

# Stafford, Crewe and Warrington overspeeding incidents

News story

Preliminary examination into three overspeeding incidents at Stafford, Crewe and Warrington on 21 February 2022.



The west coast main line, Crewe

Three overspeeding incidents occurred on Monday 21 February involving blanket emergency speed restrictions (BESRs) that had been imposed on Network Rail managed infrastructure in north west England and Scotland on Sunday 20 February and Monday 21 February (during storm Franklin). After becoming aware of these incidents, RAIB gathered evidence from the railway industry and carried out a preliminary examination into the circumstances in which they occurred.

The two BESRs relevant to these incidents were:

- The North West 50 mph BESR which covered the whole of Network Rail's North West route, other than the section of the west coast main line between Penrith and Cove level crossing. This was notified to the train and freight operating companies at 11:49 hrs on Sunday 20 February by Network Rail and was in place between 00:01 hrs and 10:00 hrs on Monday 21 February.
- The Scotland 40 mph BESR which covered the section of Network Rail's Glasgow South Western line from Kilmarnock station to the route boundary. This was notified to the train and freight operating companies at 23:35 hrs on Sunday 20 February and was in place between 23:35 hrs on Sunday 20 February and 09:00 hrs on Monday 21 February.

The key features of the three incidents are summarised below:

1. At approximately 02:53 hrs on 21 February, train 1M11, the 23:15 hrs Caledonian sleeper from Glasgow Central to Euston, was observed by the signaller at Carlisle passing Harrison's sidings (approximately 10 miles south of Penrith) at 67 mph while the North West 50 mph BESR was in place. GBRf, who supplied the locomotive and driver, had previously acknowledged receiving the BESR. The driver involved booked on remotely and didn't receive information about the BESR on the NW route (although he was informed by GSM-R of all relevant BESRs that had been imposed in Scotland). This meant that the driver was therefore unaware of the BESR when the overspeed took place.
2. At approximately 07:44 hrs on 21 February, the driver of train 1S36, the 06:15 hrs Avanti West Coast service from Birmingham New Street to Edinburgh, was examining the line at Dallam (just north of Warrington) following a report of plastic sheeting on the overhead line equipment. While this was taking place, the Avanti West Coast controller asked the train manager if the driver was aware of the North West 50 mph BESR in force at the time. The driver confirmed that he was not. The train had previously reached speeds of up to 125 mph throughout its journey from Wolverhampton to Warrington. Avanti West Coast had used its late notice procedure to inform drivers of the BESR when they booked on for duty. However, the late notice received by the driver only showed one BESR in England, covering the route from Penrith to Cove Level crossing. This was the converse of the actual BESR that Network Rail had imposed, which included the whole of the west coast main line in the NW route except for Penrith to Cove Level crossing. This again meant that the driver was unaware of the BESR when the overspeed took place.
3. At approximately 09:03 hrs on 21 February, train 1L95, the 07:09 hrs Scotrail service from Glasgow Central to Carlisle via Kilmarnock, travelled through an area where a 50 mph BESR was in force at the normal linespeed of 70 mph. The driver had been correctly advised when booking on of the existence of a BESR, which covered the whole section of line from Kilmarnock to the boundary with the North West route, near Gretna, and which was due to expire at 09:00 hrs. The driver observed the BESR until 09:03 hrs when he was just south of Sanquhar, at which point he accelerated to linespeed (70 mph). However, an extension to the BESR covering the section of the route between Sanquhar and Thornhill had issued at 09:05 hrs, effective until 12:30 hrs. The driver was unaware of the extension at the time it was implemented, and was therefore also unaware of the BESR, when the overspeed took place.

The incidents show examples of three different mechanisms which resulted in the intent of the BESR not being met, and in trains potentially travelling too fast for the prevailing conditions. These incidents also highlight different issues surrounding the communication of BESRs to drivers, including a potential for error where BESRs are introduced in a pre-planned manner but without supporting GSM-R broadcasts being made to drivers.

We have reviewed the findings of this preliminary examination and have decided not to carry out any further investigation of the incidents. RAIB has previously made recommendations in [RAIB report 08/2021](#) 'Trains overspeeding between Laurencekirk and Portlethen', published on 4 December 2021, which covers topics which are relevant to the above three incidents. The first recommendation seeks an improvement to the BESR notices provided to drivers and the second seeks a review of the methods used to implement blanket emergency speed restrictions. The learning points cover the importance of drivers being aware of information contained in late notices, and the need for safety critical communications to provide clear and unambiguous information.

We have written to the Office of Rail and Road (ORR) and sent copies of the letter to the train and freight operating companies and Network Rail, to alert ORR and the railway industry to the incidents and the circumstances surrounding them.

RAIB is aware that there is currently an industry initiative responding to the recommendations made in the Laurencekirk and Portlethen investigation report, and we hope that these incidents will inform the industry's response to these recommendations, particularly around how drivers who book on remotely are informed about BESRs in the absence of GSM-R notification.

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