



National Transportation Safety Board

Rail Transit Accident Investigations

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Presentation Outline

- NTSB overview
- Accident notification
- On-scene investigation
- Party process

NTSB Legislative Mandate

- Maintaining our congressionally mandated independence and objectivity
- Conducting objective, precise accident investigations and safety studies
- Performing fair and objective airman and mariner certification appeals
- Advocating and promoting safety recommendations
- Assisting victims of transportation disasters and their families

NTSB Values

- Integrity
- Transparency
- Independence
- Excellence

NTSB Board

- Five Board Members
- Chairman and Vice Chairman
- Nominated by President; confirmed by Senate
- No more than three Members of the same political party
- Board Members are not investigators



RPH Organization

- Railroad Division
- Pipeline and Hazardous Materials Division
- System Safety Division
- Report Development Division



Railroad Division Staff

- Division Chief and Deputy Chief
- Investigators
 - Four operations
 - Three mechanical
 - Three track and engineering
 - Three signals and train control

Accident Notification

- Title 49 CFR Part 840
- *Railroad* means any system of surface transportation of persons or property over rails. It includes, but is not limited to, line-haul freight and passenger-carrying railroads and rapid transit, commuter, scenic, subway, and elevated railways.

Accident Notification

- *Accident* means any collision, derailment, or explosion involving railroad trains, locomotives, and cars; or any other loss-causing event involving the operation of such railroad equipment that results in a fatality to a passenger or employee, or the emergency evacuation of persons
- *Fatality* means the death of a person either at the time an accident occurs or within 24 hours thereafter

Initial Accident Notification

The operator of a railroad shall notify the NTSB by telephoning

National Response Center
800-424-0201

at the earliest practicable time after the occurrence of any one of the following railroad accidents --

No Later than 2 Hours

- A passenger or employee fatality or
- Serious injury to two or more crewmembers or passengers requiring admission to a hospital
- The evacuation of a passenger train
- Damage to a tank car or container resulting in release of hazardous materials or
- Involving evacuation of the general public
- A fatality at a grade crossing

No Later than 4 Hours

- Damage (estimate) of \$150,000 or more for repairs, or the current replacement cost, to railroad and non-railroad property
- Damage of \$25,000 or more to a passenger train and railroad and non-railroad property

Decision to Launch

- Significant impact on public
- Unique circumstances of accident
- Recurring issues
 - Roadway worker fatalities
 - Fitness for duty
 - Most Wanted List
- Resources



Major Accident Investigation Team

- Investigator-In-Charge
- Signals and Train Control
- Mechanical
- Operations
- Track and Engineering
- Crashworthiness
- Human Performance
- System Safety



Major Accident Investigation Team

- Event Recorders
- Video Recorders
- 3D Scanning
- Drone Imaging
- Materials Lab
- Fire Science



Major Accident Investigation Team

- Board Member
- Board Member's Assistant
- Media Relations
- General Counsel
- Government Affairs
- Transportation Disaster Assistance
- IT Support



IIC Initial Duties

- Contact property
 - Secure perishable evidence
 - Ensure data and video recorders download
 - Coordinate interviews, wreck clearing, and response and recovery efforts
 - Identify parties to the investigation



Authority of Investigators

- Question any person who may possess relevant information
- Inspect, examine, photograph, copy, *or take* possession of any document, record, file, process, control, item, *or facility*
- Enter property relevant to an investigation, or where accident wreckage is located, and do anything necessary to conduct the investigation or study

Parties to the Investigation

- Provide suitable qualified technical personnel to actively assist
- Must follow all directions and instructions from NTSB representatives

Party Agreement

- Party representatives sign
- Outlines rules
 - No participation by attorneys, insurers
 - Investigation information controlled
 - Contact with media generally not allowed



On-Scene Investigation

- Organizational meeting
 - Party process explained
 - Working groups established
- Progress meetings
- Close-out meeting
 - Information exchanged through field notes

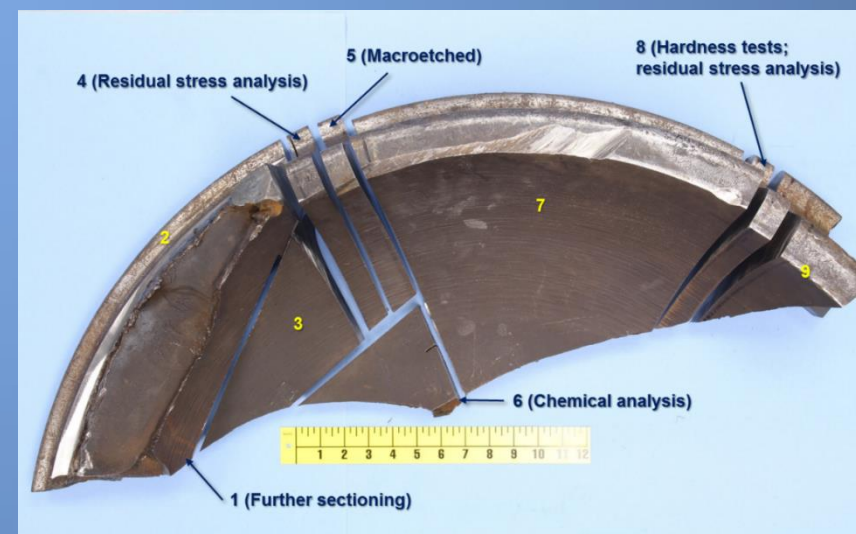


Oversight Document Requests

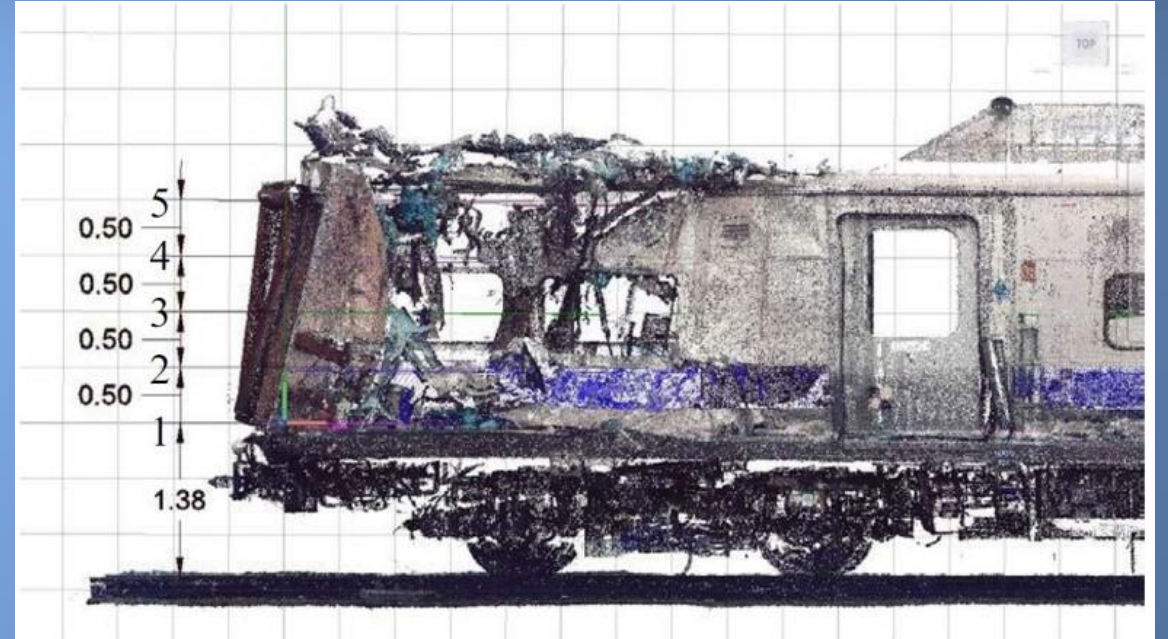
- Safety plans
- Audits
 - Internal
 - Oversight

Post On-Scene Activities

- Groups continue work
 - Interviews
 - Laboratory tests
 - Data research
 - Contact manufacturers
- Factual reports compiled



Technology



Post On-Scene Activities

- Technical review
- Investigative hearing (rare)
- Party submissions
- Board report
- Board meeting
- Safety recommendations



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