Second rail collision follows London, Paddington disaster

Mike Ingram
20 October 1999

A second crash has heightened concerns over rail safety in the aftermath of Britain's worst rail disaster in decades at London's Paddington Station. One passenger was slightly injured Monday night in an accident near Lewes Station in Kent. Connex Trains' 17.53 London Victoria commuter service heading to Hastings hit the empty Connex 18.42 Seaford to Brighton train.

A British Transport Police spokesman said early indications were that one of the trains went through a red light, the same immediate cause as the Paddington crash. The Hastings train had set off from Gatwick 10 minutes late, said Connex spokesman Dave Ewert. It was travelling at less than 15 mph and had about 10 passengers on board when it collided with the empty train that was being shunted across the track towards the platform.

The Lewes crash has given emphasis to growing concerns about passenger safety on Britain's privatised rail services. As events of that tragic day on October 5 at Paddington are gradually pieced together, the picture that emerges serves as a damning indictment of the rail companies.

The Thames Turbo driver, Michael Hodder, who was killed in the crash, had only been qualified for two weeks, not two months as first reported. Investigators believe that a combination of bright autumn sunlight reflecting on the signals and poor track layout gave Hodder little chance of escape as he headed towards disaster.

Investigators believe that signal 109 was showing red as Michael Hodder's train approached, but with the morning sun reflected straight onto its lenses, he could have perceived it as one or two yellow lights—both of which mean “proceed with caution”.

The “black box” from the front of the Thames train was so badly damaged that it is virtually useless, but information from the one in the rear of the three-carriage train shows that it coasted towards signal 109, and was not under power.

This suggests that the train had passed earlier yellow signals warning the driver to expect a red light and that he was anticipating stopping. Just before signal 109, the investigators believe Hodder cancelled the on-board warning systems which would otherwise have braked the train automatically, and sped up to 54.47 mph—exactly as he would have done on receiving a yellow light.

Having been mislead by an obscure signal, the inexperienced driver then confronted a confused track layout with fundamental design flaws. Despite the red signal, three sets of points were then set in Mr. Hodder's favour, allowing his train to proceed headlong into the Great Western Express. If two of the three sets of points had been set against the Thames train, they would have directed it safely on to other tracks that were empty that day and never carry trains running in the opposite direction; thus ruling out a head-on collision.

Much of the 700-yard stretch of track between signal 109 and the point of the crash is designed to allow express trains to approach Paddington at up to 100 mph in order to clip seconds off the timetable. It is said to be one of the fastest—if not the fastest—approaches to a mainline terminal in London. In recognition of the dangers such a high-speed limit represents, all services will be restricted to 50 mph, if the approach is allowed to reopen. Safety campaigners are demanding that this restriction be made permanent.

It emerged last week that the signalman at Paddington had made a desperate attempt to avert the crash. As he recognised the Thames train had passed signal 109 at red; he tried to switch the points to take the train onto

another track to the driver's left. This track was empty at the time and was only used by trains going in the same direction as the Thames train, so any collision would have been less serious. The signalman's efforts proved to be in vain, however. Once signal 109 switched to red, the points were locked forcing the Thames train to go straight ahead and into the path of the oncoming Great Western Express.

The points flaw has highlighted repeated concerns voiced over a fatal defect in the track layout at Paddington. The *Sunday Times* quoted an unnamed source saying: “Basically, at that point, a train can go three ways. It can go straight ahead until the line converges with the main line; it can go through another set of points, which also takes it on to the main line; or it can go onto another track to its right. Whatever way it goes, it is in danger of colliding with another train.”

It has also been revealed that Railtrack removed a relatively simple safety feature in track redesigns—a set of points designed to derail the train if it goes past a red light and send it into a sand trap that could have prevented the crash.

Contrary to early reports, it is now believed that more passengers died aboard the Thames Turbo train than the much larger Great Western Express. The difference is being put down to the materials used in the building of the two trains. According to rail industry experts, the survival of so many passengers in the first carriage of the Great Western train was due to the high standards of engineering at the Derby works of British Rail when the train was built.

“This was Mark 3 rolling stock dating from the introduction of high speed trains in the mid-seventies. It's a steel design based on technology developed in the fifties and sixties and improved over the years. It's based on the simple premise that a tube is a very good structure because it retains its strength under impact,” said Andrew Goodman of *Rail Professional* magazine.

“The Thames train was probably built in the early nineties and, being made of aluminium, performed much more poorly when the crash occurred,” he added.

This fact will focus attention on the causes of the raging inferno that engulfed the first carriage of the Great Western train. Following earlier reports of a highly flammable “winter diesel” used by the company, it has now been revealed that the train involved in the Paddington crash had a faulty fuel tank valve.

It was disclosed Monday that details of the fault, which led to a leakage from the power unit tank when it was being filled at the depot, were given in a report to Great Western in July. The company said that the problem only occurred during filling, had not recurred since and presented no danger to the train in operation. Such explanations are unlikely to placate the growing anger of rail users, given the significance of the fire in the Paddington disaster.

A seven-page report, compiled for the train drivers' union Aslef, says that eight signals on the up-line towards Paddington and 11 on the down-line were so dangerous they should be covered up before the station reopens.

Roy Bell, an independent rail expert and former head of Railtrack, said in the report, which has been handed to the Health and Safety Executive, that 24 signals in the area were badly obscured. He said that in the long-run, 19 signals should be taken out of use and another eight simplified. Bell also called for the abolition of unnecessary bi-directional tracks, which carry trains running both towards and away from Paddington.

See Also:

Privatisation, deregulation and the London rail disaster
[14 October 1999]