

RAIB Bulletin 06/2009

Runaway small infrastructure hand trolley

Description of the incident and findings of the RAIB

1 On 9 March 2009 a small infrastructure hand trolley ran away from within a possession on the main line. It ran down a 1:60 gradient for approximately 150 m and travelled a further 450 m before entering a train yard. It then came to rest against a stabled train. Neither the trolley nor the train was damaged and no one was injured.



Figure 1 – Infrastructure hand trolley

- 2 The trolley consists of a platform mounted on a set of wheels (Figure 1). It is provided with a nominally fail safe brake system that, when working correctly, requires a lever to be held to release the brake. There are no company operating instructions or other documentation describing the operation or maintenance requirements for the trolley. The duty holder concerned owns and operates 10 similar trolleys.
- 3 The brakes were found not to have been working on the incident trolley. Investigation revealed that no organisation or individual had been allocated responsibility for maintaining the trolley, and there was no evidence that they had been either maintained or inspected.
- 4 The RAIB has examined two issues relating to the incident: why the trolley was not maintained; and whether there were any controls preventing a trolley with failed brakes being introduced onto the infrastructure.

- 5 The trolley was not maintained because the trolleys were regarded by the duty holder's organisation as hand operated tools and the duty holder's Safety Management System (SMS) did not specifically mandate maintenance of hand operated tools, although it explicitly addressed maintenance arrangements for passenger traction and rolling stock and self propelled on-track plant. Furthermore, the SMS requirements for risk assessments were task based and were interpreted as not applying to the use of hand operated tools and, as such, no risk assessment had been carried out on the use of the hand trolleys, either in this specific application or generically.
- 6 There were no identified management arrangements to prevent a hand trolley with failed brakes being introduced onto the infrastructure. Although the relevant Rule Book describes the arrangements for providing protection on any line under possession before a trolley is placed on the line, it does not require any checks on the functionality or integrity of the trolley, or the presence of any documentation to specify or record such checks, before the trolley is allowed to operate on the track.

Actions taken by the duty holder following the incident

- 7 The duty holder now recognises that its SMS did not provide for the management of safe operation of hand tools that can be used on the infrastructure, either at the maintenance stage, or on site, and that there are weaknesses in the current application of its SMS at the operational level, in particular the assessment of safety risks. It is carrying out a full investigation into the incident and will be taking actions to address these issues.
- 8 The duty holder has inspected the other 9 trolleys and has confirmed that their brakes operated satisfactorily on a dry rail.

Learning Points

- 9 The RAIB has decided not to conduct a full investigation as it does not believe that it would lead to the identification of any further significant lessons that would improve the safety of the railways or prevent further accidents or incidents.
- 10 However, the RAIB believes that the learning point from this incident is that all duty holders should consider the maintenance and operation risks that can be introduced onto the railway from hand tools, determine the associated requirements that should be included in their SMS and related operational arrangements, and apply those arrangements.

11 Further details of issues with the braking of infrastructure hand trolleys can be found in the RAIB's reports (21/2006 and 12/2007) into runaway trolleys at Larkhall on 2 November 2005 and Nottinghill Gate on 24 May 2006, which can be found on the RAIB's website, <u>www.raib.gov.uk</u>.

The events took place at Dargan Bridge, Belfast on 9 March 2009.

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