



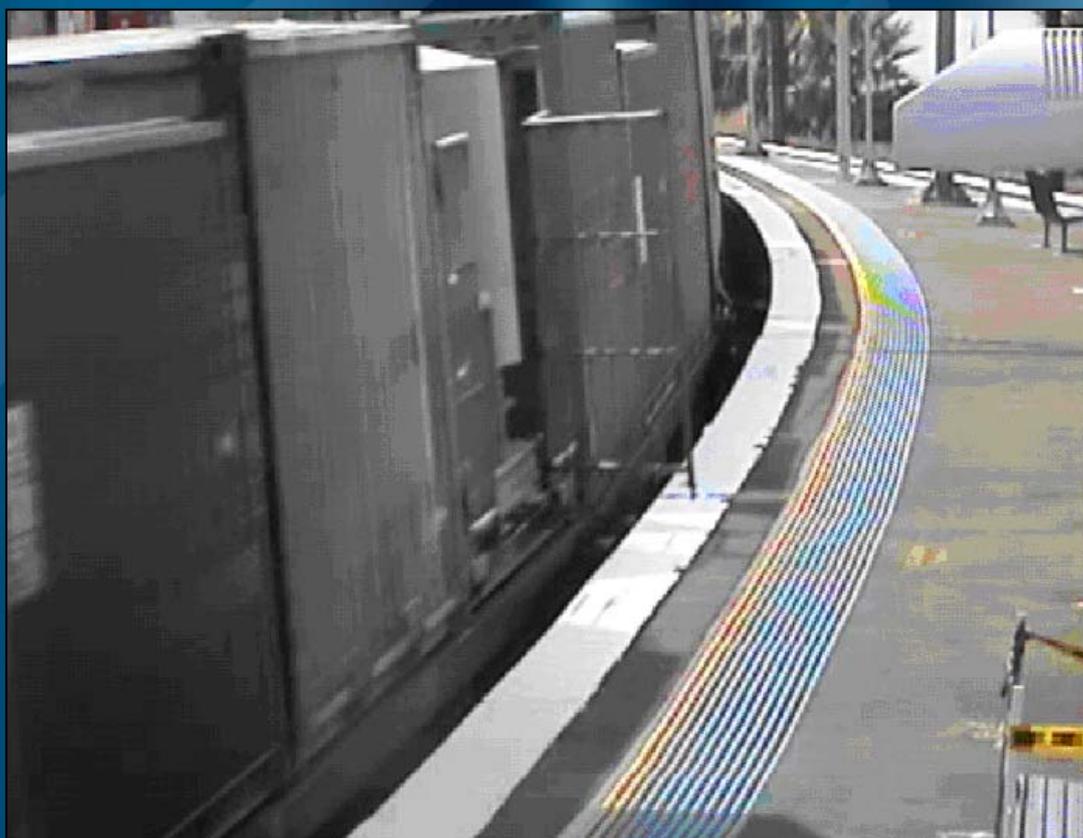
Office of Transport Safety Investigations

RAIL SAFETY INVESTIGATION REPORT

UNSECURED CONTAINER GATE STRIKES STATION INFRASTRUCTURE

WOY WOY

11 APRIL 2010



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ACRONYMS AND ABBREVIATIONS

ARTC	Australian Rail Track Corporation
CSC	Customer Service Centre
DIP	Directly Involved Party
FLM	Pacific National Freight Loading Manual
ITSR	Independent Transport Safety Regulator
LPC	Locomotive Provisioning Centre
MFT	Melbourne Freight Terminal
OTSI	Office of Transport Safety Investigations
PN	Pacific National Pty Ltd
SDC	Southern Distribution Centre
TMS	Train Management System

GLOSSARY OF TERMS

Consist	Listed order of the vehicles arranged to make up a complete train.
Down and Up direction	<p>Trains travelling away from Sydney are referred to as Down trains. Movements in this direction are referred to as being in the Down direction. Trains travelling in the down direction are odd numbered.</p> <p>Trains travelling towards Sydney are referred to as Up trains. Movements in this direction are referred to as being in the Up direction. Trains travelling in the up direction are even numbered.</p>
Flat rack	A collapsible container consisting of a flat steel container base with removable caged sides and hinged flat steel walls at both ends that can fold down onto the base for transportation. Designed to transport odd shaped cargo.
Foul	In a position to obstruct rail traffic on an adjacent line.
Left side	The left side of the train when facing in the direction of travel.
Network Controller	A qualified worker who monitors and controls train movements from a Control Centre.
Out of gauge	The load exceeds height and/or width restrictions imposed for a particular section of track.
Qualified Worker	A worker certified as competent to carry out the relevant task.
Right side	The right side of the train when facing in the direction of travel.
Roll-by inspection	A visual inspection of a moving train to identify consist load security, train integrity and equipment defects or failures.
Train Examiner	A Qualified Rail worker who inspects the loading and systems on a consist before the train departs.
Transiflat	See flat rack

EXECUTIVE SUMMARY

At approximately 11:45am on 11 April 2010, Pacific National freight service 7MB4 was travelling through Woy Woy Station when an unsecured gate on container BSCF 215 became detached after hitting the fencing at the Sydney end of Platform 1 and then striking another fence on the end of Platform 2. The gate skidded across the platform for approximately 20 metres before smashing a seating bay glass windbreak panel and coming to rest on the platform. The dislodged gate narrowly missed striking members of the public waiting on the platform but, despite a number of people being showered with broken glass, only one person suffered minor injuries.

The investigation found that the second gate (of four) on the right side of container BSCF 215 detached from the collapsible container (known as a flat rack or transiflat) as it struck the platform fencing because its locking pins had dislodged from their retaining lugs and it was not adequately restrained from swinging laterally out of gauge.

Two transport agencies were involved in transporting the container from where it was loaded to the Melbourne Freight Terminal where it was transferred onto a railway wagon. At no stage was it identified that the side gates of the container were not secured in accordance with the performance standards recommended in the National Transport Commission's *Load Restraint Guide – Second Edition 2004*.

Subsequently, a pre-departure train examination did not detect that the gates on the container were not secured in accordance with Pacific National's Freight Loading Manual. Checking on the integrity of the loading after departure relied on a series of roll-by inspections which have inherent limitations on their effectiveness. However, a swinging gate was detected and rectified as a result of one of the roll-by inspections en route but further roll-by inspections did not detect either the loss of two other gates or anomalies with the securing of the gates until after the incident.

Pacific National's own investigation into the incident identified the relevant hazards and proposed 16 wide-ranging safety actions to be taken to prevent the recurrence of similar incidents, and assigned responsibility and time frames for implementation.

It is recommended that Pacific National undertake a validation of the effectiveness of the implementation of its remedial safety actions. It is also recommended that the two road transport agencies involved, Toll Shipping and Reppers Transport Pty Ltd, institute measures to ensure loading of all freight complies with the performance standards contained in the *Load Restraint Guide - Second Edition 2004*.

PART 1 CIRCUMSTANCES OF THE INCIDENT

Train 7MB4

1.1 The marshalling of Pacific National's freight service 7MB4 to Brisbane from Melbourne was completed in the Melbourne Freight Terminal (MFT) on the morning of Saturday 10 April 2010. 7MB4 consisted of two NR Class locomotives and 29 loaded freight wagons. A flatbed wagon, RQSY34458U, was the ninth in the consist and was carrying transiflat container BSCF 215. It was this container that was to become the cause of the incident at Woy Woy Station the following day.

Container BSCF 215

1.2 Container BSCF 215 was manufactured in Launceston, Tasmania, by Doric Engineering, Welding and Steel Works in May 1989. It bears the model number 45A and the serial number 3085. Over one thousand of these containers have been manufactured and they are still in production. Initially they were designed for the shipping trade but have since been adapted for use in rail and road transportation. Since being manufactured, this particular container has been owned by four different transport companies and is currently owned by Toll Shipping.¹

1.3 The collapsible container, referred to as a flat rack or transiflat container, consists of a flat steel container base with removable caged sides and hinged flat steel walls at both ends. There is provision to have four steel gates on each side inserted into flanges attached to the container ends and base.

1.4 When empty, the container can be stored flat with the ends folded down onto the base and the gates removed and stored on the same base (see *Photograph 1*). This allows for up to eight empty containers to be stacked for movement by rail, sea or road.

¹ Toll Shipping is a business operated by Toll Transport Pty Ltd which is a member of the Toll Group.

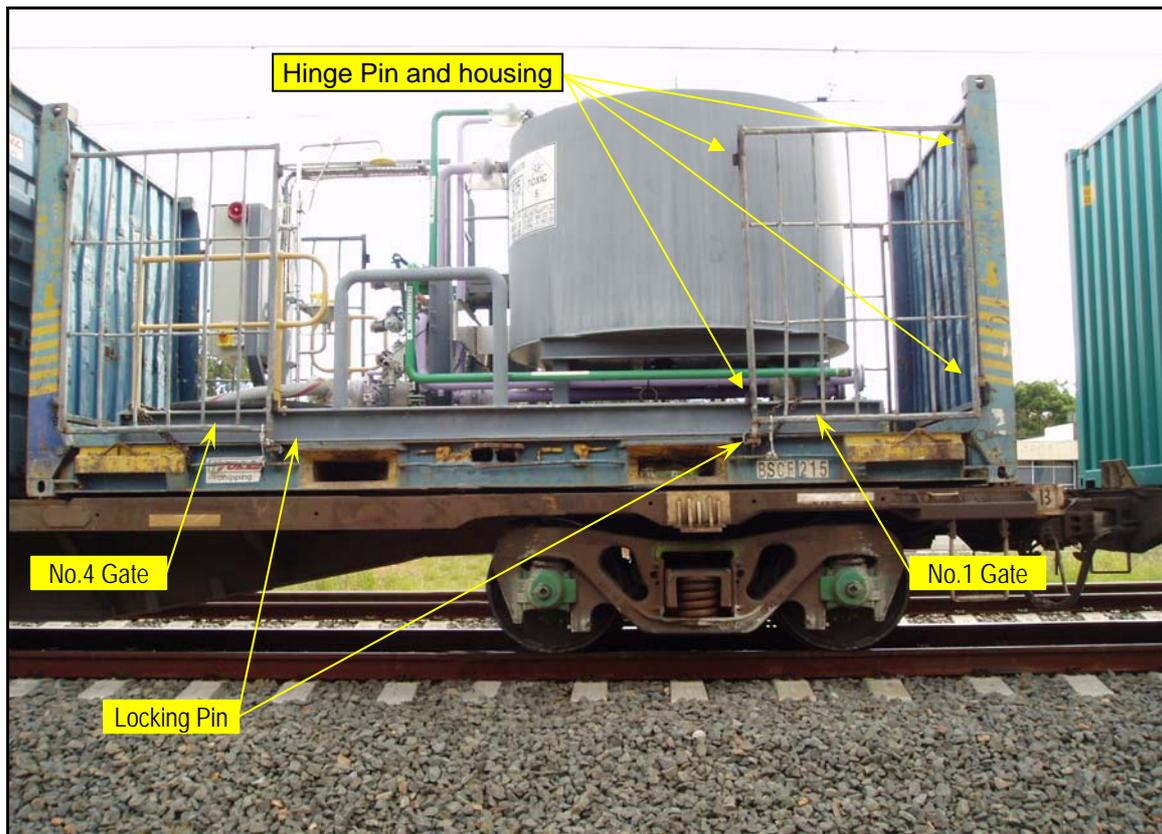


Photograph 1: Container BSCF 215 in folded configuration

- 1.5 This model of container is provided with spreader bars which fit across the top of the side gates and are secured to the container base with webbing straps. The spreader bars can support a tarpaulin covering the top and sides of the container and be secured to the base of the container. The combination of the webbing straps and tarpaulin tie-downs secure the gates against vertical movement.

Container Modifications

- 1.6 Initially, this particular model of container was produced with four side gates, two on either side. As the gates were too heavy for a single person to lift, the configuration was discontinued and replaced with eight gates, four on either side. All gates are fitted with two fixed hinge pins on one side and a locking pin at the base of the opposite side (see *Photograph 2*). The hinge pins fit into housings on the end walls in the case of the first and last ('end') gates on both sides, and into housings on the 'end' gates in the case of the 'internal' gates. All gates are secured from swinging by the locking pin which locates into a lug welded to the side of the container base. Spreader bars, webbing straps and tarpaulins are utilised in the same manner as for the original configuration.



Photograph 2: Right side of Container BSCF 215 (after the incident)

Container Repairs

1.7 Container BSCF 215 had undergone repairs in Burnie, Tasmania, by Stratton Engineering Pty Ltd in February 2010. The repairs involved work to:

- straighten and weld dented front wall;
- straighten and weld dented/broken locking bars;
- straighten and weld dented/broken side gates;
- straighten dented latches; and
- pack up and lubricate lashing points with grease.

The container was then shipped by Toll Shipping to its Melbourne depot, arriving with two other flat rack containers on 19 March 2010. (The full route of the container's journey is shown at *Figure 1*.)



Figure 1: Route of Container from Burnie to Woy Woy

Container Loading

- 1.8 After arriving in Melbourne, the empty container was road freighted to Reppers Transport Pty Ltd yard at Stawell, Victoria, to be used to transport an empty cyanide tank owned by Orica Chemical Manufacturers Pty Ltd to Gladstone, Queensland.
- 1.9 The cyanide tank had been used in the processing of gold and weighed about 4.5 tonnes. It was picked up from Ballarat, Victoria, on 17 March 2010 by Reppers Transport, a sub-contractor to Toll Resources, on a flat top truck and stored until the arrival of container BSCF 215 on 19 March 2010.
- 1.10 On 26 March 2010, Reppers Transport loaded the empty tank onto container BSCF 215 at their yard, securing it with chains to the container base. All eight side gates were placed in position utilising the hinge pins and the locking pins on the sides and base of the gates respectively. No additional chains or straps were used to prevent vertical movement of the gates despite regulations applicable to loads being carried in Victoria requiring that:

“the load must be placed and secured on the vehicle in a way that prevents or would be likely to prevent, the load or any part of the load from-

- (i) hanging or projecting from the vehicle; or*
- (ii) becoming dislodged or falling from the vehicle; ...”²*

Reppers assert that no straps or spreader bars had been supplied with the container when it was delivered by Toll Shipping.

1.11 On 29 March 2010, the loaded container was transported by Reppers Transport by road to Toll Shipping’s Melbourne depot. From there it was transported by Toll Shipping to the MFT, with no changes to the gate securing arrangements, arriving at 8:44am on 10 April 2010.

1.12 At 8:53am, the container was transferred by PN staff from the truck to wagon RQSY34458U in freight service consist 7MB4. Again, no changes were made to the gate securing arrangements, although PN’s *Freight Loading Manual* (FLM) details requirements relevant to transiflat and curtainsided containers, specifically that all gates must be secured in accordance with Section 2.3 *Gates and Associated Equipment*, Clause 2.3.10:

“For transiflats, where a gate does not have a centre bar fitted or the height of the loading is below the centre bar, two separate web straps are required, (one) minimum to supply lashing restraint to the loading and one to restrain the container’s side gate.”

Train Inspections

1.13 Freight trains are subjected to a number of physical inspections including arrival, departure and en route roll-by inspections while a train is in motion. Such inspections should identify major load shifts, obvious out of gauge loading, and open swinging doors and gates, but do not necessarily readily identify doors or gates that are not secured correctly (see *Appendix 1* for details of what is included in each of these inspections).

² Road Safety (Vehicles) Regulations 2009, Regulation 248 *Load restraint requirement*

- 1.14 Roll-by inspections serve “to identify consist load security, train integrity and equipment defects or failures”. However, roll-by inspections have their limitations in that they:
- are often conducted during darkness;
 - involve the train being inspected moving at speeds up to main line speed³;
 - cover only one side of the train in the case of en route inspections; and
 - are usually conducted by drivers and other staff who are not trained in the detailed requirements for securing loads.
- 1.15 Nevertheless, in accordance with standard procedure, after it was marshalled, freight service 7MB4 was inspected in the MFT by two qualified Train Examiners, both Melbourne-based employees of PN, between 12:00 noon and 1:00pm on 10 April 2010. When interviewed by PN they could not remember inspecting wagon RSQY34458U specifically, or the container. In fact, they could not recall a flat rack container in the consist at all.
- 1.16 Under the control of a Melbourne-based crew, freight service 7MB4 departed MFT at 6:47pm on 10 April 2010. As it departed, a roll-by inspection was conducted by a staff member of the Locomotive Provisioning Centre (LPC) and no problems were detected.
- 1.17 7MB4 underwent a number of roll-by inspections during its journey between the MFT and Woy Woy. One of those inspections was conducted by the crew of another train 6BM4, which had been diverted into a passing loop at Henty, and identified a loose gate on the left side of container BSCF 215. The Driver stopped the train at Yerong Creek and the Co-driver secured the loose gate with wire. The Co-driver found there were only two gates on that side and that a bolt on the bottom of the loose gate was missing. He didn't check the other (right) side of the container.

³ Track speed can be up to 115 km/h.

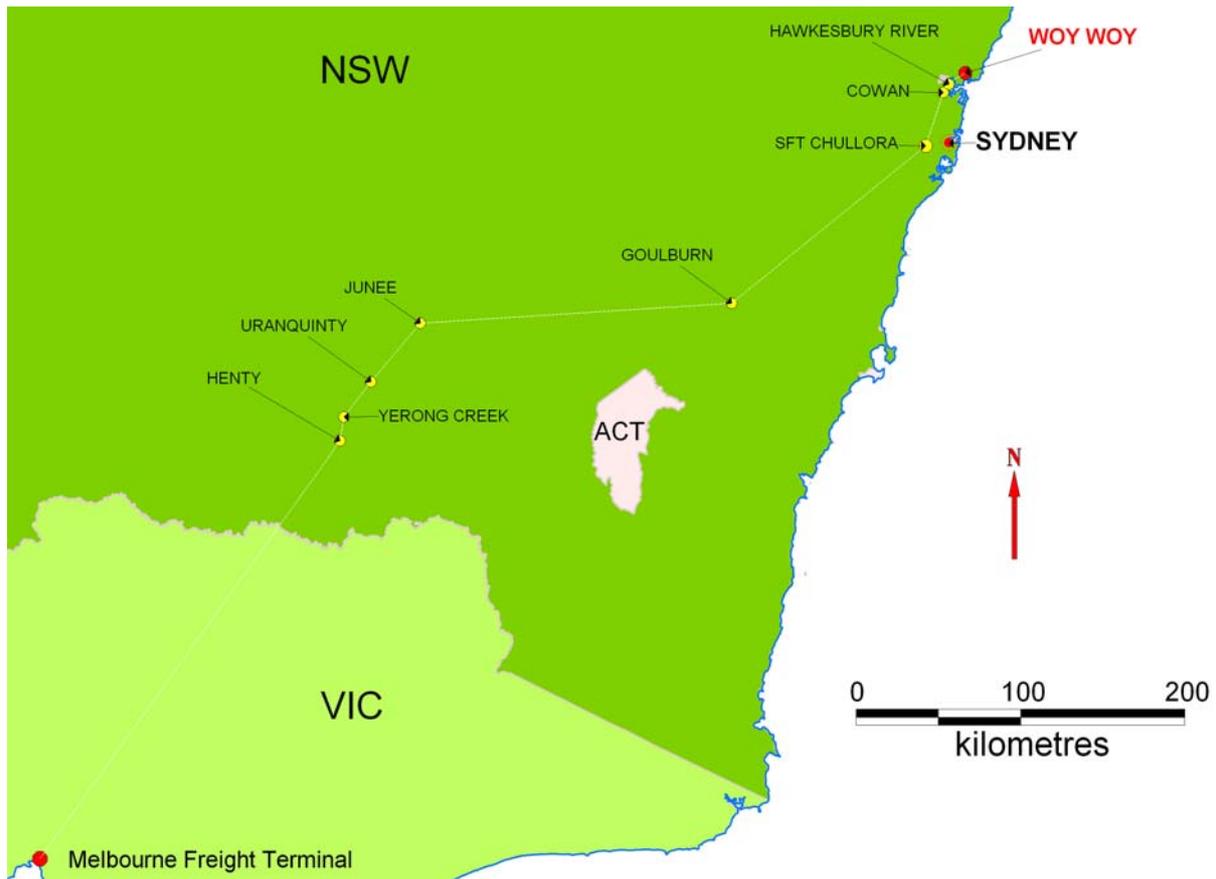


Figure 2: Route of 7MB4 showing inspection locations

1.18 Subsequently, roll-by inspections were conducted at the following locations but no abnormalities were detected:

- at Uranquinty by the crew of ST23 who checked the right side as they passed, travelling in the opposite direction;
- at Junee by the off-going crew of 7MB4 who only inspected the left side as a train was passing on the down line and there was no safe place to stand to conduct an inspection of the right side;
- at Goulburn;
- at Sydney Freight Terminal (Chullora) by the off-going crew who only inspected the right (terminal) side;
- at Cowan by the crew of 7BM4 passing on the up side, therefore only able to inspect the right side of 7MB4; and

- at Hawkesbury River by a group of track workers and the crew of a stationary Interurban passenger service who also inspected the right side.

1.19 Although these roll-by inspections did not identify any problems, CCTV footage from RailCorp cameras, subsequently examined by investigators, revealed the condition of the second gate on the right side of container BSCF 215:

- as the train passed through Bundanoon Station at 7:02am, the gate was swinging (and the third gate was missing);
- at 8:57am, the gate was swinging as the train passed through Casula Station;
- at Eastwood Station at 10:43am, the gate was open;
- at Cowan Station at 11:22am, all the remaining gates appeared to be closed; and
- at Hawkesbury River Station at 11:32am, the gate was again swinging open.



Figure 3: Aerial view of Woy Woy Station

The Incident

- 1.20 7MB4 departed Chullora with a new crew at 9:52am on Sunday 11 April 2010 and after travelling for about an hour and fifty minutes was approaching Woy Woy Station some 73 kilometres North of Sydney on the RailCorp Network. Woy Woy Station consists of two staggered platforms on a single centre island structure with electrified rail lines on either side (see *Figure 3*).
- 1.21 At approximately 11:45am, as 7MB4 was passing the platform structure, an open, unsecured gate on container BSCF215 struck the fence on the Sydney end of Platform 1 (see *Photograph 3*). The gate, still in the open position, then struck the fence on the end of Platform 2 and became dislodged from the two retaining pins attached to the supporting gate. After striking the fence, CCTV footage shows the gate become airborne, then landing on and skidding across the platform for approximately 20 metres before smashing into a seating bay glass windbreak partition between the two platforms (see *Photograph 4*).



Photograph 3: CCTV footage of swinging gate after first impact at Woy Woy



Photograph 4: Broken glass on seating bay windbreak

- 1.22 The Driver and Co-driver were unaware of the incident and continued on their journey. They were also not aware that the first gate on the right side was now swinging out of gauge as was revealed from CCTV footage from Woy Woy Station (see *Cover Photograph*).

After the Incident

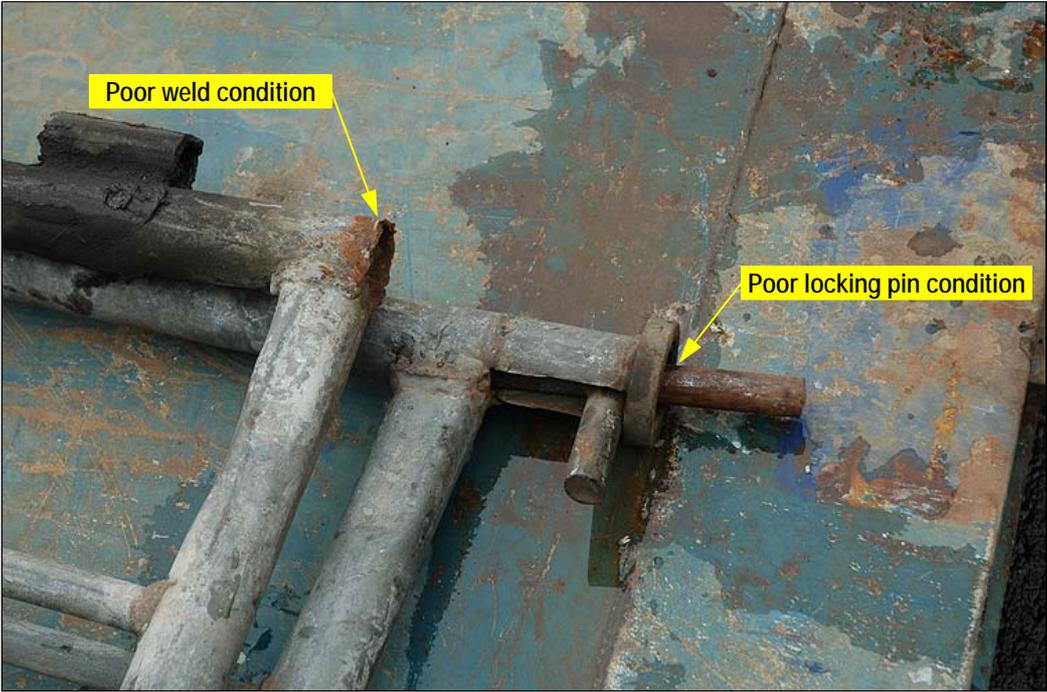
- 1.23 At 11:52am the Driver was directed to stop his train by RailCorp Network Control as a result of a report of the incident by the Woy Woy Station Master. The train was stopped just South of Gosford Station for examination by the Station Master who advised there was nothing amiss. The Driver was then instructed to proceed at reduced speed to Wyong where, on arrival at 12:50pm, 7MB4 was routed via the up main so it could be passed safely by other trains while the crew inspected the train.
- 1.24 Prior to entering Wyong Station the Co-driver observed an open gate on the right side that would have fouled the platform. It was the first gate on the

right side of the train on wagon RSQY34458U and was secured by the Co-driver. The train was then moved past the platform until clear of the points where it was brought to a stand to allow the crew to make a full inspection of both sides of the train. As a result of this inspection, the Co-driver secured the remaining gates of container BSCF 215 with wire and rope.

- 1.25 The train departed Wyong at 1:32pm with three gates missing from container BSCF 215. Subsequent inspections en route did not detect any further problems with the remaining gates and the container was delivered in Gladstone, Queensland, where the container and tank were offloaded and transported to Orica Chemical Manufacturers.

Examination of the Container

- 1.26 Arrangements were made for the container to be returned to Sydney for examination by OTSI and PN. It was dispatched on 22 April 2010 from Gladstone and arrived at Chullora on 24 April 2010. It was examined by OTSI Investigators on 28 April 2010 at PN's Freight Terminal at Chullora. The container was flat packed and contained five steel gates packed under the hinged end walls (see *Photograph 1*). The gate retrieved from Woy Woy Station had also been delivered to the Chullora yard but the other two gates remain missing.
- 1.27 The locking pin housings are welded to the bottom of the gates (see *Photograph 5*). Examination of the gates revealed evidence of a poor standard of welding and repairs having been made to most gates over time. The locking pin housing was missing from one gate and it is probable that this gate was the one with "*a bolt on the bottom ... missing*" secured by the Co-driver at Yerong Creek.
- 1.28 The locking pins did not fit snugly into the lugs on the sides of the container base and were not all the same length. In effect, they are simply drop pins (see *Photograph 6*). Without some type of additional restraint to hold the gates in place a bumpy ride could cause a locking pin to dislodge, thereby releasing a gate to swing laterally and otherwise unconstrained. This was the case for several gates as evidenced by the CCTV footage from stations en route.



Photograph 5: Weld and locking pin condition



Photograph 6: Locking pin not housed in base

Remedial Action

- 1.29 As an immediate response to the incident, PN issued *Terminal Safety Notice 10/04* to all freight terminals on 13 April 2010 alerting them to the incident and reinforcing the need to comply with procedures in relation to the securing of loads.
- 1.30 PN's own investigation into the incident⁴ identified hazards and proposed the following safety actions be taken to prevent recurrence of this sort of incident, as well as assigning responsibility and time frames for implementation:
- *“Training for MFT train examiners to up-skill them on load security for non-standard freight (ST0035).*
 - *Revamp the Freight Loading Manual into a more user friendly format by Asset Management and [sic] Engistics.*
 - *Notify all Drivers of the need for all transiflat gates to have web straps applied.*
 - *Notice to be sent out to customers of requirements of Freight Loading Manual for use of web straps on all transiflat units.*
 - *Review training packages for train examinations & freight security to ensure they adequately cover the content of the Freight Loading Manual to ensure that train examiners are suitably trained and also to set minimum training requirements for all train examiners.*
 - *Training rollout/refresher for train examiners as well as training required for all examiners to meet new minimum standards.*
 - *Training in load security to be undertaken for all shift managers.*
 - *Development of “key principles” of load restraint for the business that can be used as a guide/basic training for all employees.*
 - *Training for terminal operators in “key principles” to allow for earlier identification of potential load security issues.*
 - *Identify appropriate training for train crew, Depot Management, LPC employees, CSC employees & SDC personnel.*
 - *Roll out of Training for train crew, Depot Management, LPC employees, CSC employees & SDC personnel.*
 - *Establish observation program for load securing.*
 - *Investigate ceasing transport of any transiflat that does not have 4 web sling reels attached to the unit.*
 - *Rollout of simplified Freight Loading Manual and tools developed as part of Proposed Safety Action 2.*

⁴ Pacific National *Class 3 Incident Investigation Report* Report 004.14 – R04 dated 12 May 2010

- *Establish process to communicate to all Train Examiners and Shift Managers details of any load irregularities reported in TMS that originated from their site with local corrective actions to be identified.*
- *Put in place a system to communicate with customers on any load securing issue that arises.”*

1.31 PN has also improved accountability through modifications to the Train Inspection Certificate which is signed by both the Train Examiner and Train Driver to provide a final check that the requirements of the Freight Loading Manual (FLM) have been met and the relevant checks have been undertaken both above and below the wagon deck. In addition, members of the management team complete random safety observations and audits for compliance with the FLM.

PART 2 FINDINGS

Causation

- 2.1 The second gate on the right side of container BSCF 215 detached from the container as it struck platform fencing on Woy Woy Station because its locking pins had dislodged from their retaining lugs and it was not adequately restrained from swinging laterally out of gauge.

Contributing Factors

- 2.2 Between the time of loading of the container in Reppers Transport yard at Stawell on 26 March and departure of the train from Melbourne Freight Terminal (MFT) on 10 April, the loaded container passed through the hands of several road and rail freight agencies. At no stage was it identified that the side gates of the container were not secured in accordance with the requirements of the *Load Restraint Guide* and PN's *Freight Loading Manual*.
- 2.3 Following clearance by train examiners at MFT, checking on the integrity of the loading relied on a series of roll-by inspections which have inherent limitations on their effectiveness. However, as a result of one roll-by inspection at Henty, a swinging gate was detected and rectified at Yerong Creek. Subsequent roll-by inspections did not detect anomalies with the securing of the gates until after the incident.

PART 3 RECOMMENDATIONS

- 3.1 To prevent a recurrence of this type of rail incident, it is recommended that the following remedial safety actions be undertaken by the specified responsible entities.

Pacific National Pty Ltd

- 3.2 Undertake a validation of the effectiveness of the implementation of the proposed safety actions detailed in its *Class 3 Incident Investigation Report* into the incident.

Toll Shipping

- 3.3 Introduce pre-departure inspections of all road transport to ensure that the loading complies with the performance standards recommended in the *Load Restraint Guide - Second Edition 2004* as is required by Victorian legislation.
- 3.4 Require any load delivered by another agency that requires onforwarding not be accepted unless it complies with the performance standards contained in the *Load Restraint Guide - Second Edition 2004*.

Reppers Transport Pty Ltd

- 3.5 Institute measures to ensure that the loading of all freight complies with the performance standards contained in the *Load Restraint Guide - Second Edition 200*.

PART 4 APPENDICES

Appendix 1: Roll-By Inspections

The following are extracts from Pacific National's Operations Manual:

“Arrival Roll-By Inspections

Arrival Roll-By Inspections are normally conducted at low speed (10 km/h or less) in order to identify mechanical defects that are observable when the train is in motion.

As the train passes, the person conducting the Roll-by inspection:

- Receives any message from the Driver regarding the condition of the train;*
- Checks that all equipment is secure on the wagons of the train;*
- Notes any irregular smell, smoke or noise that may indicate a “hot” axle box or sticking brakes;*
- Visually examines the bearings for heat discoloration, signs of grease leakage from seals, incorrectly aligned or missing parts;*
- Listens for audible air leaks or wheel flat spots;*
- Checks that there is no dragging or loose equipment or loading and that all doors are closed and secure;*
- Notes any brake blocks that may require attention;*
- Notes any other observable defects;*
- After the train has stopped, the person who conducted the arrival roll-by inspection walks to the head end on the opposite side checking relevant items from the list above and noting for later attention any slack adjuster travel and/or brake piston travel that are outside allowable tolerances;*
- Where applicable, pass details of any observations made to the Train Examiner conducting the Full Mechanical Inspection on the train.*

Departure Roll-By Inspections

Departure roll-by inspections should be conducted in yards or terminals and at other suitable sites to confirm the absence of obvious rolling mechanical defects on the train and to check the general security of the loading, overall train integrity and the correct operation of the end of train marker.

Wherever practicable, a suitably Qualified Worker should conduct a Departure Roll-by inspection on any trains departing a terminal, marshalling yard or similar location. As the train passes at speeds not exceeding 10 km/h, the person conducting the Departure Roll-by inspection shall;

- *Check that all loading and equipment is secure on all wagons in consist;*
- *Listens for audible air leaks and wheel flat spots;*
- *Take note of any sounds that may indicate sticking brakes or unreleased handbrakes;*
- *Visually examine the bearings for heat discolouration, signs of grease leakage from seals, incorrectly aligned or missing parts;*
- *Ensure that there is no dragging or loose equipment or loading and that all doors are closed and secure;*
- *Take note of any abnormal sounds or observable defects;*
- *Visually check that the end of train marker is fitted and operational;*
- *Pass a message to the locomotive train crew advising the status of their train.*

En-route Roll-By Inspections

En-route roll-by inspections are normally conducted whilst trains are in-transit and at opportune locations to confirm the general security of loading, overall train integrity and correct operation of the end of train marker. Passing roll-bys can be conducted at train speed up to mainline speed and are normally concluded by passing a confirmation message to the crew of the train that has been inspected.

Whenever practicable, any suitably Qualified Worker/s should conduct an En-route Roll-by inspection on any train passing their location. These inspections

are usually conducted at crossing loops, sidings, signal boxes etc by train crews or other rail authority / track owner employees. Generally En-route Roll-by inspections are conducted at mainline speeds and, as such, are usually only able to detect gross train or loading defects. These inspections are important however, as they provide a means of confirming overall train condition and integrity and condition to train crews.

When admitting trains to crossing locations, an En-route Roll-by Inspection of the train is to be performed by the Locomotive Driver/s, whenever it is safe and practical to do so. They should be conducted:

- When crossing or passing trains;
- After being train crew are relieved en-route or in a yard;
- At crew change and depot locations; and
- When arriving or departing trains into or from any yard where no Qualified Worker/s are present.

As the train passes, the person conducting the En-route Roll-by Inspection shall;

- Check that all loading and equipment is secure on the train;
- Where conditions permit, listens for audible air leaks and wheel flat spots;
- Take note of any sounds that may indicate sticking brakes or unreleased handbrakes;
- Take note of any sight, sound or smell that may indicate a hot bearing;
- Take note of any other abnormal sounds or observable defects;
- Ensure that there is no dragging or loose equipment or loading and that all doors are closed and secure;
- Visually check that the end of train marker is fitted and operational;
- Pass a message to the locomotive train crew (of the passing train) advising the status of their train.”

Appendix 2: Sources, Submissions and Acknowledgements

Sources of Information

- Doric Engineering, Welding and Steel Works
- Orica Chemicals Pty Ltd
- PN Interviews with Train Examiners
- PN Interviews with Train Crews
- RailCorp CCTV footage
- Reppers Road Transport Pty Ltd

References

- Glossary for the National Codes of Practice and Dictionary of Railway Terminology
- National Transport Commission *Load Restraint Guide – Second Edition 2004*
- PN Freight Loading Manual
- PN Operations Manual
- PN Train Inspection Manual
- *Passenger Transport Act 1990 (NSW)*
- *Rail Safety Act 2008 (NSW)*
- *Road Safety (Vehicles) Regulations 2009 (Vic)*

Submissions

The Chief investigator forwarded a copy of the Draft Report to the Directly Involved Parties (DIPs) to provide them with the opportunity to contribute to the compilation of the Final Report by verifying the factual information, scrutinising the analysis, findings and recommendations, and to submit recommendations for amendments to the Draft Report that they believed would enhance the accuracy, logic, integrity and resilience of the Investigation Report. The following DIPs were invited to make submissions on the Draft Report:

- Independent Transport Safety Regulator
- Pacific National Pty Ltd
- Reppers Road Transport Pty Ltd
- Toll Shipping

The following agencies were also offered the opportunity to comment on the Draft Report:

- Public Transport Safety Victoria
- RailCorp

Written responses were received from the following parties:

- Independent Transport Safety Regulator
- Pacific National Pty Ltd
- RailCorp
- Toll Shipping

The Chief Investigator considered all representations made by DIPs and responded to the author of each of the submissions advising which of their recommended amendments would be incorporated in the Final Report, and those that would not. Where any recommended amendment was excluded, the reasons for doing so were explained.

Acknowledgements

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