



## **REASSESSMENT OF THE RESPONSE TO RAIL SAFETY RECOMMENDATION R93-03 – R90C0092**

### **DESTRESSING CONTINUOUS WELDED RAIL**

#### **BACKGROUND**

On 26 June 1990, Canadian Pacific Limited (CP) train No. 2-571-24, travelling at a speed of 44 mph derailed 25 cars at Mile 78.2 of the Maple Creek Subdivision, near Cardell, Saskatchewan. There were no injuries as a result of this occurrence. The Board found that the cause of this derailment was track buckle resulting from expansion forces in the continuous welded rail, created by extremely high ambient temperature. The rail was not contained by the ties resting in unsettled ballast.

The Board concluded its investigation and released report R90C0092 in February 1993.

#### **Board Recommendation R93-03 (February 1993)**

In view of the wide temperature variations in Canada under which track is maintained, firm standards for destressing continuous welded rail are required. Therefore, the Board recommended that:

The Department of Transport ensure that federally regulated railways are correctly applying appropriate standards for destressing continuous welded rail.

R93-03

#### **Response to R93-03 (19 August 1993)**

Transport Canada advised that the Department was examining railway policies concerning the handling of continuous welded rail, as well as railway employee knowledge of, and compliance with, these policies. Upon completion of this examination the Board will be advised of conclusions reached and any action taken.

#### **Board Assessment of Response to R93-03 (September 1993)**

The reply does not elaborate on the examination, time for completion, scope, exact nature, etc. Staff has been unable to find any evidence (at TC or the RAC) that any action is being taken by TC relating to this purported examination. Therefore, the Board assessed the response as “Unsatisfactory”.

### **Additional Response to R93-03 (09 April 2001)**

Transport Canada submitted an additional response to R93-03 and they advised that the new amendments to the RSA - which came into force June 1, 1999 - provide for the establishment of regulations for safety management systems for railway operators.

The Regulations will require new railways to submit information on their safety management systems 60 days prior to commencing operations. The intent of this submission is to provide early assurance that the company has developed and implemented a Safety Management System that meets regulatory requirements. The submissions must include evidence of internal monitoring systems and the applicable regulations and rules. Anytime after the submission, the company is subject to TC's audits of their SMS. (See further details in Minister's response dated March 30, 2000 to TSB's final Recommendations.) TC considers this recommendation closed.

### **Board Reassessment of Response to R93-03 (December 2004)**

The Board has conducted recent investigations where the issue of controlling the internal stresses of continuous welded rail has been causal or contributory in occurrences. As the deficiencies associated with CWR have not been mitigated and as TC has considered this issue closed the Board maintains the assessment of response to this recommendation as **"Unsatisfactory"**.

### **Board Reassessment of Response to R93-03 (December 2005)**

Standards and procedures for handling continuous welded rail have been submitted by the railways as part of their Safety Management Systems. In consideration that TC has provided no details on their monitoring activities, the Board reassesses the response to this recommendation as **"Satisfactory in Part"**.

### **Additional Response to R93-03 (July 2006)**

Transport Canada submitted an additional response in 2006 advising that TC recognizes that while railways recently updated the procedures, thermal misalignment remains a concern. The US Federal Railroad Administration (FRA) has established a working group to develop new standards for the inspection and maintenance of continuous welded rail. TC has representation on that working group. This recommendation remains open for TC.

### **Board Reassessment of Response to R93-03 (August 2006)**

Transport Canada is participating in the FRA working group to develop new standards for the inspection and maintenance of CWR. As the working group has commenced, but the outcome is not known, the Board maintains the assessment of response to this recommendation as **"Satisfactory in Part"**.

### **Additional Response to R93-03 (June 2010)**

The FRA working group, which included representation from Transport Canada, has completed CFR213-118 and CFR213-119. TC is reviewing these documents to determine if harmonization is feasible.

### **Board Reassessment of Response to R93-03 (August 2010)**

CFR213-118 and CFR213-119 are US FRA regulations. As TC's review has commenced but has not been completed the Board maintains the assessment of the response to this recommendation as "**Satisfactory in Part**".

### **Additional Response to R93-03 (December 2010)**

TC has confirmed that both CN and CP have established standards for the destressing of continuous welded rail and that the standards applied are adequate to ensure safety. TC Rail Safety Inspectors monitor both railways for compliance.

### **Board Reassessment of Response to R93-03 (February 2011)**

Transport Canada has confirmed that both CN and CP have established standards for the destressing of CWR, and that the standards applied are adequate to ensure safety. TC continues to evaluate the results of a joint TC - US FRA working group that established US standards for the inspection and maintenance of CWR for possible harmonization with TC's Track Safety Rules. The Board reassesses the response to Recommendation R93-03 as "**Fully Satisfactory**".

### **Next TSB Action**

This file is assigned a **Closed** status.