Rail Accident Investigation Branch

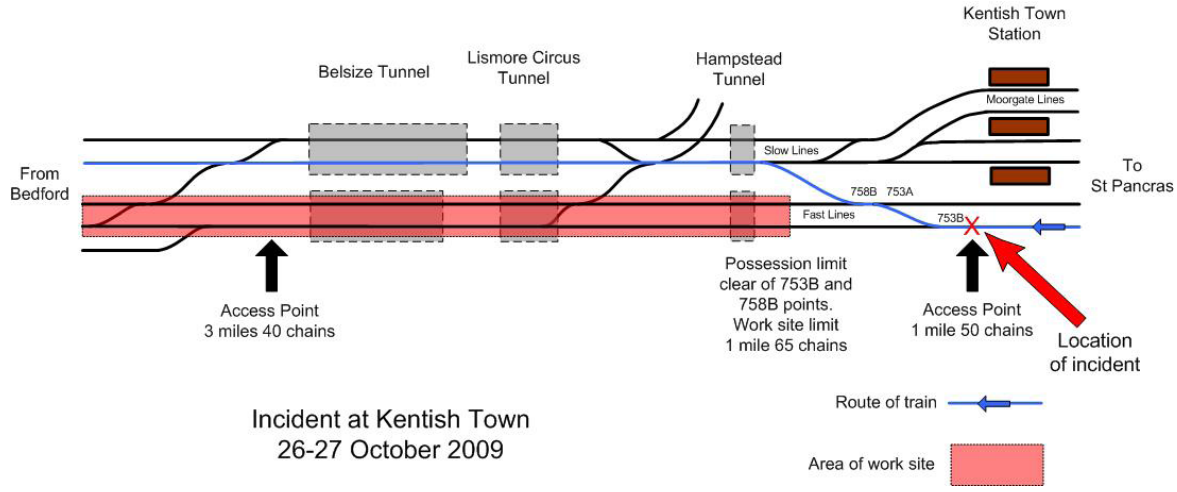
RAIB Bulletin 02/2010

Collision between train and trolley at Kentish Town 26-27 October 2009

The incident

1. A manually propelled trolley that had been placed on the track outside the limits of an engineering possession was struck by a passenger train.

2. The incident occurred at Kentish Town, north London, on the Midland Main Line route, a four track section of railway where work was planned overnight involving the blocking of the fast lines, with all trains passing on the slow lines from 23:00 hrs until 04:45 hrs.



Incident at Kentish Town 26-27 October 2009

The possession

3. The possession was taken under Rule Book Section T3, 'Possession of the line for engineering work' at about 23:48 hrs. At about 23:50 hrs the Person in Charge of the Possession (PICOP) gave permission to the Engineering Supervisor (ES) to set up a worksite just under 4 miles long. The documents for the PICOP and ES correctly reflect the setting up of the possession and worksite.

4. Between 23:50 hrs and 00:10 hrs the ES gave permission to nine Controllers of Site Safety (COSSs) to commence work. One of these COSSs signed in for a job involving running cable alongside the 'up' and 'down'[1] line fast lines at 23:55 hrs.

[1] The 'up' designation 0refers to lines used by trains travelling towards London (St Pancras), and 'down' to lines used by trains travelling away from London.

The management of the trolley

5. The COSS, who was an agency worker, had been briefed by a works supervisor (who was to be responsible for technical matters at the site), on the work for that night at the works supervisor's depot at about 21:30 hrs. The briefing had included a discussion about which access point could be used. The supervisor wished to use a different access point from either of the ones shown in the work pack given to the COSS, to reduce the distance that the party would have to walk before starting work.

6. The COSS travelled to the place, close to the site of work, where he signed in with the ES. They discussed putting the trolley on the down fast line. The ES told the COSS that the access point that the COSS had been asked to use was 15 chains outside the work site, and that if he used it the trolley would have to be manhandled for 300 metres along the cess. The COSS then agreed with the ES that his gang would use another access point, which was within the work site and was shown in the work pack which the COSS had.

7. The ES gave the COSS general directions to this access point, which was not far, in a straight line, from where they were speaking, but was some distance away by road. The COSS phoned the works supervisor and reported on this conversation. The works supervisor gained the impression that the COSS had got permission from the ES to use the alternative access point. He gave the COSS detailed directions on how to reach it. The COSS had many years experience of railway work, but he was not familiar with this area, and became confused about which access point was being referred to.

8. The COSS's work pack contained a list of access points, stating two specific locations by name, and also permitting the use of 'Authorised Access Points within the work site limits'. However, there were no details of the mileage of any access points, or on which side of the line they were, and there was no map to show their locations. The work pack included a clear, computer prepared, plan of the track layout, with the extent of the work site highlighted and a note on each sheet of the plan that the slow lines were open to traffic. The plan showed only the access points named in the pack, but did not show the mileage of the access points, or the possession limits.

9. The works supervisor went to the access point that he had discussed with the COSS and unloaded the equipment for the job. The COSS followed the directions that the works supervisor had given him to this access point, under the impression that it was the one he had discussed with the ES. In fact it was not only outside the work site, but also outside the possession. The access point had no signs giving information about its name, its location or the line identities. The COSS relied on the works supervisor's local knowledge, admitting after the incident that he was not certain of the location himself.

10. On arriving at the access point, the COSS noticed that a nearby overhead line (OLE) support structure was identified with a number that led him to think he was between the mileage limits of the work site. He was accustomed to working on the West Coast Main Line, where the numbers of the OLE structures are related to the route mileage. In fact, the numbers of the OLE structures on the route he was working on are kilometre-based, and the COSS was actually outside the work site and the possession. At 00:15 hrs the COSS briefed the gang at the access point, before placing the trolley on the down fast line, not realising that this was open to traffic, at about 00:20 hrs. The trolley did not operate track circuits (it is not required to do so), and so its presence was not detected by the signalling system.

The incident

11. The works supervisor walked north along the track while the rest of the gang were placing the trolley on the line, and on rounding a bend saw possession limit boards in front of him. He walked back to speak to the COSS to query the position with him. The COSS then phoned the ES to ask about the location of the possession limit boards. At this point an express train appeared on the down fast line. Fortunately, it had just passed a caution signal and was moving at restricted speed, preparatory to crossing to the down slow line. The works supervisor and the COSS instructed the staff to move clear and the COSS waved a lamp at the train driver, who applied his brakes when he realised he was approaching a trolley.

12. Although the train could not stop before it hit the trolley, the driver was able to reduce speed sufficiently so that only a very light collision occurred, and there was no damage to the train or the trolley. No-one was injured, and after a delay the train was allowed to proceed. The works supervisor and the COSS were relieved from duty for drugs and alcohol screening, which showed that they were clear of these substances, and the possession was handed back on time.

Previous Incidents

Manor Park

13. On 19 March 2006 a group of staff commenced work on repairing a wall alongside a line that was open to traffic, but which they thought was under possession. They narrowly escaped being struck by a train travelling at over 80 mph (129 km/h). The accident was the result of poor communications about the possession extent. The RAIB published its report, no 26/2007, on 25 July 2007. The report's recommendations, which mainly concerned the quality of method statements and communication of possession changes, were reported as being implemented, and the documentation relevant to the incident at Kentish Town reflected the lessons identified from this incident.

Acton

14. On 24 June 2008 a train hit a pair of welding grinders that had been incorrectly placed on the track outside a possession at Acton West. The RAIB's report, no 15/2009, was published on 1 June 2009. The report made the following recommendations that are relevant to the incident at Kentish Town:

    1. *The intention of this recommendation was to reinforce existing arrangements within Network Rail for COSS packs to be prepared and implemented by staff with adequate geographical knowledge of the locality.*

       Network Rail should:

       a. re-brief the requirements (now in standard NR/L2/OHS/019) for the COSS pack to be prepared and checked by individuals who have geographical knowledge of the relevant area and for COSSs to have geographical knowledge of the area in which they are to work;

       b. take steps to achieve compliance with the requirements defined in 1a; and

       c. conduct a compliance audit after a suitable period of time to confirm that these requirements defined in 1a are being implemented satisfactorily.

2. The intention of this recommendation was to:

   - *promote the involvement of the 'end-user' in designing the paperwork that they use on site;*
   - *secure the COSS's involvement in the planning of the safe system of work that they will implement on site; and*
   - *achieve a consistent and user-friendly appearance for the COSS pack (including the RT9909 form).*

   Network Rail should, in its current project to overhaul the RIMINI planning process:

   a. involve those who will use the information on site in developing a revised format for the COSS pack (and the RT9909 form);

   b. include a role for the COSS in the planning of their safe system of work; and

   c. improve the format of the COSS pack (and the RT9909 form), with particular emphasis on the clarity and consistency of information presented, including, but not limited to:

      o consistency in the method for identifying key locations such as the site of work, limits of possession and access points;

      o clarity over the information that is required in each section of the new forms;

      o the option of identifying in the COSS pack where access to site can be achieved by walking lineside as opposed to on or near the line; and

      o the use of diagrams and maps to show key locations and their relationship with each other.

3. The intention of this recommendation was to encourage Network Rail to expedite the provision of track layout signage at access points.

   Network Rail should develop and implement a programme for the provision of track layout information signage at all railway access points, showing mileages, line names and directions and other key items of local railway information, as appropriate.

At the time of this collision Network Rail had informed the Office of Rail Regulation (ORR) that it accepted all three of these recommendations, and made proposals for actions to implement them. The adequacy of these proposed actions, and the timescales to implement them, are being considered by the ORR.

Conclusions and learning points

15. The risk arising from poor communications, a lack of appropriate local knowledge and reluctance by staff to raise concerns about these things was clearly shown by this incident. Everyone who is involved in work on the track should be aware of the mistakes that were made.

16. The RAIB considers that implementation of the Acton recommendations listed above would have addressed the COSS's lack of knowledge of the railway in the area he was working and the access point locations, and the mistakes made at the access point.

17. Accordingly the RAIB draws the ORR's and Network Rail's attention to this incident, its similarity to the Manor Park and Acton events, and the need to fully deliver the Acton recommendations. The RAIB is satisfied that further investigation would be unlikely to generate more recommendations to improve railway safety.

This bulletin is published by the Rail Accident Investigation Branch, Department for Transport.

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