



Federal Railroad Administration

September 21, 2006
Railroad Safety Advisory Committee

Inspection of Joints in
Continuous Welded Rail

Working Group Report

SAFETEA-LU

August 10, 2005 - Safe, Accountable, Flexible,
Efficient Transportation Equity Act - A Legacy for
Users (SAFETEA-LU).

SAFETEA-LU

- Requires each track owner to implement procedures to improve the identification of cracks and other incipient failures in bolted joints within Continuous Welded Rail (CWR).
 - Interim Final Rule regarding CWR was published on November 2, 2005, 70 Federal Register 66288, Docket No. FRA 2005–22522. Compliance date January 3, 2006, for new paragraph (g) under §213.119.

CWR Working Group

The CWR Working group was established on February 16, 2006 to review and revise the CWR related provisions of the Track Safety Standards.

CWR Working Group Tasks

- Phase 1: Analyzing the IFR on inspection of joint bars in CWR territory, reviewing the comments to the IFR, and preparing recommendations for the final rule in regard to CWR joints.
- Phase 2: Evaluate further enhancements for the management of CWR to prevent track buckling and joint failures, including design, maintenance and inspection.

Final Rule on Inspection of CWR Joints (Phase 1)

- The working group conducted four meetings and reached consensus on recommendations for a final rule regarding the inspection of CWR joints.
- FRA has greatly benefited from the open, informed exchange of information that has taken place. The working group also benefited from participation of NTSB staff.
- On August 11, 2006, the RSAC accepted these recommendations and voted to forward them to FRA as the basis for a final rule on the inspection of CWR joints.

Recommendations to FRA

- Many provisions of the IFR are retained.
- The working group recommended the elimination of the inventory requirements and proposed additional specificity to the inspection requirements.
- In lieu of the data supplied by a CWR Joint Inventory, the railroad would supply information regarding cracked and broken CWR joint bars to the FRA. (Fracture Reports). FRA will analyze this data to enhance industry knowledge with regard to the factors causing broken joint bars.

Enhancements for the Management of CWR (Phase 2)

- The Working Group is beginning to consider several topics for further discussion and consensus.
- Training: Consideration of a standard for the qualifications of a person who inspects and maintains CWR.
- Special Inspections: Consider incorporating in paragraph (f), indications of damage to joints, environmental conditions or other factors.

Enhancements for the Management of CWR (Phase 2)

- Plans: Develop a mechanism for updating and submitting program procedures to HQ and for the notification and resubmission criteria for modifications to program plans.
- Manuals: Maintenance and retention of procedures/guidelines in field by MOW personnel.
- Ballast and Anchoring Criteria: Consider developing specific criteria.

Accident Review

- The Working Group established a team to review accidents with track buckling as the primary or secondary cause.
- The Team will consider accidents investigated by FRA, NRC, NTSB and review accident information from railroads.

Engineering Standards

- The Working Group is discussing a proposal by FRA to establish a team to identify how research has been implemented in major railroads CWR policies and to review commuter and other railroad procedures.
- The Team would identify benchmark procedures which could be applied by regional and shortline railroads.

Next Working Group Meeting

The Working Group plans to meet on January 30 & 31, 2007 at a location to be determined.

Questions and Discussion