Rail Accident Investigation Branch

# RAIB Bulletin 01/2011

## Serious injury of a guard on the Foxfield Light Railway, 24 October 2010

### Description of the Accident

1 At around 14:15 hrs on 24 October 2010 the guard of a demonstration freight train[1] operating at Foxfield Colliery yard on the Foxfield Light Railway attempted to board the brake van of a slowly moving train. He slipped from the foot step and was dragged a few metres before releasing his hold on a handrail and falling. He suffered a fractured and dislocated shoulder.

#### Description of the infrastructure

2 The Foxfield Light Railway is owned by the Foxfield Light Railway Society (FLRS) and is operated by its volunteer members. It is a heritage railway operating a mixture of passenger and demonstration freight train services. The line is 2.25 miles (3.62 km) long and runs between Caverswall Road station at Blythe Bridge, Staffordshire and Foxfield Colliery depot at the north end of the line.

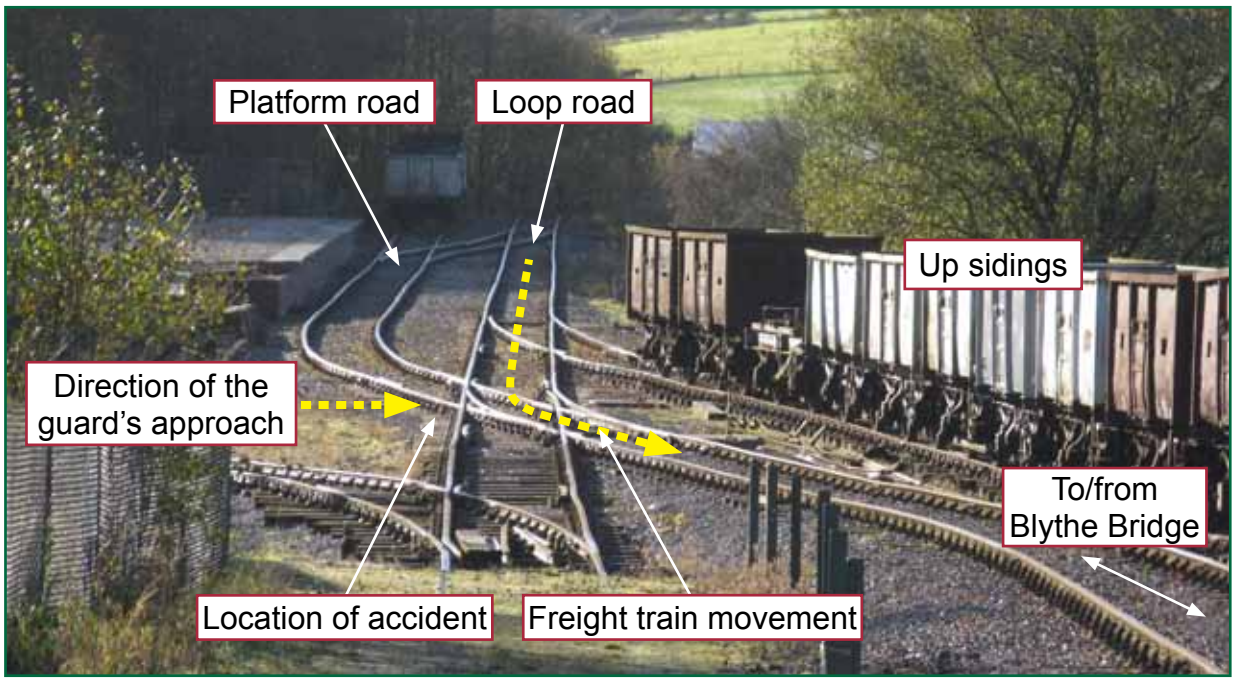


*Figure 1: Layout at Foxfield Colliery showing the location of the accident*

[1] Demonstration freight trains are not for the purposes of transferring commercial goods and do not carry passengers.

## Findings of the Rail Accident Investigation Branch

### Events preceding the accident

3 The railway held an Autumn Steam Gala on the weekend of 23 and 24 October 2010. This included the working of passenger and demonstration freight services. There were also freight train shunting demonstrations taking place at Foxfield Colliery yard. The train involved in the accident on the second day of the gala was part of such a demonstration.

4 The train involved consisted of a yard locomotive coupled to three wagons and a brake van at the rear. The crew of the train consisted of the rostered driver who was acting as the shunter and was responsible for the movement of the train in the depot, a trainee driver, a fireman who was supervising the trainee driver, and a guard.

5 The role of a train guard is to instruct drivers to move the train when required and to operate a brake in the brake van.

6 The wagons had been brought into the platform road (Figure 1) by another locomotive at 13:25 hrs. They were uncoupled and coupled to the yard locomotive which was subsequently involved in the accident.

7 The locomotive that had brought the wagons into the yard moved clear and the yard locomotive then moved the wagons to the loop road. The guard was in the brake van during this movement and at around 13:40 hrs, he applied the brake and left the train to take a break.

*Figure 2: The brake van involved (note: the footstep was sanded after the accident)*

### Events during and following the accident

8 The next timetabled movement was the departure of a freight train from Foxfield to Caverswall Road station at 14:26 hrs. Because the up sidings were full of wagons, it was necessary for the yard locomotive to move the freight wagons to the platform road.

9 At approximately 14:15 hrs, the guard was returning to the train after his break. The guard reports that he was surprised to see the train moving as he approached it. There is a conflict of evidence as to who gave the footplate crew the instruction for the train to be moved. As the brake van passed over a set of points in front of the guard, he grabbed the handrail of the leading end of the van and placed his foot on the step (Figure 2). His foot slipped and he was dragged along by the train until he let go. The estimated speed of the vehicle was between 3 to 5 mph (5 to 8 km/h).

10 The rostered driver, acting as shunter, shouted and hand signalled to the train to stop. He and the rest of the crew then attended to the injured guard and another member of staff took him to hospital. The guard was treated in hospital for a fractured and dislocated shoulder and was released shortly afterwards.

11 Both the RAIB and the Office of Rail Regulation (ORR) were informed of the accident.

12 Testing for drugs and alcohol was not undertaken on the injured guard nor any of those involved with the operation of the train.

## Analysis

13 The FLRS rules are contained within a rule book. This is a part of their safety management system (SMS). There is a requirement under the Railways and Other Guided Transport Systems (Safety) Regulations 2006 (ROGS) for heritage railways to have an SMS in place.

14 Within the rulebook, clause 2.2.13 states that railway staff must 'not board or alight from a moving vehicle and prevent passengers from doing so'.

15 The guard, an experienced, operational member of the railway since 1992, was fully aware of this rule. Part of his duties included mentoring less experienced members including giving briefings on the rules.

## Conclusion

16 The guard was injured as a result of slipping and being dragged by a moving train. This was as a result of him attempting to board a moving train in violation of the railway's rule book.

## Other observations

17 The RAIB found that boarding and alighting moving trains by staff of the FLRS was not actively discouraged by FLRS management.

18 The RAIB found that there was no evidence that all railway staff had been issued with the rule book.

19 The SMS contains a section relating to the management of competency for operational staff who are undertaking safety critical roles; this includes train crews. It is specified that all operating staff undertake a competence assessment every three years. The RAIB found that no assessments had been done since 2005 and that at that time not all staff with safety critical roles had been assessed. Also there was no evidence that the competence records were being managed by the railway in accordance with their SMS.

20 It is noted that the post accident drugs and alcohol testing following a serious accident (a requirement prescribed by the railway's SMS) was not conducted. The RAIB found that the railway had no arrangements in place for conducting such testing.

21 Although not relevant to the cause of the accident, the RAIB has identified that the yard locomotive shunting the wagons had been newly introduced to the railway following a period of refurbishment. The SMS requires that a safety assessment of new or modified traction and rolling stock is undertaken to ensure compatibility with the railway. There is no evidence that this was completed prior to it coming into operational service on the railway.

## Actions reported as already taken

22 The ORR attended the railway following the accident and conducted its own independent investigation.

23 They have issued an improvement notice to the FLRS preventing all railway operations until such time that evidence is presented that demonstrates that the railway's safety critical staff have been assessed as competent in their duties.

24 The FLRS suspended all members' competencies and is undertaking assessments. The rule book is under review and plans are in place to brief and examine all operational members in its instruction.

25 The FLRS have stopped all freight rolling stock movements until the specified vehicle examinations are complete.

## Learning points

26 On the basis of the information collected during its preliminary examination of this accident, the RAIB has concluded that actions are being taken by the FLRS to address the issues that have been identified. The completion of these actions will be monitored by the ORR. For this reason it is unlikely that further investigation by the RAIB will lead to formal recommendations for the improvement of safety. However, the accident has highlighted the need for railways that are reliant on the services of volunteers to ensure that there are suitable arrangements in place to encourage safe behaviour and compliance with published rules. In particular, such railways should check:

- that all safety critical staff (paid and volunteer) are fully aware of the requirements of the railway's safety rules, regulations and other safety requirements;
- that the competencies of safety critical staff are subject to assessment (and regular re-assessment as appropriate);
- that there are arrangements in place to enable the behaviour of safety critical staff to be monitored, and
- that suitable actions are taken to correct any unsafe behaviour that is observed to avoid any recurrence.

27 This accident also acts as a reminder to all railway staff and operators of the serious injuries that can be caused by staff attempting to climb onto the step of even a slow moving rail vehicle.

28 With regard to the Foxfield Light Railway the RAIB also observes that it should have processes in place that aim to ensure that operational practices are in alignment with the railway's safety management system, in particular:

- the implementation of arrangements for drugs and alcohol testing following an accident, and
- the completion of assessments prior to the introduction of new or modified rolling stock.

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