

Near miss with a train driver at Stafford station, 2 March 2018

Important safety messages

This incident demonstrates the importance of signallers and drivers reaching a clear understanding when a driver needs to arrange protection to get down onto the track and examine their train. It is vital that in such communication:

- signallers explain to drivers the names of which lines are blocked and which lines trains are still running on. This is because drivers may not be able to identify lines from the numbers of the signals and sets of points that a line is blocked between (since drivers are not normally expected to know the numbers of all the signals and points on the routes they drive over); and
- drivers check the status of each adjacent line with signallers if they do not fully understand the information that the signaller has given to them.

Summary of the incident

On Friday 2 March 2018, the driver of train reporting number 1A34, the 12:35 hrs Manchester to London Euston passenger service operated by Virgin Trains, had stopped his train at Stafford to attend to a fault. At about 14:36 hrs, while on the track and working on his train, he saw a train approaching at speed on the adjacent northbound line and had to take evasive action, lying down on the track next to his train, to avoid being struck. The driver was not injured but was badly shaken by the incident.





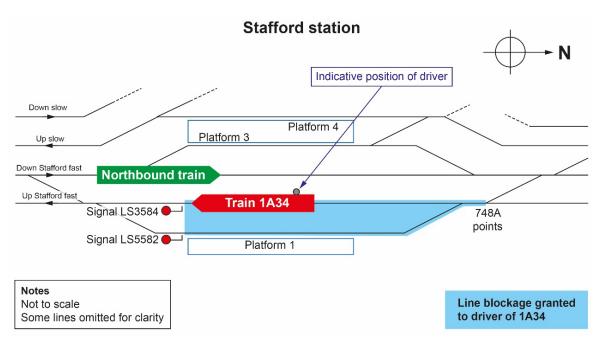
Forward facing CCTV image from the northbound (image courtesy of Virgin Trains). The driver of 1A34 is circled.

Cause of the incident

At around 13:34 hrs, train 1A34 came to a stop on the Up Stafford Fast line, north of Stafford station, as a result of an unsolicited brake application. Subsequently, each time the driver released the train's brakes and began to move, the brakes automatically applied again. The driver informed the signaller responsible for the Stafford area that the train had a recurring brake fault.

After seeking advice over the radio from maintenance support staff, the driver asked the signaller to route train 1A34 into platform 1 so that he could examine the train. The signaller was unable to do this due to the proximity of train 1A34 to a junction north of Stafford, which meant the route already set for it along the Up Stafford Fast line could not be cancelled. Instead the signaller instructed the driver to move his train to the next signal on the Up Stafford Fast line, signal number LS3584, which is located in Stafford station.





Track diagram showing Stafford station and the position of the trains involved

At 14:04 hrs, when train 1A34 was at a stand at signal LS3584, the driver called the signaller again. During this conversation, the driver asked the signaller to block the Down Stafford Fast line and the line through platform 1, which would stop any train movements on these lines (the driver concluded that the Up Stafford Fast was already blocked by the presence of his stationary train). The request to block the Down Stafford Fast line and the line through platform 1 was repeated back by the signaller. The driver stated that he would need these line blockages to gain access to the outside of his train, as he needed to isolate the brakes on a carriage towards the rear and then carry out a test to check that the wheels on that carriage were rotating correctly.

The signaller had understood this request to mean that the driver required trains to be stopped so that he could walk along the track to the rear of his train. The signaller proceeded to give the driver the numbers of the signals for the line blockages, but before granting any of these line blockages the signaller told the driver he needed to end the conversation as there was now a backlog of trains at a stand outside Stafford station which he wanted to clear first. That day, many trains were running late due to poor weather conditions and some trains were being diverted via Stafford.



About five minutes later, at 14:16 hrs, the signaller called the driver back to grant the line blockages. When he arranged the line blockages with the driver, he modified the start of the line blockages to a set of points at a junction to the north of the station. The line blockages ended at signals at the southern end of the station. These arrangements blocked the Up Stafford Fast line (the line on which train 1A34 was standing) and the line through platform 1. The signaller believed this would be sufficient for what the driver needed to do, so at the end of their conversation he gave the driver an authority number for the line blockages, which the driver repeated back and recorded. However, the signaller should not have granted a line blockage for the Up Stafford Fast line as section 13 of Rule Book module TS1 'General signalling regulations' states that a line can only be blocked when it is clear of trains. This line was not clear as train 1A34 was standing on it. Also the presence of the train in this section of line meant the signalling system would not allow any other trains to be signalled into it.

The applicable communications procedure is described at section 5 of Rule Book module G1 'General safety responsibilities and personal track safety for non-track workers'. This requires a signaller to take lead responsibility in a conversation with a driver. It states that all concerned must make sure they properly understand the meaning of all messages, and that a message must be repeated back by the person receiving it so that the other person knows it has been understood. Communications between the driver and signaller were prolonged, with information repeated back several times. The signaller told the driver the numbers of the points and signals that protected the Up Stafford Fast line and the line through platform 1. The driver repeated these details back to the signaller, but did not understand that they did not provide protection on the Down Stafford Fast line. While drivers are required to have a knowledge of the routes that they drive over, they are not normally expected to remember the numbers of all points and signals.

Section 13 of Rule Book module TS1 requires a signaller to record the details of line blockages on a line blockage form (known as a NR3180 form). It also requires the signaller to read the contents of the completed form back to the person requesting the line blockage, and to remind them of any lines that are still open on which a train could approach. The signaller did not complete the form while talking to the driver (a colleague who was assisting him did this), he did not provide a summary of the contents of the form at the end of the conversation, and he did not remind the driver that the Down Stafford Fast line was still open for train movements.

After being granted the line blockage, the driver and another member of train crew got off train 1A34 onto the track. They both exited the train onto the line alongside platform 1. After working on this side of the train, the driver walked around the end of his train to continue his work from the Down Stafford Fast line, which he believed was blocked to train movements.



At about 14:36 hrs, the northbound train approached Stafford at about 85 mph (137 km/h) on the Down Stafford Fast line. As the driver of this train passed the front of train 1A34, he saw someone on the track towards the rear of it. The driver sounded the train's horn and applied the train's brakes. The driver of train 1A34 became aware of the approaching train and lay down alongside his train to avoid being struck. He was clear of the approaching train about three seconds before it passed him.

Following the incident, both train drivers contacted the signaller to report what had happened. The driver of train 1A34 returned to his driving cab and confirmed that he would remain there until a relief driver arrived. Although shaken, the driver of the other train was fit to continue his journey.

Previous similar occurrences

In August 2016 at Kyle Beck (<u>RAIB Safety Digest 07/2016</u>), a driver had to lie down alongside his train to avoid being struck by a train on an adjacent line. The driver believed that train movements on the adjacent line were blocked, but when the driver got onto the track the line blockage had not yet been granted by the signaller. There had been a misunderstanding between the signaller and driver during their earlier conversation.