Railroad Track Inspections - Overview

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Presentation Overview

- Railroad Operations and Safety Branch (ROSB).
- Railroad inspection overview.
- Enforcement tools.
- Non-compliance examples.
- Resulting actions.
Railroad Operations and Safety Branch (ROSB)

- Provides state oversight of “national network” railroads in CA.
  - Freight: Union Pacific, Burlington Northern Santa Fe, short lines.
  - Passenger: Amtrak, Caltrain, Metrolink, others.
- Has 37 railroad inspectors.
  - Track and structures.
  - Motive power and equipment.
  - Operating rules.
  - Signal and train control.
  - Hazardous materials shipping.
ROSB (cont.)

• Works in partnership with the Federal Railroad Administration (FRA).

• ROSB inspectors:
  • 27 FRA-certified inspectors.
  • 4 inspectors in training.
  • 3 vacancies (2 signal, 1 track).
  • 1 manager, 2 supervisors.
Railroad Track Inspections

- ROSB has 7 FRA-certified track inspectors
  - Plus one vacancy.
- California state mandate: Every main and branch line mile every year.
  - 7,109 main and branch line miles.
  - Approximately 10,000 total miles in CA.
- Walking, hi-rail, and geometry car.
- Annual recurrent training.
Railroad Track Inspections

Applicable Code of Federal Regulations (CFR)
- 49 CFR – Part 214 – Roadway Worker Protection

Applicable CA General Orders and Public Utility Codes
- General Order 26-D – Side and overhead clearances
- General Order 118-A – Walkway surfaces
ROSB/FRA Enforcement Tools

ROSB/FRA has several enforcement tools, most common:

- Defect report
- Violation report (recommending a civil penalty)
• **Defect**: A condition not in compliance with the TSS.
  • Defects are noted on inspection reports:
    • Serve as notification to the railroad.
    • Serve as notice of ROSB/FRA’s awareness of the defect.

**Example:** Center crack joint bar (defect), CFR 121.03 - Remedial action is to halt operations, or repair before next train, or apply 213.9(b) if determined safe to do so by a qualified person.
Violation (Recommendation for Civil Penalty)

A violation serves three primary purposes:

1) Notifies the railroad of an egregious safety condition.
2) Notifies the railroad of non-compliance with the Track Safety Standards.
3) Notifies the railroad that civil penalty is recommended.

Example:
- Egregious joint tie defect
- Warrants a civil penalty recommendation
Track Inspection - Quick Example

What’s wrong with this picture?
Insufficient drainage (CFR 213.33):

- Causes track surface level issues.
- Creates rail car instability.
- Increases lateral dynamic stress at switch points.
- May allow switch to open and cause derailment.
Defective Ties –

- Split, worn, not holding spikes
- Thus not restraining switch stand.
- Switch stand secures and operates switch points.
Tripping Hazards, according to State General Order 118-A
Resulting Actions

- Issues discussed with railroad management.
- Action plan made.
- Railroad inspection failure analyzed and addressed.
- Defect or violation issued.
- Follow-up inspection.

2012:
- 3,361 track standards defect reports.
- 15 track standards violation reports.
Effective track inspections can prevent accidents like this.