Rail Accident Investigation

At the end of January the British Rail Accident Investigation Branch (RAIB) released its report into a near miss involving a freight train and two passenger trains at Carstairs in Scotland on 22nd December 2009.

The sole purpose of RAIB investigations is to prevent future accidents and incidents and improve railway safety. The RAIB does not establish blame, liability or carry out prosecutions.

Introduction

On 22nd December 2009, a freight train travelling south on the West Coast Main Line, in freezing temperatures and snow, passed two red signals in succession at Carstairs. It came to a stand over Carstairs Station junction, almost two and a half miles after it had started braking. A passenger train had passed clear of the junction about 75 seconds before the freight train arrived at it. Actions taken by the signaller stopped the freight train from travelling towards a second passenger train that was also approaching Carstairs. Nobody was injured and there was no damage to trains or infrastructure. However, under slightly different circumstances the incident may have led to either a collision between trains or a derailment.

The RAIB investigation found that the freight train’s wagons had a significantly reduced braking performance due to snow and ice ingress which prevented their brake equipment from working properly.

The situation occurred due to a combination of factors including:

- the rules for the operation of trains in snow were difficult for the driver of the freight train to implement and were interpreted in a way that made them ineffective; and
- the amount of lying snow that was disturbed by the train while running at its maximum permitted speed.

After the incident, Freightliner, the company that operated the freight train, issued advice to all of its train drivers to remind them of the rules for testing their train’s brakes in snowy conditions. The freight operating companies have also issued a code of practice which offers specific guidance to drivers about testing the operation of freight train brakes in snowy conditions. It also gives general guidance on how to minimise the risks associated with operating freight trains in winter weather.
Recommendations
The RAIB has made three recommendations: two relate to the rules for operating trains in snowy conditions and are targeted at the freight operating companies in conjunction with the Rail Safety and Standards Board, while the third is targeted at the freight operating companies:

- review the practicalities of testing freight train brakes on rising gradients and identify how the rules can be modified if the driver does not test the train’s brakes for more than five minutes;
- the modification of an existing rule related to the speed of trains when operating in snow; and
- review the safety impact of operating freight trains in snow and use the findings to identify how risks can be controlled by measures such as reducing speed or diverting services.