

Recording Devices Working Group Update



53rd Meeting of the Railroad Safety Advisory Committee

May 28, 2015
Washington, DC

Recording Devices Working Group (RDWG) Update

- 📁 Review task statement
- 📁 RDWG meetings to date
- 📁 FRA position on recording devices
- 📁 Questions to be resolved
 - Control and use of data
 - Technical requirements
- 📁 Scheduled meetings and report to full RSAC

Task No. 14-01

Purpose:

To develop regulatory recommendations addressing the installation and use of inward- and outward-facing image recorders in controlling locomotive cabs.

The recommendations should address installation requirements and timelines, technical controls, recording retention periods, retrieval of recordings, controlled custody of recordings, crashworthiness standards at least equivalent to those for locomotive event recorders, use of recordings for accident investigation and railroad safety study purposes, and use of recordings in conducting operational tests.

Task No. 14-01

Background:

In light of NTSB Recommendations R-10-1, R-10-2, and recent accidents, FRA believes it is appropriate to evaluate the adoption of regulations addressing inward- and outward-facing locomotive image and audio recorders to advance railroad safety.

Recordings would be used:

- to assist in post-accident/incident investigations (railroad, highway-rail grade crossing, and trespasser).
- to assist in evaluating railroad employee fatigue, distraction, and crew interactions.
- for use as a training tool for railroad employees, and for use in conducting operational tests of railroad employees.

Task No. 14-01

Description:

- NTSB Recommendations R-10-1 and R-10-2
- 49 Code of Federal Regulations (CFR) Part 229, Railroad Locomotive Safety Standards
- 49 CFR Part 218, Subpart D, Prohibition Against Tampering With Safety Devices
- 49 CFR Part 217, Railroad Operating Rules
- Railroad accidents (e.g., Chatsworth, CA; Goodwell, OK; Bronx, NY)

Task No. 14-01

Issues requiring specific report:



- 📁 All matters related to the development of regulatory standards governing the installation and use of inward- and outward-facing images and audio recorders in controlling locomotive cabs, including economic data required for regulatory analysis.

Task No. 14-01

NTSB Recommendations R-10-1 and R-10-2:

- Require the installation, in all controlling locomotive cabs and cab car operating compartments, of crash- and fire-protected inward- and outward-facing audio and image recorders capable of providing recordings to verify that train crew actions are in accordance with rules and procedures that are essential to safety, as well as train operating conditions.

Task No. 14-01

-  The devices should have a minimum 12-hour continuous recording capability with recordings that are easily accessible for review, with appropriate limitations on public release, for the investigation of accidents or for use by management in carrying out efficiency testing and systemwide performance monitoring programs. (R-10-1).
-  Require that railroads regularly review and use in-cab audio and image recordings (with appropriate limitations on public release), in conjunction with other performance data, to verify that train crew actions are in accordance with rules and procedures that are essential to safety. (R-10-2).

RDWG Update

Scheduled RDWG meetings:

- 📅 June 5, 2014
- 📅 September 2-3, 2014
- 📅 October 28-29, 2014
- 📅 December 9-10, 2014
- 📅 January 27-29, 2015 (Postponed)
- 📅 March 3-4, 2015

RDWG Update

FRA positions on recording devices

- ❑ Mandate outward- and inward-facing image recording devices.
- ❑ Audio allowed but not mandated
- ❑ Allow operational testing using image recording devices with established random selection requirements for inward-facing recording devices.

Recording Protection and Handling

Railroad Handling and Release

- Development of rule text requiring railroads to adopt and comply with chain-of-custody and release protocols for locomotive recordings.

Recording Protection and Handling

Limitations on the release of locomotive recordings:

- 📁 FOIA – related issues
- 📁 Handling of locomotive recordings and chain-of-custody after an accident/incident
- 📁 49 CFR Section 229.135(e)(f), event recorder requirements

Recording Protection and Handling

FRA's preliminary position regarding controls on two types of locomotive recordings:

- 📹 Outward-facing recordings
- 📹 Inward-facing recordings

Recording Protection and Handling

Outward-facing recordings

- Least restrictive controls due to lack of privacy interest, merely recording view of the environment outside of the locomotive cab that the public can also see.
- FRA preliminary position (49 CFR § 229.135(e)), in the event of an accident/incident required to be reported under part 225, railroads shall preserve such recordings for one year for potential analysis by FRA and/or the NTSB.

Recording Protection and Handling

Inward-facing image recordings

- ❏ Stricter controls due to elevated privacy interests, as recordings are of actions of employees inside the locomotive cab.
- ❏ FRA preliminary position, recordings shall only be retained and accessed by the railroad, or by FRA/the NTSB, in the event of:
 - an accident/incident required to be reported under part 225.

Recording Protection and Handling

- Other specific triggering events to be contemplated by the Working Group (e.g., stop signal violations):
 - Violation of a Federal railroad safety law, regulation or order.
 - Performance of operational tests in accordance with part 217, with mandatory “randomness” protocols for such testing.
 - Investigation of violations of criminal or civil laws.
 - Original recording to FRA/the NTSB if requested, railroad may retain copy.

Recording Protection and Handling

Inward-facing image recordings

- Recordings must be retained for one year from the date of a triggering event, and applicable chain-of-custody protocols must be followed.
- Use of recordings in part 240/242 certification actions or as evidence in other administrative proceedings to be considered.

Technical Requirements

Which locomotives must be equipped?

- Defined by speed, similar to event recorders (required when locomotives operate at more than 30 mph).
- Defined by Class of railroad, such as Class I and Class II railroads, and defined passenger operations.
- Defined by employee work hours, railroads with more than 400,000 total employee work hours per year.

RDWG Update

Meeting Issues (December 9-10, 2015)

- Meeting adjourned December 9 after industry request to develop joint Pilot Project Proposal.
- FRA agreed to delay and cancel January meeting and requested status reports in January and February.
- Notified in February that parties could not reach agreement on Pilot Project.

Meeting Issues (March 3-4, 2015)

- Meeting ended without RDWG reaching consensus on any areas of task.

Task No. 14-01

- ❏ Recommendations to full RSAC were due April 1, 2015.
- ❏ In absence of consensus recommendations of the RDWG and the RSAC, FRA will proceed with NPRM through traditional rulemaking process.

Questions?