RAIB

Rail Accident Investigation Branch

# Rail Accident Report

## Dangerous occurrence involving engineering possession, near Dunblane, Scotland 28 October 2012

Report 05/2013
April 2013

This investigation was carried out in accordance with:

- the Railway Safety Directive 2004/49/EC;
- the Railways and Transport Safety Act 2003; and
- the Railways (Accident Investigation and Reporting) Regulations 2005.



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# Dangerous occurrence involving engineering possession, near Dunblane, Scotland, 28 October 2012

## Contents

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# Summary

An engineering possession was established on the night of 27/28 October 2012 between Stirling and Blackford in Scotland. A possession is an arrangement whereby the line is closed to normal traffic to allow engineering staff to carry out work. Several items of maintenance work were planned to be carried out in this possession and these items were grouped into four work sites. At 07:04 hrs the person in charge of the possession authorised the reopening of the line to normal traffic when only three of the work sites had completed their work and were clear of the line. Work in the fourth work site was still ongoing when the line reopened to traffic.

Seven members of staff were working on the line along with a road-rail excavator and trailer. This work continued for an hour after the line was reopened. No collision occurred as there were no trains scheduled at the time, but there were no measures in place to prevent a train from being signalled through the work site.

The person in charge of the possession did not record details of the work site on the possession form. He was under some stress from events outside of his work at the time and this may have affected his performance. Other probable factors were late alterations to the work sites within the possession and the way in which the briefing pack for the possession was presented.

The RAIB has identified three learning points related to the use of the possession arrangements form, the way in which possession information packs are prepared and dealing with staff under stress.

# Introduction

## Preface

1 The purpose of a Rail Accident Investigation Branch (RAIB) investigation is to improve railway safety by preventing future railway accidents or by mitigating their consequences. It is not the purpose of such an investigation to establish blame or liability.

2 Accordingly, it is inappropriate that RAIB reports should be used to assign fault or blame, or determine liability, since neither the investigation nor the reporting process has been undertaken for that purpose.

3 The RAIB's investigation (including its scope, methods, conclusions and recommendations) is independent of any inquest or fatal accident inquiry, and all other investigations, including those carried out by the safety authority, police or railway industry.

## Key definitions

4 All dimensions in this report are given in metric units, except track locations which are given in imperial units in accordance with normal Network Rail practice.

5 The report contains abbreviations and technical terms (shown in *italics* the first time they appear in the report). These are explained in appendices A and B.

6 British Summer Time (BST) finished at 02:00 hrs on 28 October. In accordance with Network Rail's instruction, the signallers and staff working in the possession put their clocks back one hour to Greenwich Mean Time (GMT) at 02:00 hrs BST, during the possession. For clarity, times given in this report are suffixed BST or GMT as appropriate.

## Description of the incident

7 At 01:13 hrs BST on Sunday 28 October 2012 a *possession* of the line was taken over a 15 mile (24 km) length of railway between Stirling and Blackford, in Scotland (figure 1). The possession was pre-planned by Network Rail to enable a variety of maintenance tasks to be carried out at various locations between Stirling and Greenloaning. It started after the last scheduled train on Saturday night and was due to finish before the first on Sunday morning.

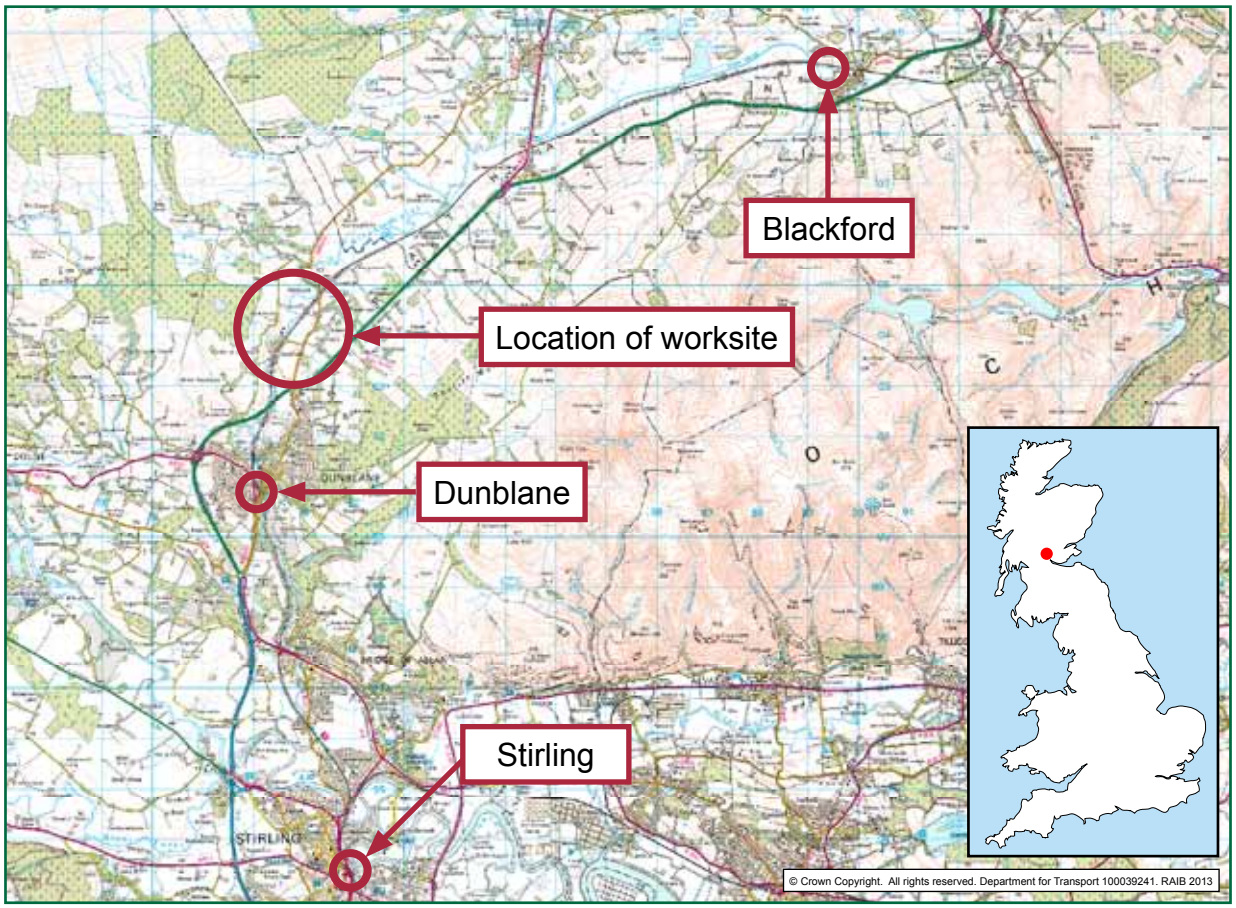


*Figure 1: Extract from Ordnance Survey map showing location of incident*

8 At 07:04 hrs GMT on Sunday 28 October the *person in charge of the possession* (PICOP) informed the Network Rail signaller at Blackford that work was complete and authorised the reopening of the line to normal traffic (this is known as 'giving up' a possession). However, work involving seven staff and a *road-rail excavator* with a trailer on the track at Ashfield, to the north of Dunblane, was still ongoing.

9 The work at Ashfield was completed and the staff and road-rail vehicle (RRV) and trailer moved clear of the line at 07:58 hrs GMT. During the time between giving up the possession at 07:04 hrs GMT and the staff being clear at 07:58 hrs GMT the line was open to traffic and a train could have run through the site at up to the permitted speed on the line concerned (75 mph (120 km/h)).

10 No accident occurred because no trains were scheduled at the time. However, there were no measures in place to prevent an unscheduled train, an engineering train or an on-track machine from being routed towards the *work site*.

# Background

11 The rules governing possessions are given in module T3 of the Rule Book (*Railway Group Standard* GE/RT8000/T3) and in Rule Book Handbooks 11 and 12 (GE/RT8000/HB11 & GE/RT8000/HB12). Paragraphs 12 to 16 below describe the process defined by the Rule Book and Handbooks. The possession must normally be planned in advance of the work and the details published in the Network Rail *Weekly Operating Notice* (WON).

12 The Rule Book states that the PICOP must speak to the signaller and confirm the details of the possession. The signaller places the signals to danger to prevent trains entering the possession. The signaller then gives the PICOP permission to arrange for the placing of *detonators* and *possession limit boards* on the lines at the pre-planned positions.

13 Clause 2.3 of module T3 of the Rule Book requires the PICOP to complete section 1 of a possession arrangements form, RT3198 (see appendix C[1]), and read the details back to the signaller. This form provides tables for the PICOP to record details of the work sites, *engineering supervisors* and others working in the possession. These details include the times at which the PICOP grants permission to each engineering supervisor for work to begin and the time at which each engineering supervisor reports that the line is clear. The form is designed to cover one running line, so two forms are needed for a double track railway.

14 Once the PICOP has confirmed to the signaller that the detonators and limit boards are in place the signaller 'grants' the possession to the PICOP.

15 The individual items of work within the planned possession are grouped according to their location so that several items of work in the same area become one work site. There can be any number of work sites within a possession. Each work site is overseen by a named individual, termed the engineering supervisor.

16 The PICOP, having taken possession of the line, grants permission to each engineering supervisor to start work on their work site. The PICOP records the details of each work site on the RT3198 form(s). Handbook 12 instructs each engineering supervisor to record the details of their work site on an engineering supervisor's certificate (RT3199).

17 The maintenance work activities that took place on the night of 27/28 October between Stirling and Blackford were grouped into four work sites. The site at Ashfield was one such work site and the work there was being done by Network Rail's contractor, QTS Group Ltd, under the control of their engineering supervisor and a *controller of site safety* (COSS). The work covered a one mile (1.6 km) stretch of the route. Within this work site a road-rail excavator, trailer and seven staff were engaged in drainage work on the up line (the line that carries trains from Perth towards Stirling).

[1] The version of the form in appendix C is the one that was used in this possession. This was not the latest version on the Group Standards website at the time, but the differences between the versions were of no relevance to this incident.

18 The PICOP was a member of Network Rail's staff and he was in charge throughout the possession. The PICOP had undergone Network Rail's training and certification for his role and Network Rail had deemed him competent to conduct PICOP duties. He was an experienced member of staff who had been a PICOP for 12 years and had worked in various operational roles since starting with British Rail in 1978.

19 The engineering supervisor in charge of the Ashfield work site was self employed and contracted to QTS. He had worked in the railway industry for 10 years and held a number of safety-critical competencies, including a qualification to act as engineering supervisor which he had held since 2006.

## The incident

20 The PICOP took possession of the line at 01:13 hrs BST from the signallers at Stirling and Blackford. He then authorised the engineering supervisor in charge of each work site to commence work. These authorisations were given by telephone. The PICOP authorised four engineering supervisors to start work. Figure 2 shows the location of the four work sites that were set up; paragraphs 41 to 48 explain how four work sites were set up, rather than the three that were planned.

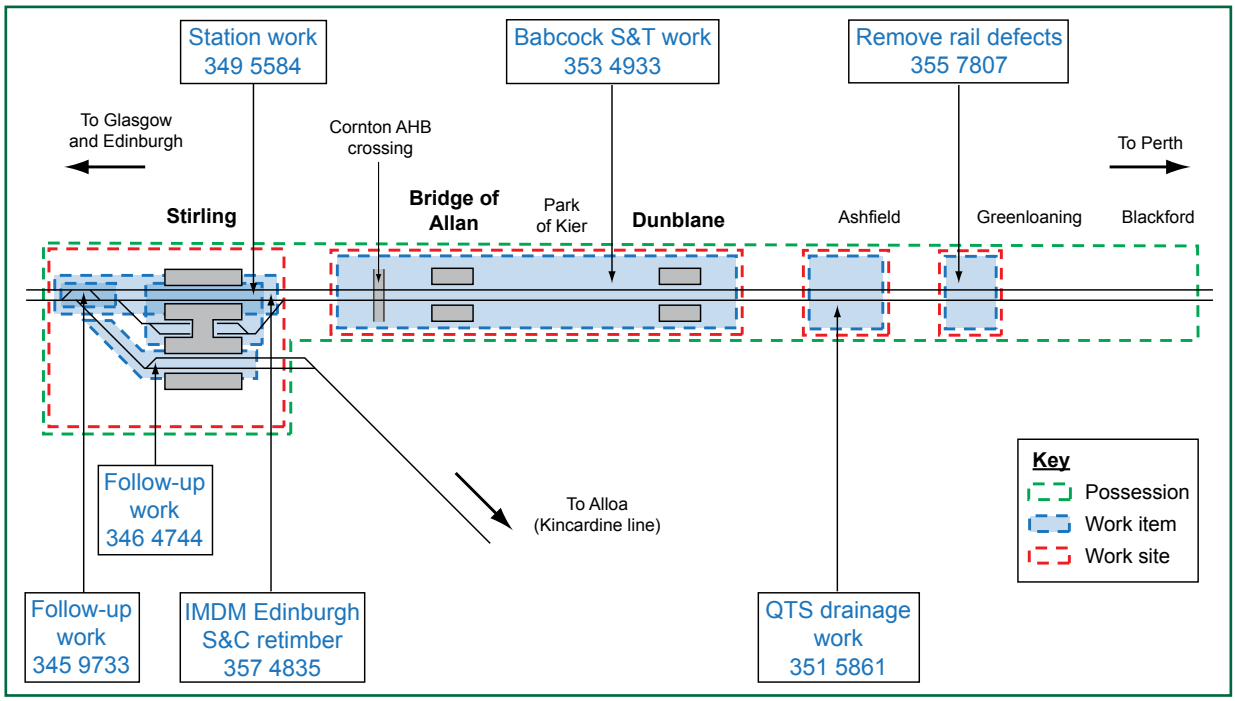


*Figure 2: Plan of the line showing the work sites and work items, as set up on the night*

21 When the work in their work site finished, each engineering supervisor telephoned the PICOP to inform him that their work was complete and that the line was clear for trains to run. After three engineering supervisors had reported that they had finished the PICOP believed that all work was complete and 'gave up' the possession. The work at Ashfield was still ongoing at this time.

22 When the drainage work at Ashfield was complete the engineering supervisor for the work site tried to contact the PICOP to inform him that the road-rail vehicle and the staff were clear of the line. The engineering supervisor was unable to contact the PICOP and so called the signaller at Blackford. The signaller reported that the PICOP had given up the possession an hour earlier and the line had been open to traffic since then. The work site had been active during this time with a road-rail vehicle, trailer and seven staff working on or near to the line with no protection from trains. The line at Ashfield is not fitted with track circuits so the signaller was unaware of the presence of the on-track plant.

23 When the signaller and the engineering supervisor realised what had happened they reported the incident to their respective managers. Network Rail's on-call manager confirmed that all staff were clear of the line and that the line was safe for traffic. As an additional precaution, the first train through the area on the up line was *run at caution*. No further problems were found.

24 As is standard practice, the PICOP was tested for the presence of drugs and alcohol following the incident; none were found.

## Identification of the immediate cause[2]

25 **The person in charge of the possession gave up the possession while the Ashfield work site was still active.**

26 At the start of the possession, the PICOP authorised four engineering supervisors to start work in separate work sites. However, after being informed by three engineering supervisors that they had finished their work, the PICOP believed that all work was complete and gave up the possession.

## Identification of causal factors[3]

### Discounted factor

27 The RAIB has discounted the change from BST to GMT as a factor in this incident as the time that the possession was given up and the time that the QTS engineering supervisor called the signaller were both recorded in GMT by the Blackford signaller.

[2] The condition, event or behaviour that directly resulted in the occurrence.

[3] Any condition, event or behaviour that was necessary for the occurrence. Avoiding or eliminating any one of these factors would have prevented it happening.

## Use of standard forms

28 **The PICOP did not record the details of the Ashfield work site on the list of work sites forms intended for this purpose. This was a causal factor.**

29 The PICOP did not fill in the details on the RT3198 forms at the start of the possession (paragraph 13). Instead, he wrote the names and phone numbers of the various staff within the possession (engineering supervisors and controllers of site safety) on the page of the WON which gave details of this possession. Details of the work planned for the shift are given in table 1. The PICOP stated that he did not fill the details in on the RT3198 forms straight away as they often changed at the last minute, making it necessary to make alterations to the form or to fill in a fresh copy. The PICOP stated that he always filled in the RT3198 forms before the end of the possession and audit checks by his manager reported that this was the case. The Rule Book does not specify when the forms must be filled in, only that they must be used.

| PPS Ref | Organisation | Work details | Start location (m = miles, y = yards) | End location |
|---|---|---|---|---|
| W2012/3515861 | QTS Group | Drainage work | 118 m 1200 y | 125 m 880 y |
| W2012/3534933 | Babcock Rail | *S&T* work | 118 m 1200 y | 125 m 880 y |
| W2012/3459733 | Babcock Rail North Renewals | Follow-up work | 118 m 0 y | 118 m 110 y |
| W2012/3464744 | Babcock Rail North Renewals | Follow-up work | 0 m 0 y (SAK line) | 0 m 880 y |
| W2012/3495584 | Network Rail property maintenance | Station work | 118 m 200 y | 118 m 1000 y |
| W2012/3557807 | Network Rail IMDM Perth | Remove rail defects | 126 m 0 y | 129 m 0 y |

*Table 1: Work planned in the possession*

30 The PICOP wrote details of the supervisor of every work item in the possession on the WON page. Some of these supervisors were acting as an engineering supervisor and some were acting as a COSS. The PICOP drew an arrow to distinguish COSS items from engineering supervisor items, the direction of the arrow showing the engineering supervisor who the COSS was to *sign in* with.

31 The planned arrangement for the possession, as documented in the WON, was that QTS would manage the work site and the Babcock S&T COSS would sign in with the QTS engineering supervisor. However, the arrangements were changed just before the start of the possession and the Babcock S&T and QTS work became separate work sites (paragraphs 44 and 45).

32 The entry that the PICOP made on the WON page for the QTS work item had an arrow which incorrectly showed that QTS was to sign in to the Babcock S&T engineering supervisor's work site. The PICOP was unable to recall why he had shown the entry in this way, but he may have been influenced by a briefing sheet (paragraph 49) that was provided to the PICOP listing the Babcock work item ahead of the QTS one. Network Rail's practice is to issue these briefing sheets to their PICOPs prior to the possession.

33 The PICOP copied the details from the WON page to the RT3198 forms after the work had started in the work sites. During this copying process he overlooked the QTS work site at Ashfield and its details were not copied to either of the RT3198 forms. The arrow he had drawn on the WON page may have led him to believe that the QTS work was not a separate work site. The possible reasons for this oversight are dealt with in the following sections.

## Management of the PICOP

34 **The PICOP was very likely under stress from events outside of his work. The PICOP had not reported this to his manager although his manager had noticed an effect on his performance at work during previous shifts. Neither the PICOP nor his manager had taken steps to deal with the likely effect of this stress on his work. The fact that the PICOP continued to work whilst in a condition where he may have been susceptible to making errors is a probable causal factor.**

35 The PICOP stated that he had recently experienced events outside of his work which caused him stress. He did not consider that this stress was affecting his work and he did not report this to his manager until the night of the incident (paragraph 38).

36 On two occasions in the previous six weeks the PICOP had been involved in possession irregularities. The first of these was on 18 September when he was working as possession support staff assisting another PICOP with a possession of the Stirling to Blackford line. He forgot to remove a detonator from the line at the end of the possession. The second incident occurred on 21 October when, whilst undertaking PICOP duties, he left a detonator on the line at Stirling when the possession was shortened. In both cases a train exploded the detonator, causing the driver to make an emergency stop and contact the signaller.

37 The PICOP's manager spoke to the PICOP after the first of these incidents to try to understand why the error had occurred. The PICOP could not explain why he had overlooked the detonator. No previous similar incidents had happened to him. The PICOP's manager suggested a better way of accounting for detonators at the end of the possession to avoid the PICOP overlooking them in future.

38 Following the second incident, the PICOP's manager visited the PICOP to give him some containers to store detonators in. This visit took place on the night of the Dunblane incident. The PICOP's manager met the PICOP on site after the start of the possession. At this time the PICOP had not yet copied the work site details from the WON page to the RT3198 forms. The manager and PICOP discussed the recent incidents. The PICOP could not understand why he was making these simple errors and his manager asked him if there was anything outside his work that was causing him stress. A frank discussion followed during which the PICOP told the manager about the external issues which were concerning him. At the end of this discussion the manager asked the PICOP if he felt able to continue with his shift. The PICOP stated that he did. The manager then left the PICOP to continue his shift.

39 After the manager had left, the PICOP completed the work site details on the RT3198 forms. He used the information he had noted on the WON page as the basis for this. The discussion that took place immediately prior to the PICOP filling out the RT3198 forms, where he recounted the events outside his work that were causing him stress, may have led to him making an error of omission when filling in the form.

40 Network Rail provides advice to its managers through its 'HR Direct' system which provides online guidance and telephone support on human resources issues. HR Direct includes advice on dealing with stress, including that caused by factors outside of work. This advice includes considering relieving the member of staff of some of their duties. It does not mention the timing of discussions with staff who may be undertaking safety critical duties at the time.

## Number of work sites

41 **The possession was planned to have three work sites and the PICOP briefing information pack listed that number, but the PICOP increased the number to four just before the possession started. This was a factor that may have influenced the PICOP to overlook a work site.**

42 The possession was planned to include six items of work. Each of these items was planned in advance of the possession by the possession planners and was input to Network Rail's Possession Planning System (PPS). PPS is a computer system that Network Rail uses to manage work that must be carried out when no trains are running. The work items and their locations are listed in table 1.

43 The PPS system grouped the individual items of work together to produce three work sites. These work sites were denoted A, B and C. Where there were two or more items of work in the same work site, one of the items was defined as the primary item and the person in charge of this work was nominated to be the engineering supervisor for that work site. The plan stated that the COSS in charge of each of the other items of work within that work site was to sign in with the engineering supervisor. The primary work item was listed with a 'P' suffix in the PICOP's briefing pack and the other items were suffixed 'S' (secondary).

44 The possession arrangements were discussed at a planning meeting which was held on 17 October by telephone conference. At this meeting Babcock Rail and QTS agreed that the QTS work item would be the primary one in work site 'A' and Babcock would sign in to the QTS work site. Thus the QTS work item was denoted 'AP' and the Babcock S&T renewal work at the same mileage was denoted 'AS'. Similarly the 'B' and 'C' work sites were denoted 'BP', 'BS' (two number), and 'CP'. Figure 3 is a diagram showing how the planned work sites and work items were grouped along the track.

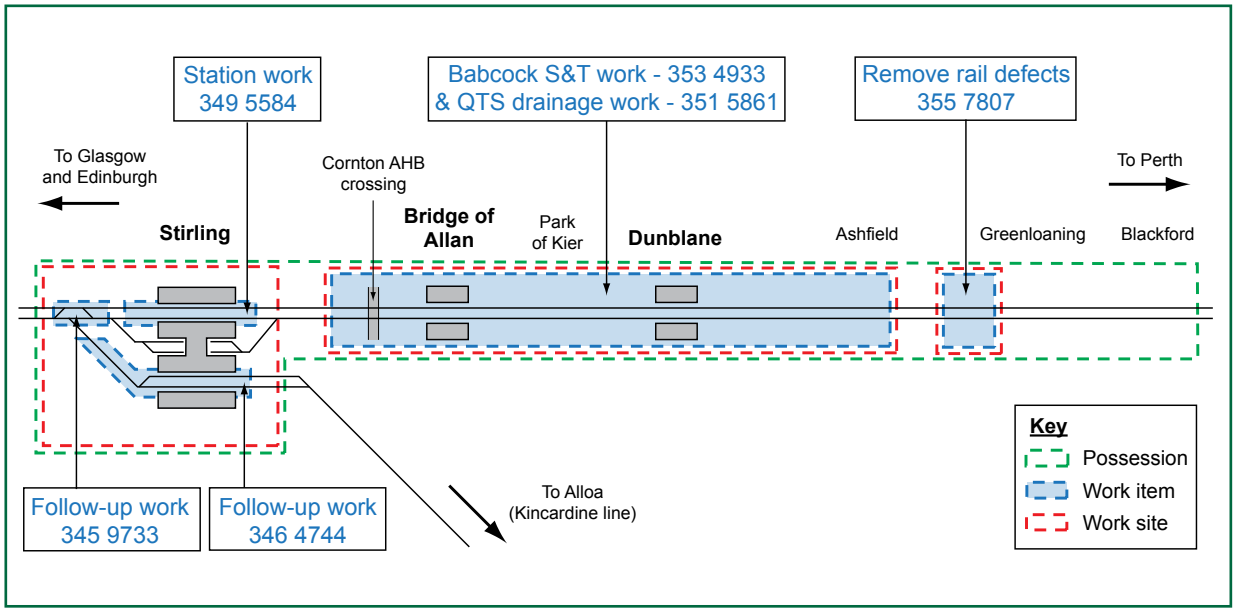


*Figure 3: Plan of the line showing the work sites and work items, as planned*

45 QTS had two separate areas where they needed to do work. One was at Ashfield, at 125 miles, and the other was at Park of Kier at 122 miles. The work at Park of Kier required access over fields to the line side and prolonged wet weather made this access impossible on 28 October. When the QTS engineering supervisor started his shift on the night of 27/28 October he phoned the PICOP to state that he would not be doing any work at 122 miles and he only needed a work site from 124 miles 880 yards to 125 miles 880 yards. He asked if his work site could be shortened to these mileages as it would be easier to control the shorter work site. The PICOP agreed to the shortened work site and noted the revised mileages on his copy of the WON page. Handbook 11 allows the PICOP to alter the length of work sites.

46 The effect of shortening the QTS work site was to remove the Babcock S&T work from it. This work now became a separate work site and the Babcock COSS became the engineering supervisor for it, a role he was qualified to undertake. The PICOP realised that there were now four work sites as he authorised four engineering supervisors to start work (paragraph 20).

47 In addition to the work listed in table 1, there was a late alteration to the possession which was emailed out at midday on Friday 26 October, though this was not relevant to the incident. This alteration had two items. The first stated '*additional worksite - W2012/3574835 IMDM Edinburgh, Stirling Middle and Stirling North SB, S&C Retimber 118m 0yds and 118m 880yds'*. The second alteration stated that Cornton level crossing would have an attendant to operate the barriers during the possession. The first item was not entirely correct as the work was not a new work site but a new work item in the 'B' work site.

48 The actual arrangement of work sites and work items, as agreed by the PICOP on the night of 27/28 October, is shown in figure 2.

## PICOP briefing pack

49 **The secondary work item was listed before the primary one on the 'A' work site page of the briefing pack (the primary items were listed first in the other two work sites). This was a factor that may have influenced the PICOP to overlook the QTS work site.**

50 The PICOP briefing pack was produced by a Network Rail computer system known as PDA (possession delivery assistant). This takes the details of the possession and the work sites within it from the PPS system (paragraph 42) along with details of the possession staff and other information input by the planner and produces a PICOP briefing pack.

51 The PICOP briefing pack is a document which is intended to give the PICOP the information he needs to manage the possession. The pack includes an extract from the WON, a list of possession staff, details of the work sites and other information.

52 Each work site has a page listing details which include the lines under possession, start and end mileage, name of the engineering supervisor, details of those acting as a COSS and the PPS reference number of each work item.

53 The details of the work items within each work site are listed next. These normally start with the primary work item and secondary work items (if any) are listed below and on additional sheets if necessary.

54 The PICOP briefing pack sheet for work site 'A' listed the 'AS' item first. This was the Babcock S&T work item. This work item was planned to be supervised by a COSS who was to sign in with the QTS engineering supervisor. However, when the PICOP agreed to the QTS engineering supervisor shortening his work site (paragraph 45), the 'AS' work item became a work site in its own right.

55 The order of the work items on the pages of the PICOP pack is determined by the PDA software. The manual for this software explains that the order of the worksites can be changed if the user specifies the order he wants in a sort field. The planner who used the PDA software to produce the PICOP pack for this shift was unaware of this facility and so the work items were not sorted.

# Summary of conclusions

## Immediate cause

56 The PICOP gave up the possession while the QTS Ashfield work site was still active (**paragraph 25**).

## Causal factors

57 The following causal factor was identified:

a. The PICOP did not fill in details of the QTS Ashfield work site on his RT3198 possession arrangements forms (**paragraph 28, Learning Point 1**).

58 It is probable that the following factors influenced the PICOP to overlook the QTS work site:

a. The PICOP was under stress from events in his private life that he had not reported to his manager prior to the shift. When he revealed these events to his manager during the shift, neither his manager nor the PICOP judged that the PICOP might, as a result, be unfit to continue with the shift (**paragraph 34, Learning Point 2**).

b. The possession was planned with three work sites but the number was increased to four at the start of the shift (**paragraph 41**).

c. The PICOP briefing pack listed the work items in the 'A' work site in the wrong order (**paragraph 49, Learning Point 3**).

## Learning points[4]

59 The RAIB has identified the following key learning points.

1 The RT3198 possession arrangements form was designed for the purpose of keeping track of work sites, and other details, within a possession. Correct use of this form would have prevented this incident. Network Rail issued 'Possession Delivery Alert No. 7 2012/2013' on 7 November 2012 which instructed its PICOPs to always fill this form in with work site details immediately upon receipt of those details and not keep rough notes to copy up later.

2 When planning to discuss with a member of staff matters that might have a bearing on their performance at work, it is good practice for managers to consider the timing of the interview with regard to any safety critical role that the staff member may be undertaking or be about to commence.

3 The sorting of work sites into a logical order on the possession paperwork reduces the risk of errors. Network Rail has re-briefed its planners accordingly.

[4] 'Learning points' are intended to disseminate safety learning that is not covered by a recommendation. They are included in a report when the RAIB wishes to reinforce the importance of compliance with existing safety arrangements (where the RAIB has not identified management issues that justify a recommendation) and the consequences of failing to do so. They also record good practice and actions already taken by industry bodies that may have a wider application.

# Appendices

## Appendix A – Glossary of Abbreviation and acronyms

| | |
|---|---|
| BST | British Summer Time |
| COSS | Controller Of Site Safety |
| GMT | Greenwich Mean Time |
| PICOP | Person In Charge Of Possession |
| PPS | Possession Planning System |
| RRV | Road-Rail Vehicle |
| S&T | Signals and Telecommunications |

## Appendix B – Glossary of terms

| | |
|---|---|
| Controller Of Site Safety | A controller of site safety (COSS) is the person responsible for setting up a safe system of work for staff working on or about the line. |
| Detonator | A device attached to the rail head which explodes when a train goes over it to attract the attention of the driver. |
| Person In Charge Of Possession (PICOP) | The person nominated to set up the possession with the signaller(s) and authorise the engineering supervisors to set up their work sites. |
| Possession | A possession is an arrangement whereby the line is closed to normal rail traffic to allow engineering staff to carry out work. |
| Possession limit board | An illuminated stop sign placed on the track to mark the end of a possession. |
| Railway Group Standard | A document which defines standards to be observed by the UK railway industry. |
| Road-rail excavator | A piece of construction plant (an excavator) that has been modified to be able to run on both road and rail wheels. |
| Run at caution | Running at caution means that the train driver is warned that the line ahead may not be clear and so must drive in such a manner as to be able to stop short of any obstruction. |
| Sign in | Procedure used when an engineering supervisor authorises a COSS to work in his work site. The COSS is said to 'sign in' with the engineering supervisor. |
| Weekly Operating Notice (WON) | The weekly operating notice is a Network Rail publication that lists temporary speed restrictions, details of engineering possessions, changes to operating instructions and other information of relevance to staff operating the railway. |
| Work Site | The term 'work site' is used in this report in accordance with the Rule Book definition as work that is under the control of a single engineering supervisor. |

# Appendix C – RT3198 possession arrangements form

## Possession Arrangements Form (T3)

RT3198 : (Page 1 of 2)
June 2007

### Section 1 Possession details

| | |
|---|---|
| Name of PICOP | |
| Employer | |
| WON item No *(if applicable)* | |

| | | |
|---|---|---|
| Signalbox | | Panel/workstation |
| Phone Number | | |
| Permission to place protection given at: | Time | |

**Possession planned to be taken around train standing at signal**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Train number | | | | | | | | |
| At signal | | | | | | | | |

### Section 2 Protection arrangements

| | |
|---|---|
| Line to be blocked | |

| | | |
|---|---|---|
| Possession limits (mileage) | Start | |
| | End | |

| Detonator Protection | | Placed | Withdrawn |
|---|---|---|---|
| PLB/dets beyond these signals/ points | | Time / Date | Time / Date |
| | | Time / Date | Time / Date |
| | | Time / Date | Time / Date |

| Detonator Protection | | Placed | Withdrawn |
|---|---|---|---|
| PLB/Dets on approach to these signals/ points | | Time / Date | Time / Date |
| | | Time / Date | Time / Date |
| | | Time / Date | Time / Date |

| Points | | Secured | Un-secured |
|---|---|---|---|
| Points to be secured | | Time / Date | Time / Date |
| | | Time / Date | Time / Date |

| SPRS | | Operated | To normal |
|---|---|---|---|
| SPRS operated at these signals | | Time / Date | Time / Date |
| | | Time / Date | Time / Date |

**Other information**

### Section 3 Level crossing arrangements

| Level Crossing | # | Arranged | Withdrawn |
|---|---|---|---|
| | | Time / Date | Time / Date |
| | | Time / Date | Time / Date |

| Level Crossing | # | Arranged | Withdrawn |
|---|---|---|---|
| | | Time / Date | Time / Date |
| | | Time / Date | Time / Date |

In the **#** column enter -

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **N** | If there is normal working at the crossing | **A** | if an attendant is required throughout (at AHBC, CCTV or RC crossings | **E** | if the road signals/siren/bells are switched off (at ABCL or AOCL crossings | **Q** | If an attendant is required some of the time (at AHBC, CCTV or RC crossing) |
| **W** | If wrong direction movements must be cautioned (at crossings worked by the signaller/crossing keeper or those with white lights) or stop before crossing (at crossings with red/green lights) | **C** | If all movements must be cautioned (at crossings worked by the signaller/crossing keeper or where red/green lights have been switched off | | | | |

| **Possession granted at:** | Time | Date |
|---|---|---|

## Section 4 Record of work

**Work sites**

| Site No. | Work site limits (mileage) | Authority given | Work completed |
|---|---|---|---|
| | Start | Time | Time |
| | End | Date | Date |
| | Start | Time | Time |
| | End | Date | Date |
| | Start | Time | Time |
| | End | Date | Date |
| | Start | Time | Time |
| | End | Date | Date |
| | Start | Time | Time |
| | End | Date | Date |
| | Start | Time | Time |
| | End | Date | Date |

**Engineering Supervisors**

| Site No. | Name of ES (or relief) | Phone number | Start of duty |
|---|---|---|---|
| | | | Time |
| | | | Date |
| | | | Time |
| | | | Date |
| | | | Time |
| | | | Date |
| | | | Time |
| | | | Date |
| | | | Time |
| | | | Date |
| | | | Time |
| | | | Date |

**IWA/COSS using possession arrangements outside a work site**

| Name of IWA/COSS | Phone number | Employer | Authority given at | Work completed at |
|---|---|---|---|---|
| | | | Time | Time |
| | | | Date | Date |
| | | | Time | Time |
| | | | Date | Date |
| | | | Time | Time |
| | | | Date | Date |
| | | | Time | Time |
| | | | Date | Date |

## Section 5 Change of PICOP

| Name of new PICOP | Employer | Start of duty |
|---|---|---|
| | | Time |
| | | Date |
| | | Time |
| | | Date |
| | | Time |
| | | Date |

| Name of new PICOP | Employer | Start of duty |
|---|---|---|
| | | Time |
| | | Date |
| | | Time |
| | | Date |
| | | Time |
| | | Date |

| Possession to be given up with train standing at signal | Train | Number | At signal | Number |
|---|---|---|---|---|

| Possession given up | Time | Date |
|---|---|---|

This report is published by the Rail Accident Investigation Branch,
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