



Australian Government
Australian Transport Safety Bureau

Near hit with derailed passengers on track

Kilbride, New South Wales | 22 May 2014



Investigation

ATSB Transport Safety Report
Rail Occurrence Investigation
RO-2014-009
Final – 17 January 2018

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Addendum

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Safety summary

What happened

At 1137 on 22 May 2014, NSW Trains XPT passenger service NT33 departed Paterson towards Kilbride when the driver observed a bus at the Mirari road level crossing and people walking on the track ahead. The driver immediately made an emergency brake application and brought the train to a stand approximately 80 m short of the people.

There were no reported injuries as a result of the incident.

Mirari Road level crossing Kilbride



Source: ONRSR

What the ATSB found

A disabled coal train SF630 had initially delayed NSW Trains' passenger service V938. A decision was made to evacuate V938 and provide the passengers with alternative road transport.

The train crew of V938 did not comply with the Australian Rail Track Corporation (ARTC) network rules when detraining passengers from their train and unknowingly placed the passengers in the path of NT33.

The NSW Trains procedure for detraining did not preference the option of moving to a designated platform when available and would have required approval from the network owner ARTC. This option was also absent from ARTC's Network Rules and Procedures.

Key operational staff in NSW Trains and Sydney Trains continued to operate under RailCorp legacy systems, even though documented transitional arrangements had re-established lines of responsibility and authority. This misunderstanding of roles, responsibilities and limits of authority by operational employees likely contributed to inadequate communication between critical safe working positions.

What's been done as a result

NSW Trains has informed the ATSB they had commenced an immediate review of procedures for detraining passengers when a train is not at a designated station. It has also informed the ATSB that the procedures had also been amended to clarify how passenger safety, their wellbeing and track protection will be managed when detraining.

Safety message

This incident illustrates the importance for train crews to strictly adhere to recognised detraining and track protection procedures when transferring passengers from a stranded train to a safe place.

It is essential that train crew and network control implement an appropriate level of protection and confirm that the protection is in place before detraining passengers.

When the option is available, preference should be given to detraining at a recognised platform before electing to detrain passengers into the rail corridor.

Operators must confirm and ensure roles, responsibilities and limits of authority are clearly understood during organisational change.

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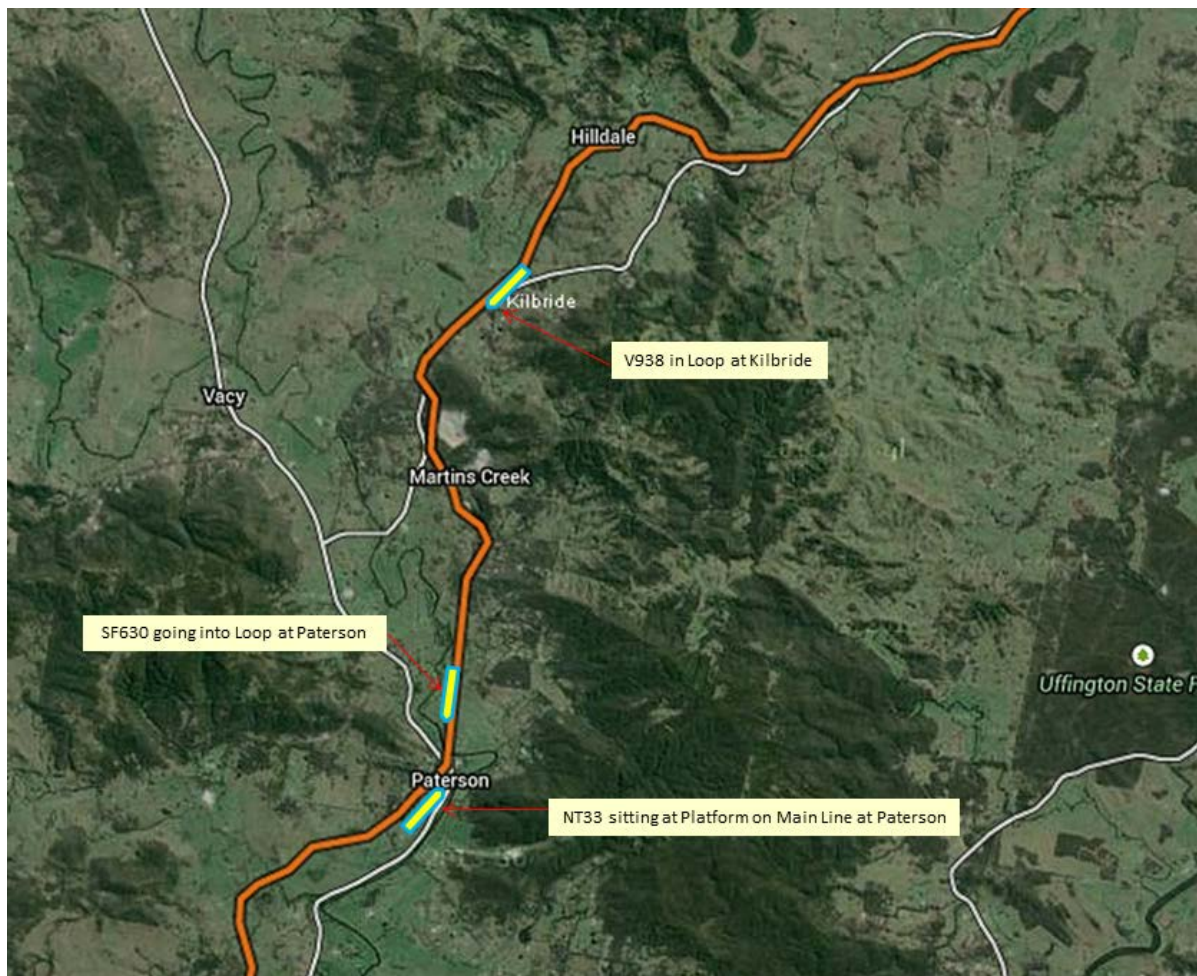
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The occurrence

At 1010 on Thursday 22 May 2014, a south bound (Up¹) loaded Pacific National coal train (SF630) and a north bound (Down) NSW Trains' XPT passenger service (NT33) were approaching Paterson, in the Hunter region of New South Wales. ARTC train control planned for SF630 to enter the Paterson loop to allow NT33 to pass on the single line. NT33 was scheduled to stop at Paterson station to pick-up passengers as required and then depart at 1020.

At 1013 SF630 was entering Paterson crossing loop (see Figure1). As it entered the crossing loop its lead locomotive 8215 suffered a mechanical problem. This forced the train to come to a stand with a portion of the train still standing foul of the main line. As a result, NT33's departure path from Paterson station platform was blocked.

Figure 1: Position of trains SF630 and NT33 at Paterson, and train V938 at Kilbride



Source: Google Earth, annotated by ATSB

Meanwhile, a two-car Hunter passenger service operated by NSW Trains (V938), had departed Dungog and was also travelling south behind SF630. At 1022 V938 entered the loop at Kilbride as scheduled and waited for NT33 to pass. V938 was scheduled to depart Kilbride at 1029 towards Newcastle.

At 1024 the Broadmeadow (Newcastle) based ARTC Train Transit Manager (TTM) called the NSW Trains' Daily Operations Continuity Centre Shift Supervisor (DOCC SS) to advise of the

¹ In NSW a train travelling in the Up direction is heading toward Central station, Sydney and a train heading away from Central station, Sydney is travelling in the Down direction.

failure of SF630. The ARTC TTM also discussed the delays to XPT NT33 and Hunter service V938 and asked to clarify which service to give preference to, once the line was clear.

At 1028 the DOCC SS passed the delay information onto the Sydney Trains' Rail Management Centre Shift Manager (RMC SM).

Being aware of the potential delay to V938, the RMC SM started to action, with his Train Crew Liaison Officer (TCLO), alternative road transport for the passengers on train V938.

At 1057 the TCLO contacted the Guard of V938 on his work issued mobile phone enquiring about passenger numbers and a discussion took place on the possible organisation of a mini bus or changing ends and returning to a platform. The Guard advised the TCLO that there were six passengers.

By 1100 the RMC SM advised the TCLO that a bus will be ordered and to advise the crew of V938.

At 1111 the RMC SM contacted ARTC TTM and advised a bus had been ordered to pick up passengers on V938.

Meanwhile, the crew of SF630 had identified the source of the mechanical problem and found a temporary solution that allowed the train to be moved clear of the main line.

At 1120 the ARTC TTM advised the RMC SM that SF630 was moving into the loop at Paterson and XPT NT33 will proceed north.

At approximately 1125, the bus arrived at Kilbride and accessed the rail corridor via a maintenance access road. Once in the rail corridor, the bus parked alongside V938. Despite the close proximity of pedestrian access between the train and the bus, it was deemed unsuitable. The guard instructed the bus driver to move to the Mirari road level crossing located approximately 110 m south of the Kilbride crossing loop.

At 1127 SF630 had moved into the Paterson crossing loop. This cleared the track for NT33 to continue its journey north towards Kilbride.

At Kilbride, the crew of V938 had informed the passengers that a bus had arrived and that they would be required to walk along the track to the Mirari road level crossing. The guard and driver assisted five passengers to disembark the train via the crew compartment door of the front car. The passengers were instructed to walk in single file within the four foot² of the track.

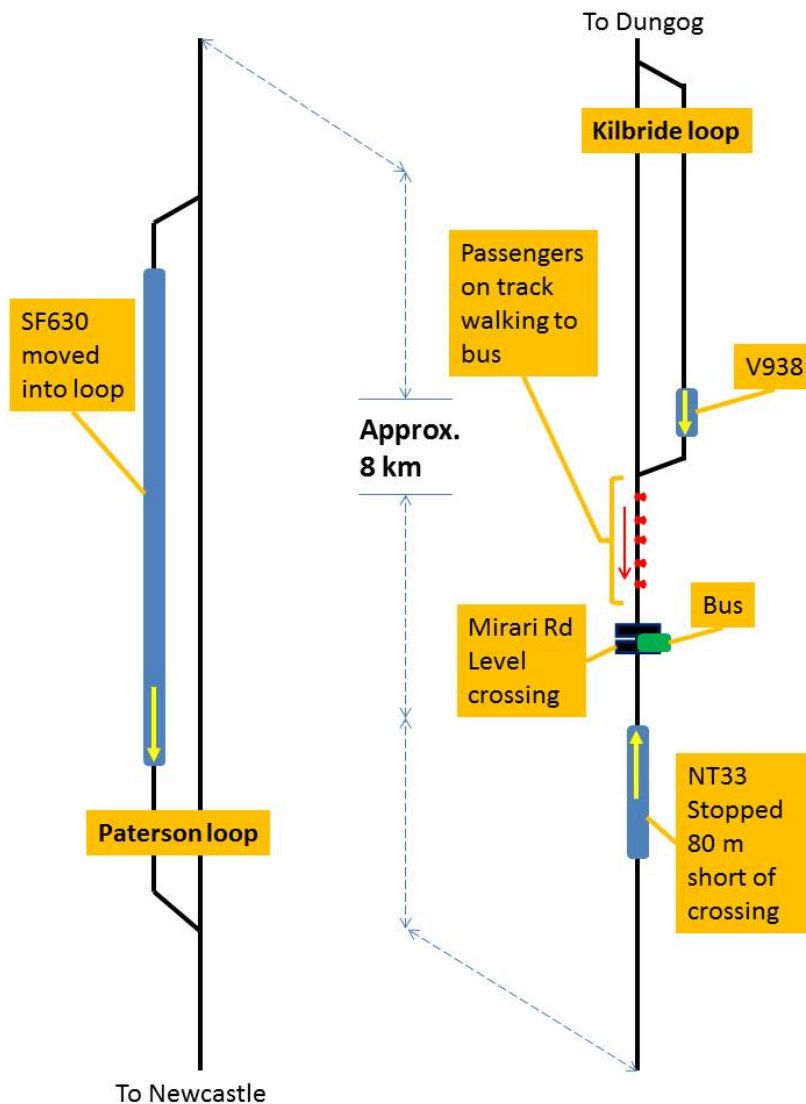
NT33 was approaching Kilbride at 118 km/h.³ As NT33 approached the Mirari road level crossing, the driver observed a bus at the level crossing and people walking on the track approximately 300 m ahead of the train. The driver of NT33 immediately made an emergency brake application and sounded the horn continuously as he brought the train to a stand approximately 80 m short of the bus and people.

The crew of V938 had completed assisting five of their six passengers off the train when the guard observed the level crossing activate and looked up the track to see NT33 coming towards them. The guard gave a verbal warning to the passengers to get off the track before noticing NT33 had already stopped (see Figure 2).

² The four foot is the area between the rails of the same line.

³ Track speed limit for XPT services in the section was 120km/h.

Figure 2: Position of trains, bus and people at time of incident



Source: ATSB

Post-occurrence

The driver of NT33 reported the incident to the DOCC SS. The driver advised of nearly hitting a number of people walking on the track and the presence of a bus at the Mirari road level crossing.

The guard on V938 rang the TCLO and reported the incident. The TCLO advised the RMC SM and the DOCC SS.

The RMC SM conferred with the ARTC TTM about the passengers detrainment. The TTM checked with the ARTC Network Controller (NC) and confirmed that no authorisation or track protection for the detrainment had been given.

The RMC SM later advised the ARTC TTM that five passengers of V938 had walked up to the level crossing and boarded the bus while one passenger remained on the train to disembark at Maitland Station.

NSW Trains conducted drug and alcohol testing on the crew of V938 on arrival at Newcastle station, both driver and guard returned negative results. NSW Trains revoked their rail safety worker cards pending internal investigation.

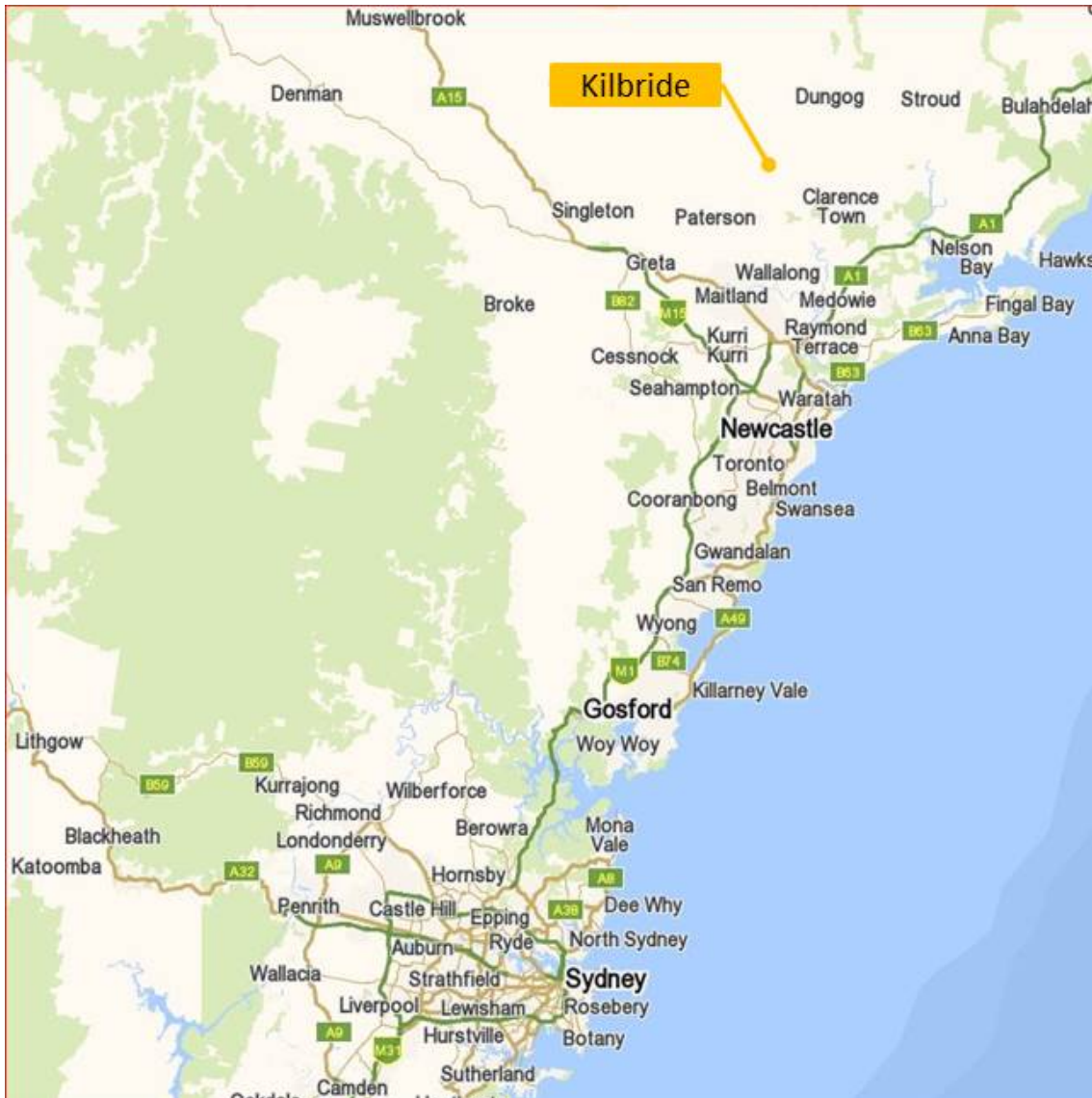
The driver of NT33 continued in service to Taree where a crew change occurred as planned.

Context

Incident location

The incident occurred at Kilbride in the Hunter Valley, NSW. Kilbride is a crossing loop located at 223.468 kms by rail north from Central railway station, Sydney⁴ (see Figure 3).

Figure 3: Location of Kilbride



Source: Whereis (Annotated by ATSB)

Kilbride is situated 10 km from the township of Paterson. The rail infrastructure at Kilbride consists of a crossing loop that is used to allow trains to pass on the single line. The track is a single standard gauge line that predominantly carries a mix of passenger and freight trains. The posted track speed for the main line between Paterson and Kilbride was 120 km/h for XPT services.

⁴ All kilometres are measured from No.1 platform at Central railway station, Sydney Terminal. The kilometres shown for Kilbride location is referenced in the ARTC NSW Curve and Gradient Diagrams: Section 1- North and Hunter Valley publication.

Environmental conditions

The Bureau of Meteorology records for Paterson, indicated a maximum temperature of 24.9 degrees and a minimum of 9.2 degrees, approximately 10 km from Kilbride. The ATSB determined that the environmental conditions were not a factor in the incident.

Organisational change and transition

At the time of the incident Sydney Trains and NSW Trains were in a transitional period.

From 1 January 2004 until 30 June 2013, Rail Corporation New South Wales (RailCorp) provided metropolitan and intercity passenger rail services via CityRail and regional and interstate services via CountryLink. RailCorp also owned and maintained the Metropolitan Rail Network (MRN) and provided access to freight and third-party operators in the metropolitan area.

From July 2013 RailCorp's operation and maintenance functions were transferred to Sydney Trains and NSW Trains, leaving RailCorp as an asset owner.⁵

In the transition from RailCorp to Sydney Trains and NSW Trains a Services Contract⁶ and an Operational Interface Protocol (OIP)⁷ were developed to identify the roles, responsibilities and limits of authority of key operational personnel throughout the change.

Parties involved in the incident

At the time of the incident, there were three main rail network infrastructure managers (RIM) in NSW. Each RIM was responsible for controlling train operations and maintaining track within their respective networks. They each imposed a strict set of network rules and procedures to provide safe working on their network. Each RIM was also responsible for ensuring competent people were in place to execute their safe working rules and procedures. Rolling stock operators (RSO) were required to follow the network rules and procedures for the relevant network they were operating on.

The three RIM's in NSW were:

- **The Australian Rail Track Corporation (ARTC) – responsible for the NSW Interstate, Hunter Valley and Metropolitan Freight Network.**
- **Sydney Trains – assumed responsibility for the MRN from RailCorp.**
- **John Holland Rail – responsible for the Country Regional Network (CRN) (see Figure 4).**

John Holland CRN was not involved in this incident.

⁵ www.transport.nsw.gov.au/about-us/who-we-are/railcorp

⁶ TfNSW Services Contract Sydney Trains and NSW Trains Final – 7 June 2013

⁷ Operational Interface Protocols Sydney Trains and NSW Trains version 1.0, issue date 1 July 2013

ARTC Network Controller (NC)

The NC implements plans and manages the movement of trains over the NC's allotted portion of the ARTC network. This includes recording of train performance and carrying out communication with above rail operators on the network. This position is primarily concerned with ensuring safe working across the ARTC network.

ARTC's NC (Coast A board) was in charge of train control and safe working in the Kilbride area at the time of the incident.

Sydney Trains

Sydney Trains is a NSW State Government Agency. It has responsibility and authority for all suburban rail infrastructure management and train control in the Sydney Metropolitan area bounded by Islington Junction, Lithgow, Macarthur and Bomaderry.

Sydney Trains is also the rollingstock operator for the Suburban Fleet.⁹

Prior to July 2013, RailCorp was responsible for service delivery of the suburban and intercity fleets and operational management of the MRN. Post 2013, Sydney Trains' responsibility and authority was limited to service delivery for the suburban fleet and operational management of the MRN.

Sydney Trains' control centre for train movements through their network is located at Central Station. It is called the Rail Management Centre (RMC). A number of service delivery and network control functions reside within this complex.

Sydney Trains Rail Management Centre Shift Manager (RMC SM)

Prior to July 2013, the RMC SM had responsibility and authority for service delivery of the suburban, interstate and intercity (intrastate) fleets and the operational management of the MRN. The RMC SM supervised a number of TCLO's as well as staff primarily concerned with network control and security on the MRN.

Post July 2013, as the service delivery of intercity and interstate passenger services had transferred to NSW Trains, the RMC SM's responsibilities and authorities were focused on service delivery of the suburban fleet only and the operational management of the MRN.

Sydney Trains Train Crew Liaison Officer (TCLO)

The TCLO was responsible for supporting Sydney Trains' train crew. Primarily, the TCLO managed such issues as crew relief, rostering and support for business continuity. Their activities also included organising support buses for passenger detrainments from Sydney Trains and NSW Trains passenger services on the MRN.

NSW Trains

Prior to July 2013, RailCorp's division CountryLink was responsible for above rail operations of the XPT and Xplorer fleets. Post July 2013, NSW Trains became the accredited RSO for the XPT, Xplorer, and Intercity Fleets.

Within NSW, NSW Trains operates over the MRN, CRN and ARTC networks. NSW Trains are required to apply the rules and procedures for the relevant network they are operating on. NSW Trains was the RSO for NT33 and V938.

⁹ Suburban Fleet is the fleet of rail vehicles used to service the SRN. The Intercity Fleet is the fleet of rail vehicles used on the NSW passenger network outside the SRN. For details of the rail vehicles go to www.sydneystains.info/about/fleet/

NSW Trains Daily Operations Continuity Centre Shift Supervisor (DOCC SS)

At the time of the incident the DOCC SS was responsible for business continuity of regional (interstate) passenger train services across NSW. The passenger train services included; XPT, Xplorer and Intercity Fleets. The DOCC SS was also responsible for organising alternative travel arrangements for NSW Train services operating outside the MRN. The DOCC SS was seated in the RMC along with the RMC SM and TCLO.

NT33

NT33 consisted of two XPT power cars and seven trailer cars with a length of 155 m. NT33 was timetabled to depart Paterson at 1020. However, NT33 departed 76 minutes late due to the failure of SF630.

V938

V938 was a diesel multiple unit (DMU) consisting of two Hunter rail cars. It measured 51 m in length. At the time of the incident V938 was carrying six passengers, a driver and a guard.

V938 was being held in the Kilbride passing loop at starting signal 05 12 L (222.779 km) waiting for NT33 to pass on the main line. V938 had been delayed over 60 minutes before the bus arrived.

Driver of V938

Training and competency records show the driver had been driving passenger services for NSW Trains and their predecessor CountryLink since 2008. The driver held appropriate competencies and qualifications for the relevant rolling stock and systems of safe working. The driver also had the required route knowledge for the north coast line.

On the day of the incident, the driver had signed on for duty at 0810.

Guard of V938

Training and competency records show he commenced training as a freight train guard in 1982. The guard had worked intercity services, as a guard, in the Newcastle area since 1987. The guard was qualified in safe working systems for passenger service operations. The guard also had the required route knowledge for the north coast rail line.

On the day of the incident, the guard had signed on for duty at 0449.

Pacific National (PN)

PN is a national rail freight RSO. PN was the operator of SF630 at the time of the incident.

Coal train SF630

SF630 comprised of three locomotives hauling 72 loaded wagons. Its total length was approximately 1700 m.

At 1024 on the day of the incident, just prior to Paterson, the lead locomotive suffered an air compressor problem. This resulted in the train losing its air and the brakes automatically¹⁰ applying. As a result, SF630 was stranded partially on the main line blocking all other traffic.

By 1118, the crew had temporarily fixed the problem and advised the ARTC NC they had gained sufficient air to release the brakes. Consequently, SF630 was permitted to move into the Paterson loop clear of the main line.

Although SF630 delayed train operations approaching Kilbride, the ATSB deemed its loss of air did not directly contribute to the safe working incident.

¹⁰ The train braking system requires a constant air pressure to hold the train brakes in the release position. In the event the train braking system incurs a reduction in air pressure the brakes will automatically apply.

Safety analysis

Network rules and operator specific procedures

The ARTC NC authorises track and train protection in accordance with Network Rules on the ARTC network, when requested by the driver. The ARTC NC, in consultation with the driver, assesses then selects the appropriate level of protection required for the task.

The network rules take precedence over operator specific procedures and foremost, operators must comply with the network rules.

The applicable rule that should have been followed in this incident was ANGE 206 – Reporting and Responding to a Condition Affecting the Network (CAN). With regards to reporting, ANGE 206 states:

‘Conditions that can or do affect the safety of operations in the ARTC NSW Network must be reported promptly to the Network Control Officer responsible for the affected portions of line.’

As an operator using the ARTC network, the moment the decision was made to put people into the rail corridor, an appropriately qualified worker, from NSW trains needed to follow this rule and report the CAN to the ARTC NC.

At the time of this incident, NSW Trains had in place RailCorp’s Operator Specific Procedure *OSP 11 – Train evacuation and detraining passengers when not at stations*, version 6.0 Effective date 27 May 2012.

OSP 11 states the following:

‘Detraining passengers when not at a station in non-life-threatening situations

Driver, Guard/PSS

1. Tell the Network Control Officer:

- your location
- about the situation
- how many passengers
- whether there is good access to the train
- about any passengers who cannot detrain by themselves

2. Find out how long it will take for help to arrive.

3. Agree with the Network Control Officer on:

- the protection required for the train
- whether alternative transport is required, and when it will arrive
- how to manage passengers who cannot detrain by themselves

4. Place the required protection...’

Review of voice recordings indicated that the ARTC NC and the driver of V938 did not discuss the matter of train protection during their conversations. Instead their discussions focussed on the effects to service delivery issues.

At interview, the driver of V938 said he did not contact the ARTC NC as he was of the belief that all safe working requirements were being attended to by the guard and the TCLO. The driver stated:

‘I could hear the guard discussing the matter with someone and assumed that the protection was being provided.’

At no time did the driver request an assurance from the guard nor confirm in any other way that appropriate track protection had been implemented.

The guard said during interview that he thought the TCLO was arranging train protection. The guard said he had relied on the information and knowledge of the TCLO for guidance. The guard was of the opinion the TCLO held a higher and more qualified position, and the guard made the assumption that train protection had been provided by the TCLO. However, the voice recordings of conversations between the guard and the TCLO have no mention of train protection by the guard or by the TCLO. Their conversation instead focussed on transfer of passengers to alternative transport.

ARTC had in place ANRF004 and ANGE206, the rules and procedures for reporting and responding to a condition affecting the network. These were the rules and procedures that the crew of V938 needed to be aware of and follow.

Management of change

It is evident there was confusion among the involved parties about their individual roles, level of responsibility and limits of authority with regards to ensuring passengers were detained only when it was safe to do so.

Prior to transitioning from RailCorp to Sydney Trains and NSW Trains, the organisation completed a Services Contract and OIP to clearly define the roles, responsibilities and limits of authority for key operational staff from 1 July 2013.

Some of these changes included the following, from the Services Contract, regarding alternative travel arrangements, 6.3 (d):

'NSW Trains will organise alternative transport required outside of the RailCorp Network.'

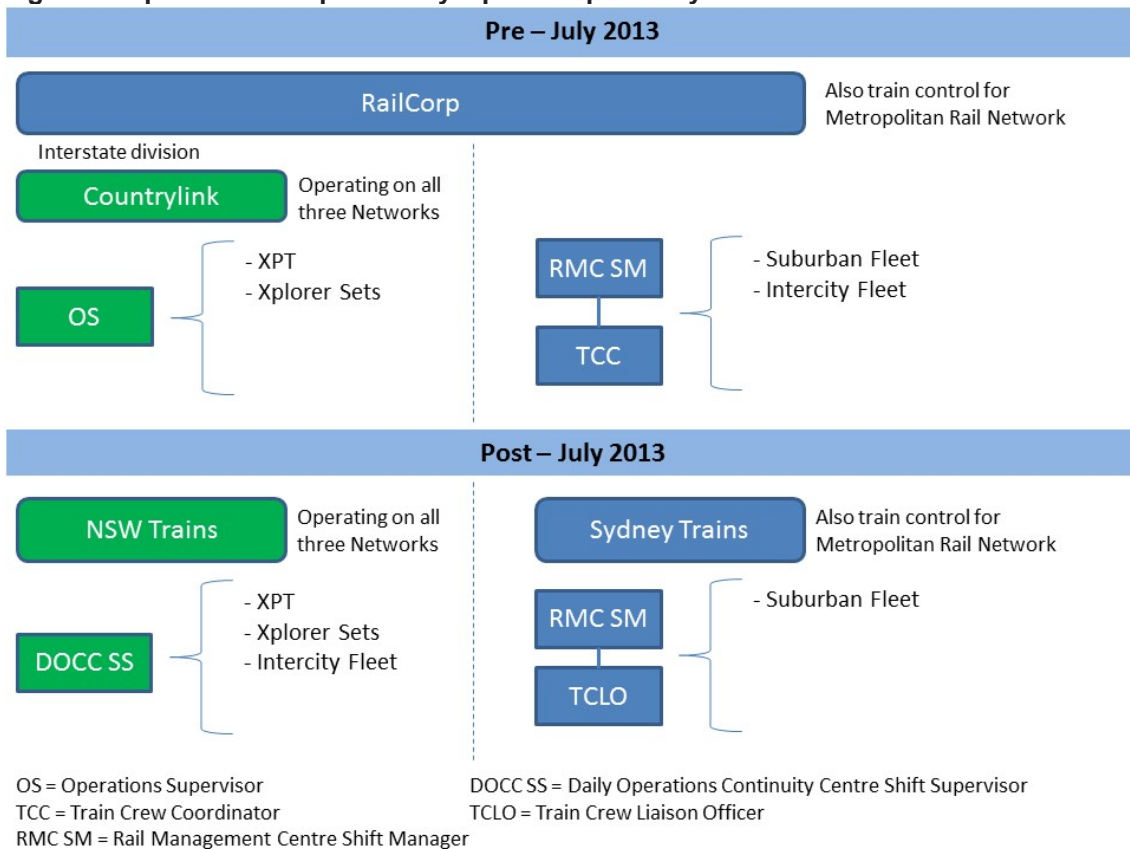
and from the OIP, regarding protocols for incident response and recovery, 4.2.1.2:

'The NSW Trains Operations Shift Supervisor will be responsible for the coordination of incidents involving NSW Trains' services in ARTC, JHR, Victorian and Queensland networks.'

Post July 2013, the RMC SM and TCLO had responsibilities for suburban fleet services on the MRN and some responsibilities for the intercity fleet services but only when they were operating on the MRN.

Responsibility for intercity service V938 resided with the NSW Trains' DOCC SS (see Figure 5).

Figure 5: Operational responsibility – pre and post July 2013



Source: ATSB

In contrast, the TCLO at interview indicated the transition from RailCorp and CountryLink to Sydney Trains and NSW Trains resulted in very little change to operational staff responsibilities. Whilst position titles had changed, TCC became TCLO, the tasks associated with the position had not. The TCLO was still expected, in the interim, to provide operational support for NSW Trains' intercity services.

Additionally, the discrepancy in understanding of roles and responsibilities between senior management and frontline staff was highlighted in the timeline account from the NSW Trains' investigation, where;

'(11:59) The Director of NSW Customer Service Division and Manager Operations Planning and Coordination contacted the DOCC SS. The details of the incident were discussed. The Director asked why the crew were conversing with the RMC and not the DOCC? The DOCC SS explained that the TCLO contacts the old CityRail crew and CountryLink information comes through me.'

Further, the DOCC SS's understanding of the transitional arrangements are reflected in his interview comments,

'The agreement is that for CountryLink the DOCC has full operational control. RMC looks after operations for all bar CountryLink. The DOCC is not fully staffed or resourced, people are seconded out.'

The change in entities post July 2013 is a contributing factor to the confusion of associated responsibilities and limits of authority in the operations staff. As witnessed in this incident, the Sydney Trains' RMC SM and TCLO were still intricately involved in dealing with service delivery issues on intercity fleet services (including V938).

Further evidence of the on-going legacy arrangements was apparent in the communications between the ARTC TTM and the RMC SM about potential delays to intercity services due to the breakdown of SF630.

It is likely, the changes in responsibilities had not been effectively communicated to operational staff of relevant stakeholders, such as ARTC. This resulted in a continuance of communication between parties that existed before the change.

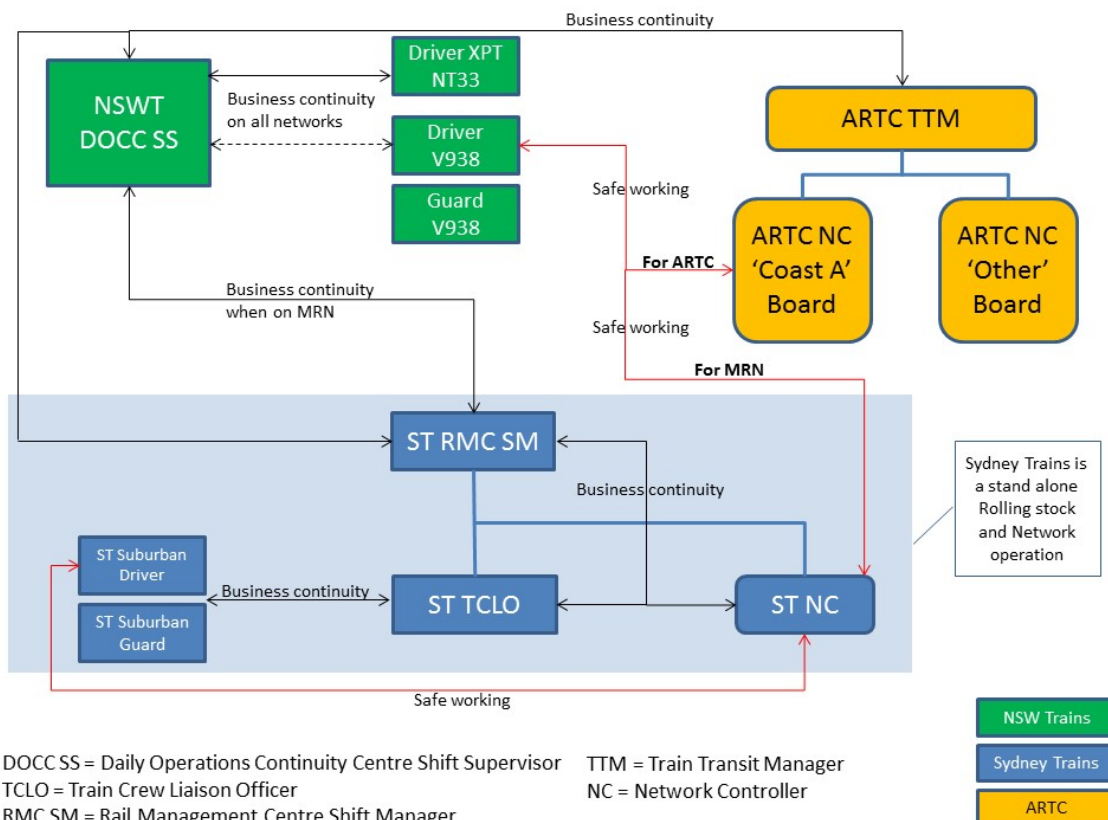
Purpose of communication

The communication pathways between the organisations and people involved is dependent on the purpose. Particular roles have responsibilities for managing service delivery and business continuity, while others have responsibility for managing operations and safe working.

The investigation found that all safe working communications should have occurred between the ARTC NC and the driver of V938. The only evidence of a conversation between the ARTC NC and driver of V938 was when the driver called to find out how long V938 would be delayed in the Kilbride Loop. The business continuity communication, arranging alternative transport, should have taken place between the DOCC SS and the guard of V938.

At interview, the driver and the guard of V938 said they assumed the RMC were arranging protection for passengers to detrain. They made this assumption because RMC’s communications gave them the perception that train protection was also being arranged. Despite these assumptions, the train crew of V938 remained responsible for critical safe working duties (ensuring adequate protection was in place) before detraining their passengers into the rail corridor (see Figure 6).

Figure 6: Communication between relevant parties



Source: ATSB

Priorities when detrainning passengers

OSP 11 also highlights a number of safety factors that a train crew should consider when detrainning passengers. Listing these safety factors in a procedure can be useful if the train crew have the procedure with them and they are trained to act in a manner that ensures the procedure is strictly adhered to. TWP 100 – Responsibilities of Train Crews stipulates drivers must carry OSP 11, amongst other OSP's. On the day of the incident, the train crew drew upon their experience and training to manage the detrainment, they did not refer to a copy of OSP 11 which they should have had with them for reference.

In situations where detrainment is deemed necessary, priority should be given to moving the train to a station platform. There was a train platform at Hilldale approximately 2.9 km north of Kilbride that would have enabled the passengers to safely alight and wait for either another train or transfer from the platform to a bus.

This option was considered by the guard of V938 as evidenced in the record of phone conversation between the guard and the TCLO. The option was discounted by the guard and TCLO due to the remoteness of Hilldale station and potential difficulties for the bus driver locating the station. The station was also in the opposite direction to V938's intended journey to Newcastle.

Had the guard and TCLO agreed to moving the train to Hilldale for detrainment, the process of obtaining a path would have involved communication with the ARTC NC, who would then be aware of V938's intentions. Importantly, choosing to detrain at a designated station removes the safety risks associated with walking in the rail corridor. Any procedure for detrainment should preference alighting passengers at designated station platforms. The decision to detrain when not at a platform should only be considered once all other options have been exhausted or no other option exists, such as in the case of a disabled or stranded train.

Findings

At 1137, NSW Trains XPT passenger service NT33 departed Paterson towards Kilbride when the driver observed five people walking on the track ahead. The driver immediately made an emergency brake application while continuously sounding the horn and brought the train to a stand approximately 80 m from the people. There were no injuries or damage.

From the evidence available, the following findings are made with respect to the incident. These findings should not be read as apportioning blame or liability to any particular organisation or individual.

Safety issues, or system problems, are highlighted in bold to emphasise their importance.

A safety issue is an event or condition that increases safety risk and (a) can reasonably be regarded as having the potential to adversely affect the safety of future operations, and (b) is a characteristic of an organisation or a system, rather than a characteristic of a specific individual, or characteristic of an operating environment at a specific point in time.

Contributing factors

- **The crew of V938 detrained passengers onto the track near Kilbride without having arranged the required train protection with the ARTC Network Controller in accordance with the ARTC Network rules and procedures.**
- **Key operational staff in Sydney Trains and NSW Trains continued to operate under RailCorp legacy systems, even though documented transitional arrangements had re-established lines of responsibility and authority.**
- **The purpose of communication between key operational people was not always clearly stated nor understood leading to misunderstandings between people.**

Other factors that increased risk

- **Rules and procedures for detrainment do not consider the priority option of moving the train to a station or platform.**

Safety issues and actions

The safety issues identified during this investigation are listed in the Findings and Safety issues and actions sections of this report. The Australian Transport Safety Bureau (ATSB) expects that all safety issues identified by the investigation should be addressed by the relevant organisation(s). In addressing those issues, the ATSB prefers to encourage relevant organisation(s) to proactively initiate safety action, rather than to issue formal safety recommendations or safety advisory notices.

All of the directly involved parties were provided with a draft report and invited to provide submissions. As part of that process, each organisation was asked to communicate what safety actions, if any, they had carried out or were planning to carry out in relation to each safety issue relevant to their organisation.

The initial public version of these safety issues and actions are repeated separately on the ATSB website to facilitate monitoring by interested parties. Where relevant the safety issues and actions will be updated on the ATSB website as information comes to hand.

Train protection

Number:	RO-2014-009-SI-01
Issue owner:	NSW Trains
Operation affected:	Rail: Passenger
Who it affects:	All rail operations

Safety issue description:

The crew of V938 detrained passengers onto the track near Kilbride without having arranged the required train protection with the ARTC Network Controller in accordance with the ARTC Network rules and procedures.

Proactive safety action taken by NSW Trains:

Action number: RO-2014-009-NSA-043

NSW Trains developed the following recommendations to address this safety issue:

- Review the risk of “Person in path of rail vehicle” and define associated controls in the Safety Risk Register.
- Develop and implement a procedure for the DOCC to remind Train Crew of the imperative to obtain authority from the relevant Network Controller and ensure protection is put in place whenever access to the track may be required.
- Request all Network Controllers where NSW operate (SYDT, ARTC, John Holland Rail, QR) to implement a procedure where operators are reminded to obtain correct authority from Network Control and ensure protection is put in place whenever track access may be required.

Their flow chart for detrainment, OSP11 and OSP12 have been updated and communicated to reflect these.

Current status of safety issue:

Issue Status: Adequately addressed

Justification: The review of the risk with consideration of the organisations risk profile is considered positive. The subsequent/additional controls serve to reinforce the requirements of the crew to ensure required train protection is in place.

Management of change

Number:	RO-2014-009-SI-02
Issue owner:	NSW Trains; Sydney Trains
Operation affected:	Rail: Passenger
Who it affects:	All rail operations

Safety issue description:

Key operational staff in NSW Trains and Sydney Trains continued to operate under RailCorp legacy systems, even though documented transitional arrangements had re-established lines of responsibility and authority.

Proactive safety action taken by NSW Trains:

Action number: RO-2014-009-NSA-042

NSW Trains commissioned a review of the current operational interfaces between NSW Trains and the respective Network Controls to identify any areas of concern. Then to develop and action an appropriate plan to address concerns raised.

Proactive safety action taken by Sydney trains:

Action number: RO-2014-009-NSA-046

Sydney Trains undertook a Level 5 investigation into issues around the incident. As a result of this safety investigation a series of recommendations were made to address a number of issues. Recommendation 2, "Develop a specific brief for TCLO roles and responsibilities", has been completed.

Current status of safety issue:

Issue status: Adequately addressed

Justification: The review of operational interfaces by NSW Trains is considered appropriate. While the action plan from the review has not been reviewed by ATSB, there is confidence the organisations' action management system.

The action to brief Sydney Trains' key operational staff of their roles and responsibilities is considered appropriate.

Unclear purpose of communication

Number:	RO-2014-009-SI-03
Issue owner:	NSW Trains; Sydney Trains
Operation affected:	Rail: Passenger
Who it affects:	All rail operations

Safety issue description:

The purpose of communication between key operational people was not always clearly stated nor understood leading to misunderstandings between people.

Proactive safety action taken by NSW Trains:

Action number: RO-2014-009-NSA-045

NSW Trains investigation made the following recommendations to address this safety issue;

- Brief all NSW Train Crew on correct communication procedures, particularly around dealings with Network Control across all networks.
- Provide NSW Train input into training content to make it consistent with NSW Train procedures for communicating with Network Control and the operational environment of NSW Train.

Proactive safety action taken by Sydney Trains:

Action number: RO-2014-009-NSA-047

Sydney Trains conducted a Level 5 investigation into the incident. Recommendation 1 from the investigation was the “Immediate briefing of all staff (within RMC) in relation to effective communication”. This has been completed.

Current status of safety issue:

Issue status: Adequately addressed

Justification: Reinforcing correct and effective communication procedures is an appropriate action.

Processes for evacuating trains

Number:	RO-2014-009-SI-04
Issue owner:	NSW Trains; Sydney Trains
Operation affected:	Rail: Passenger
Who it affects:	All rail operations

Safety issue description:

Rules and procedures for detrainment do not consider a priority option of moving the train to a station or platform.

Proactive safety action taken by NSW Trains:

Action number: RO-2014-009-NSA-044

NSW Trains has a flow chart “Decision for customer detrainment” that was being updated to instruct moving the train to a platform when available.

Proactive safety action taken by Sydney Trains:

Action number: RO-2014-009-NSA-048

Sydney Trains has reviewed and updated its Standard Operating Instruction – Decision for Customer Detrainment (issue date 02/06/16), to include instruction to move a train to a platform.

Current status of safety issue:

Issue status: Adequately addressed

Justification: Updating flow charts and standard operating instructions to include an instruction to move a train to a platform when detrainment is required addresses this safety issue.

General details

Occurrence details

Date and time:	22 May 2014 – 1137 EST	
Occurrence category:	Near miss collision	
Primary occurrence type:	Near miss collision with people on track	
Location:	Kilbride, New South wales	
	Latitude: 32° 31.699' S	Longitude: 151° 37.608' E

NSW Trains Hunter passenger service V938

Train operator:	NSW Trains	
Registration:	V938	
Type of operation:	Rail: Passenger - Regional	
Persons on board:	Crew – 2	Passengers – 6
Injuries:	Crew – 0	Passengers – 0
Damage:	None	

NSW Trains XPT passenger service NT33

Train operator:	NSW Trains	
Registration:	NT33	
Type of operation:	Rail: Passenger - Regional	
Persons on board:	Crew – 6	Passengers – Unknown
Injuries:	Crew – 0	Passengers – 0
Damage:	None	

Pacific National freight service SF630

Train operator:	Pacific National	
Registration:	SF630	
Type of operation:	Freight – General	
Persons on board:	Crew – 2	Passengers – Nil
Injuries:	Crew – 0	Passengers – 0
Damage:	None	

Sources and submissions

Sources of information

The sources of information during the investigation included:

Bureau of Meteorology (BOM)
NSW Trains (NT)
NSW Trains Daily Operations Continuity Centre (DOCC)
NSW Trains driver of NT33
NSW Trains driver of V938
NSW Trains Passenger Services Supervisor of NT33
NSW Trains guard of V938
Office of the National Rail Safety Regulator (ONRSR)
Pacific National driver of SF630
Rail Industry Safety and Standards Board (RISSB)
Sydney Trains (ST)
Sydney Trains Rail Management Centre Shift Manager (RMC SM)
Sydney Trains Train Crew Liaison Officer (ST TCLO)
Transport for NSW (TfNSW).

References

ARTC Train Operating Conditions (TOC) Manual – August 2004
ARTC voice transcripts
NSW Trains NT33 Hasler speed tape
NSW Trains V938 Data logger recording
NSW Trains Daily Operations Continuity Centre Shift Supervisor (DOCC SS) voice logs
Operational Interface Protocols Sydney Trains and NSW Trains version 1.0, issue date 1 July 2013
Pacific National SF630 data recording
Rail Industry Safety and Standards Board (RISSB, Dec 2010). *National Guideline Glossary of Rail Terminology*
Rail Safety National Law (NSW) (2012 No 82a)
Rail Safety National Law National Regulations (2012)
RailCorp 2011 standard operating instruction 'Decision for Customer Detrainment'
RailCorp Engineering Standard – *NSW Signalling SGS 01 Infrastructure Engineering Manual – Glossary of Signalling Terms*
RailCorp Operator Specific Procedure OSP 11 *Train evacuation and detrainment passengers when not at stations* – May 2012
RailCorp Procedure TWP 168 *Securing a train on the network* – July 2014

Sydney Trains General Rule NGE 200 *Walking in the Danger Zone* – July 2014

Sydney Trains Train Crew Liaison Officer (ST TCLO) voice logs

Sydney Trains Rail Management Centre Shift Supervisor (RMC SM) voice logs

TfNSW Services Contract Sydney Trains and NSW Trains Final – 7 June 2013.

Submissions

Under Part 4, Division 2 (Investigation Reports), Section 26 of the *Transport Safety Investigation Act 2003* (the Act), the Australian Transport Safety Bureau (ATSB) may provide a draft report, on a confidential basis, to any person whom the ATSB considers appropriate. Section 26 (1) (a) of the Act allows a person receiving a draft report to make submissions to the ATSB about the draft report.

A draft of this report was provided to:

NSW Trains (NT)

NSW Trains Daily Operations Continuity Centre (NT DOCC)

NSW Trains driver of NT33

NSW Trains driver of V938

NSW Trains Passenger Services Supervisor of NT33

NSW Trains guard of V938

Office of the National Rail Safety Regulator (ONRSR)

Pacific National driver of SF630

Australian Rail Track Corporation (ARTC)

Sydney Trains (ST)

Sydney Trains Rail Management Centre Shift Supervisor (RMC SM)

Sydney Trains Train Crew Liaison Officer (ST TCLO)

Transport for NSW (TfNSW).

Any submissions from those parties will be reviewed and where considered appropriate, the text of the draft report will be amended accordingly.

Australian Transport Safety Bureau

The Australian Transport Safety Bureau (ATSB) is an independent Commonwealth Government statutory agency. The ATSB is governed by a Commission and is entirely separate from transport regulators, policy makers and service providers. The ATSB's function is to improve safety and public confidence in the aviation, marine and rail modes of transport through excellence in independent investigation of transport accidents and other safety occurrences; safety data recording, analysis and research; fostering safety awareness, knowledge and action.

The ATSB is responsible for investigating accidents and other transport safety matters involving civil aviation, marine and rail operations in Australia that fall within Commonwealth jurisdiction, as well as participating in overseas investigations involving Australian registered aircraft and ships. A primary concern is the safety of commercial transport, with particular regard to fare-paying passenger operations.

The ATSB performs its functions in accordance with the provisions of the *Transport Safety Investigation Act 2003* and Regulations and, where applicable, relevant international agreements.

Purpose of safety investigations

The object of a safety investigation is to identify and reduce safety-related risk. ATSB investigations determine and communicate the factors related to the transport safety matter being investigated.

It is not a function of the ATSB to apportion blame or determine liability. At the same time, an investigation report must include factual material of sufficient weight to support the analysis and findings. At all times the ATSB endeavours to balance the use of material that could imply adverse comment with the need to properly explain what happened, and why, in a fair and unbiased manner.

Developing safety action

Central to the ATSB's investigation of transport safety matters is the early identification of safety issues in the transport environment. The ATSB prefers to encourage the relevant organisation(s) to initiate proactive safety action that addresses safety issues. Nevertheless, the ATSB may use its power 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 undertaken by the relevant organisation.

When safety recommendations are issued, they focus on clearly describing the safety issue of concern, rather than providing instructions or opinions on a preferred method of corrective action. As with equivalent overseas organisations, the ATSB has no power to enforce the implementation of its recommendations. It is a matter for the body to which an ATSB recommendation is directed to assess the costs and benefits of any particular means of addressing a safety issue.

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 safety advisory notices suggesting that an organisation or an industry sector consider a safety issue and take action where it believes it appropriate. There is no requirement for a formal response to an advisory notice, although the ATSB will publish any response it receives.

Australian Transport Safety Bureau

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Investigation

ATSB Transport Safety Report Rail Occurrence Investigation

Near hit with derailed passengers on track
Kilbride, New South Wales, 22 May 2014

RO-2014-009

Final – 17 January 2018