria, on 29 January 2020
- SPAD of V/Line Train at Docklands on 23 November 2020
- Breakaway from Moorings, Florida Highway, Webb Dock, 27 December 2020

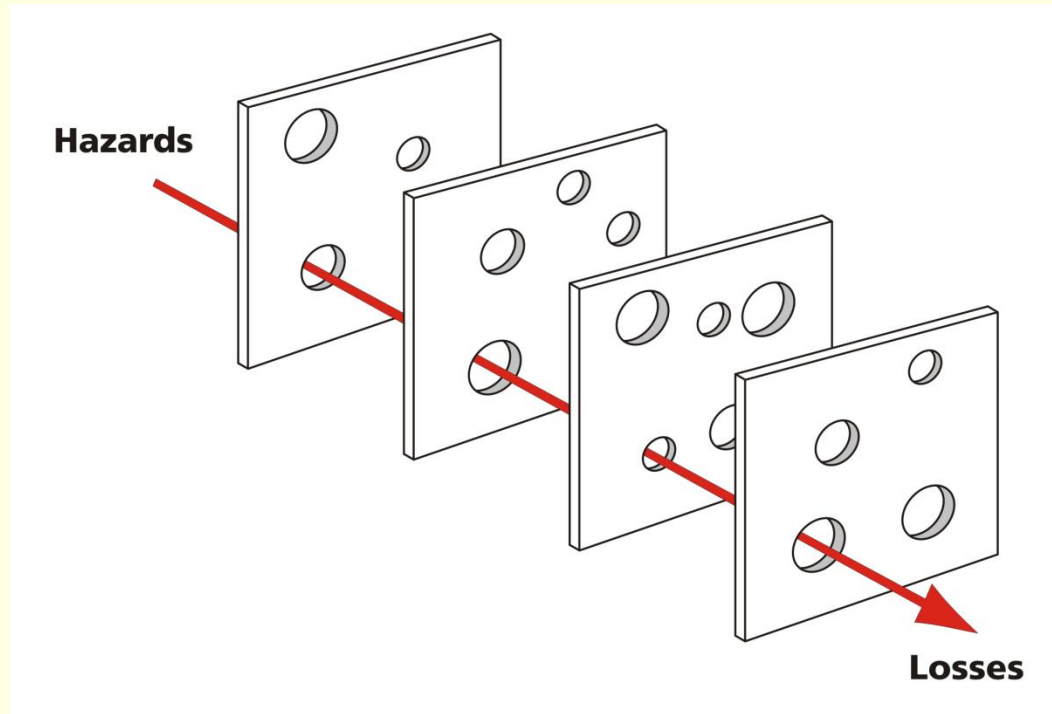


The test of a good accident report is not so much its fidelity to the often-irrecoverable reality, but the extent to which it directs those who regulate, manage and operate hazardous technologies towards appropriate and workable countermeasures - *James Reason*

## Discussion Q&A

<https://transport.vic.gov.au/about/chief-investigator-transport-safety>  
[www.atsb.gov.au](http://www.atsb.gov.au)





The Swiss cheese model of accident causation illustrates that, although many layers of defence lie between hazards and accidents, there are flaws in each layer that, if aligned, can allow the accident to occur.

