Australian Government

Australian Transport Safety Bureau

Proceed Authority exceeded by train 9337N

Junee, NSW | 20 August 2013

Investigation

ATSB Transport Safety Report

Rail Occurrence Investigation

RO-2013-022

Final – 19 December 2013

Released in accordance with section 25 of the *Transport Safety Investigation Act 2003*

Publishing information

Published by: Australian Transport Safety Bureau
Postal address: PO Box 967, Civic Square ACT 2608
Office: 62 Northbourne Avenue Canberra, Australian Capital Territory 2601
Telephone: 1800 020 616, from overseas +61 2 6257 4150 (24 hours)
Accident and incident notification: 1800 011 034 (24 hours)
Facsimile: 02 6247 3117, from overseas +61 2 6247 3117
Email: atsbinfo@atsb.gov.au
Internet: www.atsb.gov.au

© Commonwealth of Australia 2013

Ownership of intellectual property rights in this publication
Unless otherwise noted, copyright (and any other intellectual property rights, if any) in this publication is owned by the Commonwealth of Australia.

Creative Commons licence
With the exception of the Coat of Arms, ATSB logo, and photos and graphics in which a third party holds copyright, this publication is licensed under a Creative Commons Attribution 3.0 Australia licence.

Creative Commons Attribution 3.0 Australia Licence is a standard form license agreement that allows you to copy, distribute, transmit and adapt this publication provided that you attribute the work.

The ATSB's preference is that you attribute this publication (and any material sourced from it) using the following wording: *Source:* Australian Transport Safety Bureau

Copyright in material obtained from other agencies, private individuals or organisations, belongs to those agencies, individuals or organisations. Where you want to use their material you will need to contact them directly.

Addendum

Page	Change	Date

What happened

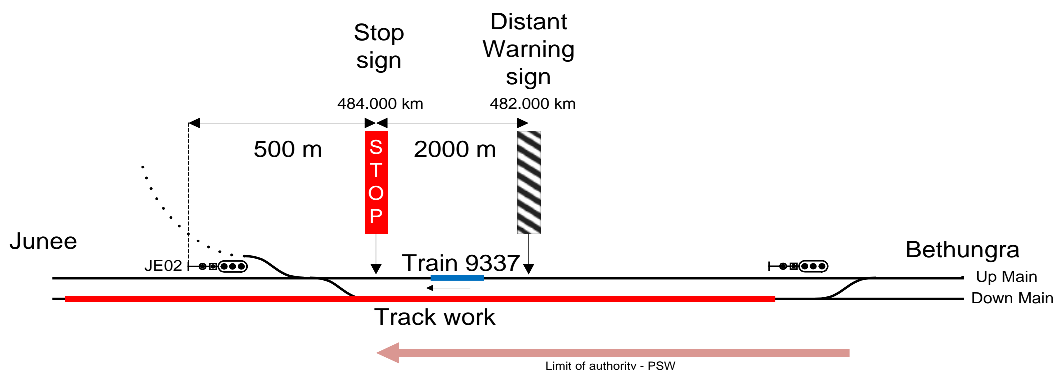
At 0346 on 20 August 2013, Pacific National train 9337N left Moss Vale bound for Narrandera, NSW. Narrandera is located on the Griffith branch line that joins the Defined Interstate Rail Network at Junee[1] (Figure 1).The train consisted of two locomotives (8113 and 8109) hauling 15 empty wagons for a total length of 295.2 m and weight of 634.6 gross tonnes. Both locomotive drivers had over 10 years' experience in train driving, were medically fit and were assessed as competent at the time of the incident. The driver in the observer's position had 7 years route knowledge while the driver at the locomotive controls was familiarising himself with the route south of Cootamundra.

Figure 1: Location of Bethungra and Junee, NSW

Source: Geoscience Australia

There were several worksites on the Down Main line between Bethungra and Junee. Consequently, both up and down rail traffic were required to travel on the Up Main line. As the track was not signalled for bi-directional movements, pilot staff working[2] was in force between Bethungra and Junee. The limit of authority for rail traffic travelling under pilot staff working in the down direction was marked by a Stop sign placed at the 484.000 km point (just before Junee), with a Warning sign placed 2000 m in advance of the Stop sign (Figure 2). Train crews were advised of the implementation and details of pilot staff working via a SAFE Notice, in this case, SAFE Notice 2013 Number 2-1933.

Figure 2: Bethungra - Junee section under pilot staff working



Note: Only relevant details shown (Not to scale)

[1] Junee is located on the Sydney to Melbourne line, 485.67 track km from Central Station in Sydney (0 km).

[2] Pilot staff working is a method of special working that can be used to authorise rail traffic movements that are not permitted under the system of safeworking normally in operation. The rules pertaining to pilot staff working are documented in ARTC ANSY 516 – *Pilot Staff Working*.

At Cootamundra, the train crew received a Condition Affecting the Network (CAN) notice advising them that pilot staff working was in force between Bethungra and Junee. Train 9337N was to travel in the down direction on the Up Main line. At Bethungra, a Qualified Worker (acting as a signaller) diverted train 9337N from the Down Main line to the Up Main line. The train crew were given a Pilot Staff Notice and issued with a Pilot Staff ticket as authority to travel through to the Stop sign. The train departed Bethungra at 0926.

While travelling towards Junee, the train crew's attention was drawn towards the track works on the Down Main line. Consequently, the crew did not notice the distant Warning sign located at the 482.000 km point, 2000 m prior to the Stop sign. At about 0955, while approaching Junee at a speed of approximately 50 km/h, the train crew observed the Stop sign ahead and immediately placed the brake handle into the emergency position. The train passed over the 3 detonators placed at the Stop sign and came to a stand approximately 75 m past their limit of authority.

The Network Controller (located in Junee) was advised of the incident and the train crew relieved. Both drivers were tested at Cootamundra which proved negative for the presence of alcohol or drugs. They then returned to Moss Vale by car.

Distraction

Driver distraction can be defined as 'the diversion of attention away from activities critical for safe driving toward a competing activity (occurring) voluntarily or involuntarily'[3]. In this case, the train crew described how they had been distracted by the track works on the Down Main line between the 479.500 km and 483.500 km points. As a result, they did not see the Warning sign. It is likely that had they noticed the Warning sign they would have taken appropriate action to stop train 9337N at or prior to the Stop sign.

Safety action

Whether or not the ATSB identifies safety issues in the course of an investigation, relevant organisations may proactively initiate safety action in order to reduce their safety risk. The ATSB has been advised of the following proactive safety action in response to this occurrence.

Pacific National

As a result of this occurrence Pacific National has advised the ATSB that they are taking the following safety actions:

- Shift managers facilitated SPAD[4] briefing presentations, re-issued the SAFE Notice applicable to the works between Bethungra and Junee, and held targeted safety briefings for crews working between Cootamundra and Junee.
- The Cootamundra depot personnel were briefed by the regional manager on the circumstances surrounding the incident.

Safety message

The ATSB SafetyWatch highlights the broad safety concerns that come out of our investigation findings and from the occurrence data reported to us by industry. One of the safety concerns is safe work on rail (http://www.atsb.gov.au/safetywatch/safe-work-on-rail.aspx).

This occurrence demonstrates the importance of train crews remaining vigilant while carrying out the driving task, especially where a method of special working has been implemented due to track work.

---

[3] Regan,A., Hallett,C. & Gordon, C. Driver Distraction and driver inattention: Definition, relationship and taxonomy

[4] Signal Passed at Danger

General details

Occurrence details

Date and time:	20 August 2013 0954 EST	
Occurrence category:	Incident	
Primary occurrence type:	Proceed Authority exceedance	
Location:	Junee, New South Wales	
	Latitude: 34° 51.595’ S	Longitude: 147° 35.167’ E

Train details

Train operator:	Pacific National Pty Ltd	
Registration:	9337N	
Type of operation:	Intrastate bulk	
Persons on board:	Crew – 2	Passengers – 0
Injuries:	Crew – 0	Passengers – 0
Damage:	None	

About the ATSB

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; and 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.

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

About this report

Decisions regarding whether to conduct an investigation, and the scope of an investigation, are based on many factors, including the level of safety benefit likely to be obtained from an investigation. For this occurrence, a limited-scope, fact-gathering investigation was conducted in order to produce a short summary report, and allow for greater industry awareness of potential safety issues and possible safety actions.

Australian Transport Safety Bureau

24 Hours 1800 020 616
Web www.atsb.gov.au
Twitter @ATSBinfo
Email atsbinfo@atsb.gov.au

Investigation

ATSB Transport Safety Report
Rail Occurrence Investigation
Proceed Authority exceeded by train 9337N
Junee, NSW, 20 August 2013

RO-2013-022
Final – 19 December 2013