



## REASSESSMENT OF THE RESPONSE FROM TRANSPORT CANADA TO RAIL SAFETY RECOMMENDATION R92-06

### TRUCKS COMPONENT WEAR

#### Background

TSB's investigation into a number of derailments involving leased tank cars determined that these derailments occurred when the tank cars had truck component wear on interrelated components which individually did not exceed the condemning limit, but collectively the combinations of wear reduced the suspension damping of the trucks. The application of existing maintenance and inspection practices did not prompt the required remedial action. Specifically, the Association of American Railroads (AAR) Rules governing inspection and repair of worn truck components on leased tank cars were not prompting the railway companies to initiate repairs to leased tank cars.

#### Board Recommendation R92-06 (18 March 1992)

Following a number of derailments to leased tank cars where truck component wear was a contributing factor, and in consideration of the potential consequences of derailments involving tank cars carrying dangerous goods, the Board recommends that:

The Department of Transport prescribe condemning limits for combination truck component wear for all leased cars in service on federally regulated railways.

R92-06

#### Response to R92-06 (11 June 1992)

Transport Canada (TC) indicated that some safety action had been taken but only with respect to single component wear within the truck.

#### Board Assessment of Response to R92-06 (August 1992)

Given that the safety action taken was only with respect to single component wear, the response was assessed as **Unsatisfactory**.

#### Next TSB Action (August 1992)

The Board followed up with TC to determine what action would be implemented.

This deficiency file was assigned an **Active** status.

### **Board Reassessment of Response to R92-06 (December 1997)**

Staff reviewed the assessment and in consideration that the AAR research group had undertaken initiatives to address the issue, the assessment was changed to **Satisfactory in Part**.

### **Next TSB Action (December 1997)**

The Board followed up with TC to determine what action would be implemented.

This deficiency file was assigned an **Active** status.

### **Response to R92-06 (June 2003)**

In 2003, Transport Canada submitted a Rail Safety Update and, in that document, they advised that the AAR's Transportation Technology Center, in collaboration with several railways have implemented test sites called Truck Performance Detectors (TPD) where "in use" data is collected for analysis of lateral forces created by truck components in service. These advanced techniques (which are superior to current visual and dimensional methods) will give objective maintenance attention criteria. The data received from the TPD sites will allow early targeting of poor performing trucks and for subsequent repairs to be scheduled. TC indicated that the advanced truck performance monitoring technology will provide the data required to develop the standards for combined truck component wear condemning limits.

### **Board Reassessment of Response to R92-06 (November 2003)**

In consideration that the AAR project to develop the required standards is progressing with a certain amount of success, but not completed, the response to Recommendation R06-92 was reassessed as having **Satisfactory Intent**.

### **Response to R92-06 (28 July 2006)**

TC indicated that the AAR has taken steps to work with the industry and has implemented many changes. On 02 June 2006, AAR Circular C-10235 was issued. This document indicated the Rule 46 had been updated based on some of the comments received.

In addition, Rule 46 (effective 01 July 2006) now incorporates the new criteria for truck hunting. A previous Circular Letter advised that a revision will also be made to Rule 1.5.a.(17) to include wedge rise gauges. To allow time for the provisioning of these gauges across the system, that requirement will be added to Rule 1, on or about 01, October 2006. In the meantime, where repair tracks are so equipped, they have been required to start gauging wedge rise as of 01 July 2006.

In addition, a companion Rule change was identified by the Arbitration and Rules Committee for addition to the Field Manual in Section B of Rule 88. The change is intended to clearly spell out the requirements when the car owner has possession of a car shopped for hunting.

### **Board Reassessment of Response to R92-06 (25 August 2006)**

The AAR project has issued new truck component wear condemning limit criteria and interchange rules which prescribe condemning limits both from a static measurement of

combination wear and a condemning limit based on dynamic measurement from a wayside truck hunting detector.

In consideration that the industry has responded with new Rules and technology to address the safety deficiency, the response to Recommendation R06-92 is reassessed as **Fully Satisfactory**.

**Next TSB Action (25 August 2006)**

This file has been assigned a **Closed** status.