



U.S. Department of
Transportation

Federal Railroad
Administration

**Railroad Safety Advisory Committee Task Statement:
Appropriate Train Crew Size**

Task No.: 13-05

Date initially presented to the RSAC: August 29, 2013

Purpose:

- Evaluate whether and how crew redundancy affects railroad safety.
- Evaluate whether there are any types of railroad services or operations requiring redundant crew members.
- Evaluate whether there are acceptable methods to provide crew redundancy if redundancy is deemed necessary.
- Evaluate whether there is an appropriate train crew size for both passenger and freight operations necessary to assure railroad safety.

Background: In light of the recent Canadian train incident and the subsequent emergency directive issued by Transport Canada, FRA believes it is appropriate to review whether train crew staffing practices affect railroad safety.

Description: Review the following regulations and documents to evaluate whether and how crew size impacts railroad safety:

- 49 CFR Part 214 Subpart C, Roadway Worker Protection
- 49 CFR Part 218 Subpart B, Blue Signal Protection of Workers.
- 49 CFR Part 219, Control of Alcohol and Drug Use. § 219.405, Co-Worker Report Policy
- 49 CFR Part 220 Subpart B, Radio and Wireless Communication Procedures.
- 49 CFR Part 220 Subpart C, Electronic Devices.
- 49 CFR Part 221, Rear End Marking Device- Passenger, Commuter and Freight Trains.
- 49 CFR Part 232, Brake System Safety Standards for Freight and Other Non-Passenger Trains and Equipment; End-of-Train Devices. § 232.103 (n) and Subpart C.
- 49 CFR Part 234 Subpart C, Response to Credible Reports of Warning System Malfunction at Highway-Rail Grade Crossings.
- 49 CFR Part 238, Passenger Equipment Safety Standards.
- 49 CFR Part 239 Subpart C- Passenger Train Emergency Preparedness.
- 49 CFR Part 240, Qualification and Certification of Locomotive Engineers.
- 49 CFR Part 242, Qualification and Certification of Conductors.
- Review published studies and reports as appropriate.

Issues requiring specific report:

- Report on whether there is a safety benefit or detriment from crew redundancy, including an analysis of observed safety data and outcomes from current crew deployment practices.
- Review existing regulations and consider the impact of crew size on the performance of any task or activity.
- Report on the costs and benefits associated with crew redundancy.
- If appropriate, develop recommended regulatory language or guidance documents regarding crew size requirements that enhance the safety of railroad operations by providing enhanced regulatory

redundancy. In considering the development of regulatory language, specifically consider the value of regulatory redundancy in terms of crew size as it relates to trains or vehicles identified by the group responsible for task no. 13-02 as requiring special handling and/or operational controls, and if appropriate develop recommended regulatory language specific to these railroad operations.

Other Issues: Consider the appropriate role and impact of technological advances on crew size and crew deployment and incorporate these into any recommendation developed. Consider PTC and Remote Control Operations or other operations where crew deployment practices or the use of technology may enhance the safety of operations. Consider the application of a System Safety Program to these issues.

Refer to/establish following working group: Train Crew Working Group

Target Dates: Report recommendations to the Committee by April 1, 2014.

Disposition: Accepted

Accepted Date: August 29, 2013