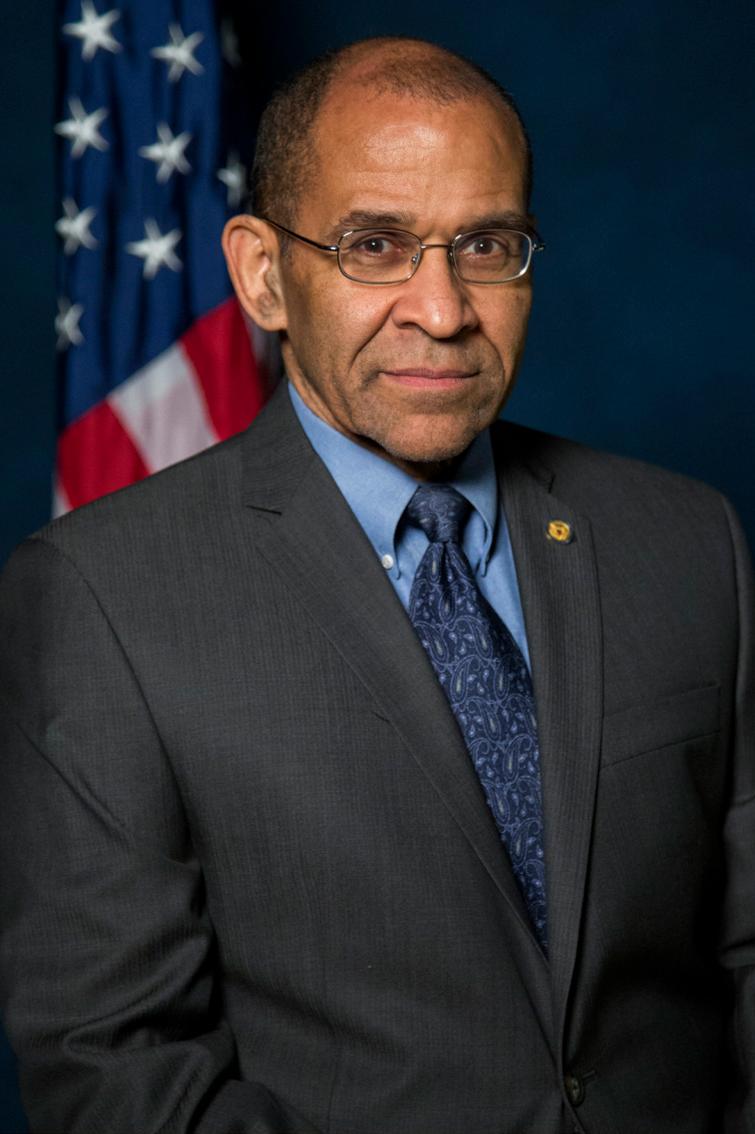




NATIONAL TRANSPORTATION SAFETY BOARD

ANNUAL REPORT TO CONGRESS 2014



A MESSAGE FROM THE Chairman

I am pleased to present the 2014 Annual Report to Congress for the National Transportation Safety Board (NTSB). Recognized internationally for our accident investigation expertise, the NTSB has been at the forefront of transportation safety for nearly 50 years. In our history, we have investigated more than 140,000 aviation accidents and thousands of surface transportation accidents, and issued more than 14,000 safety recommendations. The 2014 Annual Report presents the agency's work over the last year, providing details about completed and ongoing investigations, safety recommendations, transportation disaster assistance activities, and emerging issues.

The year was very productive for the NTSB, as we continued to advance our transportation safety mission. We completed several major and significant accident investigations, such as the Collapse of the Interstate 5 Skagit River Bridge in Mount Vernon, Washington and a Pipeline Rupture in Sissonville, West Virginia. In addition to deploying teams to accidents, we promoted the exchange of safety information by holding public forums like *Awake, Alert, Alive: Overcoming the Dangers of Drowsy Driving* and *Emerging Flight Data & Locator Technology*; as well as providing special investigative reports on *Parasailing Safety* and *Railroad and Rail Transit Roadway Worker Protection*. In 2014, we also released a safety study on *Drug Use Trends in Aviation: Assessing the Risk of Pilot Impairment*, as well as issuing one urgent recommendation to the Federal Aviation Administration regarding the oversight of air operators in Alaska owned by HoTh, Inc. Beyond the agency's domestic work, we continued our safety role abroad, providing technical expertise to our international partners and participating in accident investigations. These activities helped drive further safety improvements in US products and services, and encouraged reciprocal support from our foreign partners when foreign equipment or foreign carriers are involved in accidents in the United States.

We hope you find the 2014 Annual Report to Congress to be an informative presentation of the agency's accomplishments during 2014.

Sincerely,

Christopher A. Hart
Chairman



ANNUAL REPORT TO CONGRESS 2014

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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; and,
- Assisting victims of transportation accidents and their families.

MISSION/VISION

To be a Premier Organization Improving Transportation Safety

CORE VALUES

We are committed to the core values:

- Safety
- Excellence
- Independence
- Integrity
- Diversity and Inclusion
- Transparency

STRATEGIC GOALS

Strategic Goal No. 1: Conduct Effective Accident Investigations.

Strategic Goal No. 2: Recommend and Advocate Actions to Improve Global Transportation Safety.

Strategic Goal No. 3: Conduct Fair and Expeditious Adjudication of Airman and Mariner Appeals from the Federal Aviation Administration and the US Coast Guard Enforcement Actions and Certificate Denials.

Strategic Goal No. 4: Provide Outstanding Mission Support.

ABOUT THE NTSB

The National Transportation Safety Board (NTSB) is an independent federal agency responsible for investigating and determining the probable cause of every civil aviation accident in the United States and significant accidents in other modes of transportation—railroad, highway, marine, and pipeline. With this vested responsibility, the NTSB develops recommendations that will prevent future accidents or reduce their effects in terms of injury, loss of life, or damage to property.

The NTSB promotes transportation safety, assists victims of transportation accidents and their families, conducts safety studies, and prepares accident reports based on investigation and analyses of transportation accident and incident data. NTSB investigations are used to determine factors common to a series of events and to identify safety improvements or evaluate the worth of transportation related devices or policies. Safety studies enhance the NTSB's corporate knowledge, enabling it to better perform its transportation safety mission.

Since its creation in 1967 as an accident investigation agency within the newly created US Department of Transportation (DOT), the National Transportation Safety Board's (NTSB's) mission has been to determine the probable cause of transportation accidents and incidents and to formulate safety recommendations to improve transportation safety. The NTSB's authority currently extends to the following types of accidents:

- All US civil aviation accidents and certain public aircraft accidents
- Selected highway accidents
- Railroad accidents involving passenger trains or selected freight train accidents that result in fatalities or significant property damage
- Major marine casualties and any marine accident involving both a public and a nonpublic vessel
- Pipeline accidents involving fatalities, substantial property damage, or significant environmental damage

- Selected accidents resulting in the release of hazardous materials in any mode of transportation
- Selected transportation accidents that involve problems of a recurring nature or that are catastrophic

In 1974, Congress passed the Independent Safety Board Act, which severed the NTSB's ties to the DOT and authorized the agency to take the following additional actions:

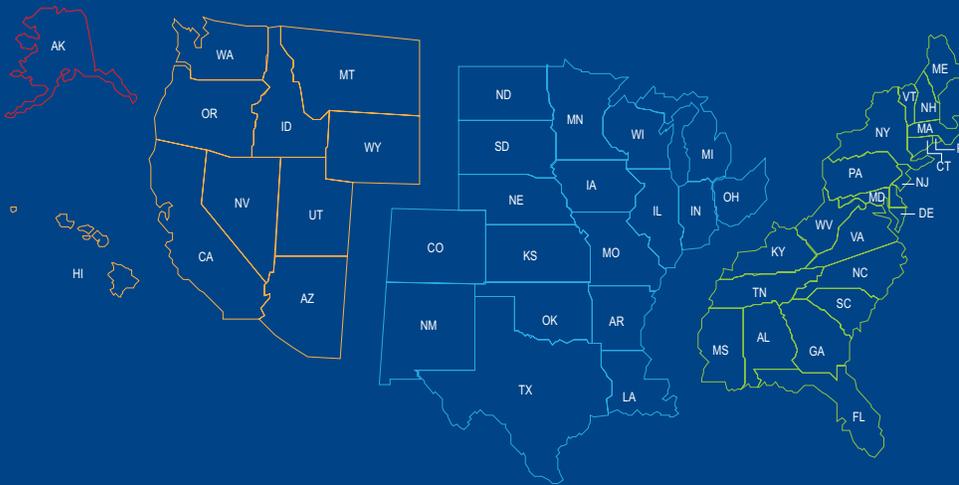
- Evaluate the effectiveness of government agencies involved in transportation safety
- Evaluate the safeguards used in the transportation of hazardous materials
- Evaluate the effectiveness of emergency responses to hazardous material accidents
- Conduct special studies on safety problems
- Maintain official US census of aviation accidents and incidents
- Review appeals from airmen, mechanics, and repairmen who have been assessed civil penalties by the Federal Aviation Administration (FAA)
- Review appeals from airmen and merchant seamen whose certificates have been revoked or suspended by the US Coast Guard (USCG)

Since its inception, the NTSB has investigated more than 140,500 aviation accidents and thousands of surface transportation accidents. The NTSB has issued more than 14,000 safety recommendations to more than 2,300 recipients in all transportation modes as a result of its investigations. Since 1990, the NTSB has published a Most Wanted List, highlighting safety-critical actions that the US Department of Transportation (DOT) modal administrations, the US Coast Guard (USCG), and others should take to help prevent accidents and save lives. The NTSB does not have authority to regulate transportation equipment, personnel, or operations, or to initiate enforcement action. However, based on its reputation for objectivity and thoroughness, the NTSB has achieved such success in shaping transportation safety judgments that those who are in a position to affect transportation safety changes have accepted more than 73 percent of the agency's recommendations from 2010 through 2014.

The NTSB can have five Board Members, each nominated by the President and confirmed by the Senate to serve 5-year terms. One Member is designated by the President as Chairman and another as Vice Chairman for 2-year terms. The chairmanship requires separate Senate confirmation. When there is no designated Chairman, the Vice Chairman serves as Acting Chairman.



NTSB REGIONAL OFFICES



ANC	WPR	CEN	ERA
Alaska Region	Western Pacific Region	Central Region	Eastern Region
Anchorage, AK	Federal Way, WA	Denver, CO	Ashburn, VA

Figure 2: National Transportation Safety Board Regional Offices

NTSB ORGANIZATION AND PROGRAM STRUCTURE



Figure 3: National Transportation Safety Board Organization and Program Structure

Table 1: NTSB 2014 At Glance

2014 NTSB AT A GLANCE SAFETY STATISTICS	
RECOMMENDATIONS	
Recommendations Issued	255
Urgent Recommendations Issued	1
Recommendations Implemented	149
Urgent Recommendations Implemented	5
Recommendations Closed Unacceptable	68
ACCIDENT LAUNCHES	
Major Accident Launches	19
Regional/Field Accident Launches	221
International Accident Launches	9
REPORTS AND PRODUCTS ADOPTED BY THE BOARD	
Major Reports	12
Accident Briefs	1726
Special Investigation Reports	5
Safety Alerts	8
Safety Studies	1
RESEARCH AND ENGINEERING/ LABORATORY	
Vehicle Recorders Received	566
Vehicle Recorders Readout	521
Material Laboratory Exam Reports	197
Vehicle Performance Products	26
AVIATION CERTIFICATE APPEALS	
Total Cases Received	231
Total Cases Closed	216
Emergency Cases Closed	101

Safety Recommendations and Quality Assurance Division

The Safety Recommendations and Quality Assurance Division, within the Office of the Managing Director (MD), develops and coordinates strategies to encourage those in a position to effect changes to implement the NTSB's safety recommendations. The division is also responsible for tracking the implementation of those safety recommendations after they are issued to recipients and maintaining statistics of recommendation adoption and implementation. See table 2 for a summary of the 2014 safety recommendations.



Figure 4: Aviation Safety Recommendation Specialist, Nathan Hoyt at the Experimental Aircraft Association's annual fly-in convention in Oshkosh, Wisconsin.

Safety recommendations usually address a specific issue uncovered and specify corrective action that will help prevent recurrences. Letters containing the recommendations are sent to the organizations best able to act on the problem; recipients of NTSB safety recommendations include the DOT and its modal administrations, the USCG, other federal and state agencies, manufacturers, operators, industry and trade organizations, and others.

Table 2: 2014 Safety Recommendations Statistics

Recommendations Issued	255
Urgent Recommendations Issued	1
Recommendations Implemented	149
Recommendations Closed Unacceptable	68
Urgent Recommendations Implemented	5

The division encourages the DOT modal administrations, the USCG, and other recipients to implement the NTSB's recommendations; compiles monthly statistics regarding recommendation acceptance rates; and coordinates products through the NTSB review process. In 2014, 149 safety recommendations were implemented. Over the last 5 years, the implementation rate has remained somewhat steady, as shown in Figure 5. In addition, the NTSB issued 255 recommendations (131 aviation, 29 highway, 13 marine, 76 railroad, 4 pipeline, and 2 intermodal).

In response to NTSB safety recommendations, federal agencies issued a number of important final rules, notices of proposed rulemaking (NPRMs), advanced notices of proposed rulemaking (ANPRMs), and advisory circulars (ACs). See table 3.

Table 3 Final Rules, NPRMs, ANPRMs, and ACs from federal agencies that Addressed Safety Recs

Federal Railroad Administration	5
Federal Aviation Administration	52
Federal Motor Carrier Safety Administration	2
Pipeline and Hazardous Materials Safety Administration	8
National Highway Traffic Safety Administration	7
Federal Transit Administration	19

¹ Implemented is defined as closed in an acceptable status. Acceptable statuses include "Closed—Acceptable Action," "Closed—Acceptable Alternate Action," and "Closed—Exceeds Recommended Action."

Advocacy efforts by NTSB, DOT and USCG staffs to resolve issues regarding recommendations, led to the closure of 157 recommendations issued to those agencies, see table 4.

Table 4: Safety Recommendations Closed to DOT and its modal Agencies and the USCG during 2014

United States Department of Transportation	6
Federal Highway Administration	4
Federal Railroad Administration	7
Federal Aviation Administration	109
Federal Motor Carrier Safety Administration	4
Pipeline and Hazardous Materials Safety Administration	7
National Highway Traffic Safety Administration	7
Federal Transit Administration	1
United States Coast Guard	12

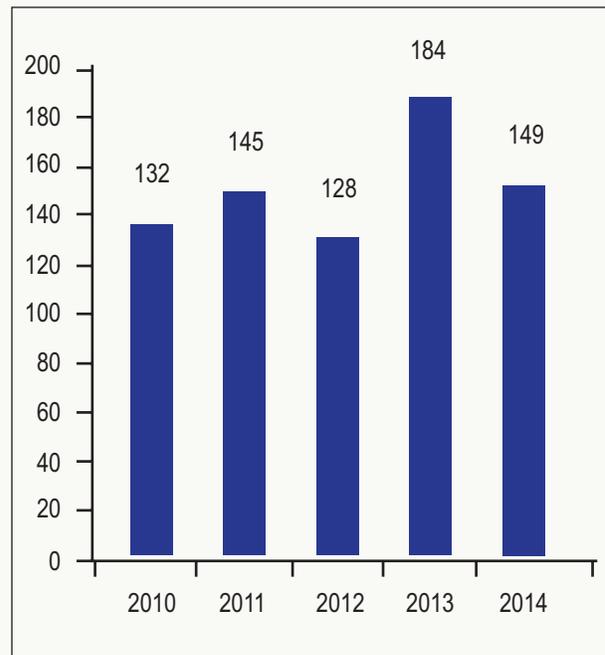


Figure 5: Safety Recommendations Implemented During the Past 5 Years

Office of Aviation Safety

The mission of the Office of Aviation Safety (AS) is to accomplish the following: (1) Investigate all air carrier, commuter, and air taxi accidents; in-flight collisions; fatal and nonfatal general aviation accidents; and certain public aircraft accidents; (2) Participate in the investigation of major airline crashes in foreign countries that involve US carriers, US-manufactured or designed equipment, or US-registered aircraft to fulfill US obligations under International Civil Aviation Organization (ICAO) agreements; and (3) Conduct investigations concerning safety issues that extend beyond a single accident to examine specific aviation safety problems from a broader perspective.

AS is responsible for investigating domestic aviation accidents and incidents (about 1,750 annually) and for proposing probable causes for the Board's approval. Working with other offices within the NTSB, AS develops recommendations to prevent the recurrence of similar accidents and incidents, and to otherwise improve aviation safety.

AS conducts investigative activities through five specialty divisions based in Washington, DC, and a regional investigation management structure consisting of four regional office sites. Investigators are located throughout the country, including Hawaii. International aviation activities are coordinated from the Washington, DC, office.

Table 5: 2014 AS Statistics

Recommendations Issued	131
Urgent Recommendations Issued	1
Recommendations Implemented	65
Recommendations Closed Unacceptable	53
Major Reports	5
Accident Briefs	1690
Special Investigation Reports	1
Major Accident Launches	3
Regional Accident Launches	194
International Accident Launches	6
Safety Alerts	5

Completed Investigations

Descent Below Visual Glidepath and Impact With Seawall, Asiana Airlines Flight 214 (3 fatalities, 187 injured)

On July 6, 2013, a Boeing 777-200ER, Korean registration HL7742, operating as Asiana Airlines flight 214, was on approach to runway 28L when it struck a seawall at San Francisco International Airport (SFO), San Francisco, California. The airplane was destroyed by impact forces and a postcrash fire.

The safety issues identified in the report include the following:

- Adherence of Asiana pilots to standard operating procedures regarding callouts;
- Reduced design complexity and enhanced training on the airplane's autoflight system;
- Opportunity at Asiana for new instructors to supervise trainee pilots in operational service during instructor training;
- Guidance for Asiana pilots on use of flight directors during a visual approach;
- More manual flight for Asiana pilots;
- A context-dependent low energy alert;
- Research that examines the injury potential from significant lateral forces in airplane crashes and the mechanism that produces high thoracic spinal injuries;
- Evaluation of the adequacy of slide/raft inertia load certification testing;
- Aircraft rescue and firefighting (ARFF) training for officers placed in command of an aircraft accident;
- Guidance on when to pierce the fuselage of a burning airplane with a skin-piercing nozzle;
- Integration of the medical supply buses at SFO into the airport's preparation drills;
- Guidance or protocols for ensuring the safety of passengers and crew at risk of being struck or rolled over by a vehicle during ARFF operations;
- Requirements for ARFF staffing;

- Improvements in emergency communications at SFO; and,
- Increased Federal Aviation Administration (FAA) oversight of SFO's emergency procedures manual.



Figure 6: Fire damage to the fuselage of flight 214.

The NTSB determined that the probable cause of this accident were the flight crew's mismanagement of the airplane's descent during the visual approach, the pilot flying's unintended deactivation of automatic airspeed control, the flight crew's inadequate monitoring of airspeed, and the flight crew's delayed execution of a go-around after they became aware that the airplane was below acceptable glidepath and airspeed tolerances. Contributing to the accident were (1) the complexities of the autothrottle and autopilot flight director systems that were inadequately described in Boeing's documentation and Asiana's pilot training, which increased the likelihood of mode error; (2) the flight crew's nonstandard communication and coordination regarding the use of the autothrottle and autopilot flight director systems; (3) the pilot flying's inadequate training on the planning and executing of visual approaches; (4) the pilot monitoring/instructor pilot's inadequate supervision of the pilot flying; and (5) flight crew fatigue, which likely degraded their performance.

As a result of this investigation, the NTSB made safety recommendations to the FAA, Asiana Airlines, Boeing, the Aircraft Rescue and

Firefighting Working Group, and the City and County of San Francisco.

Crash During a Nighttime Nonprecision Instrument Approach to Landing, UPS Flight 1354 (2 fatalities, 0 injured)

On August 14, 2013, UPS flight 1354, an Airbus A300-600, N155UP, crashed short of runway 18 during a localizer nonprecision approach to runway 18 at Birmingham-Shuttlesworth International Airport (BHM), Birmingham, Alabama. The airplane was destroyed by impact forces and postcrash fire.

The safety issues identified in the report include the following:

- Lack of clear communications between the dispatcher and the flight crew, between flight crewmembers, and about the weather;
- Off-duty time management, fatigue awareness, and counseling;
- Use of the continuous descent final approach technique;
- Lack of standardized guidance; and
- Timing of when altitude alerts are provided.

The NTSB determined that the probable cause of this accident was the flight crew's continuation of an unstabilized approach and their failure to monitor the aircraft's altitude during the approach, which led to an inadvertent descent below the minimum approach altitude and subsequently into terrain. Contributing to the accident were (1) the flight crew's failure to properly configure and verify the flight management computer for the profile approach; (2) the captain's failure to communicate his intentions to the first officer once it became apparent the vertical profile was not captured; (3) the flight crew's expectation that they would break out of the clouds at 1,000 feet above ground level due to incomplete weather information; (4) the first officer's failure to make the required minimums callouts; (5) the captain's performance deficiencies likely due to factors including, but not limited to, fatigue, distraction, or confusion, consistent with performance

deficiencies exhibited during training; and (6) the first officer's fatigue due to acute sleep loss resulting from her ineffective off-duty time management and circadian factors.



Figure 7: Photograph of the right side of the forward fuselage.

As a result of this investigation, the NTSB made safety recommendations to the FAA, UPS, Airbus, and the Independent Pilots Association.

Crash Following Encounter with Instrument Meteorological Conditions After Departure from Remote Landing Site Alaska Department of Public Safety Eurocopter AS350 B3, N911AA, (3 fatalities, 0 injured)

On March 30, 2013, Eurocopter AS350 B3 helicopter, N911AA, impacted terrain while maneuvering during a search and rescue flight near Talkeetna, Alaska. The helicopter was destroyed by impact and postcrash fire.

The safety issues identified in the report include the following:

- Inadequate pilot decisionmaking and risk management;
- Lack of organizational policies and procedures to ensure appropriate risk management;
- Inadequate pilot training in night vision goggle use and inadvertent instrument meteorological condition encounters;
- Inadequate dispatch and flight following;
- Lack of a tactical flight officer program;

- Punitive safety culture;
- Lack of management support for safety programs; and,
- Attitude indicator limitations.



Figure 8: Aerial view of the accident site with helicopter wreckage circled in red.

The NTSB determined that the probable cause of this accident was the pilot's decision to continue flight under visual flight rules into deteriorating weather conditions, which resulted in the pilot's spatial disorientation and loss of control. Also causal was the Alaska Department of Public Safety's punitive culture and inadequate safety management, which prevented the organization from identifying and correcting latent deficiencies in risk management and pilot training. Contributing to the accident was the pilot's exceptionally high motivation to complete search and rescue missions, which increased his risk tolerance and adversely affected his decision-making.

As a result of this investigation, the NTSB made safety recommendations to the FAA, the state of Alaska, 44 additional states, the Commonwealth of Puerto Rico, and the District of Columbia.

Crash Following In-Flight Fire Fresh Air, Inc. Convair CV-440-38, N153JR (2 fatalities, 0 injured)

On March 15, 2012, a Convair CV-440-38, N153JR, operated by Fresh Air, Inc., crashed into a lagoon about 1 mile east of the departure end

of runway 10 at Luis Muñoz Marín International Airport (SJU), San Juan, Puerto Rico. The airplane was operated under the provisions of 14 *Code of Federal Regulations* (CFR) Part 125 as a cargo flight. The airplane was destroyed by impact forces.

The safety issues identified in the report include the following:

- Inadequate FAA oversight of Part 125 operations;
- Inadequate evaluation of Fresh Air's compliance with FAA approved procedures; and,
- Evaluation of Part 125 pilots using another operator's Operations Specifications.



Figure 9: Pre-accident photograph of N153JR.

The NTSB determined that the probable cause of this accident was the flight crew's failure to maintain adequate airspeed after shutting down the right engine due to an in-flight fire in one of the right augmentors. The failure to maintain airspeed resulted in either an aerodynamic stall or a loss of directional control.

As a result of this investigation, the NTSB made safety recommendations to the FAA.

[Auxiliary Power Unit Battery Fire, Japan Airlines Boeing 787-8, JA829J \(0 fatalities, 0 injured\)](#)

On January 7, 2013, smoke was discovered by cleaning personnel in the aft cabin of a Japan Airlines (JAL) Boeing 787-8, JA829J, which was parked at a gate at General Edward

Lawrence Logan International Airport (BOS), Boston, Massachusetts. About the same time, a maintenance manager in the cockpit observed that the auxiliary power unit (APU) had automatically shut down. Shortly afterward, a mechanic opened the aft electronic equipment bay and found heavy smoke coming from the lid of the APU battery case and a fire with two distinct flames at the electrical connector on the front of the case.

The safety issues identified in the report include the following:

- Cell internal short circuiting and the potential for thermal runaway of one or more battery cells, fire, explosion, and flammable electrolyte release;
- Cell manufacturing defects and oversight of cell manufacturing processes;
- Thermal management of large format lithium-ion batteries;
- Insufficient guidance for manufacturers to use in determining and justifying key assumptions in safety assessments;
- Insufficient guidance for FAA certification engineers to use during the type certification process to ensure compliance with applicable requirements; and,
- Stale flight data and poor quality audio recording of the 787 enhanced airborne flight recorder (EAFR).

The NTSB determined that the probable cause of this incident was an internal short circuit within a cell of the auxiliary power unit (APU) lithium-ion battery, which led to thermal runaway that cascaded to adjacent cells, resulting in the release of smoke and fire. The incident resulted from Boeing's failure to incorporate design requirements to mitigate the most severe effects of an internal short circuit within an APU battery cell and the Federal Aviation Administration's failure to identify this design deficiency during the type design certification process.

As a result of this investigation, the NTSB made safety recommendations to the FAA, Boeing, and GS Yuasa Corporation.



Figure 10: Right aft corner of the battery lid and side 4 of the battery case.

Special Investigation Report on the Safety of Agricultural Aircraft Operations

This special investigation report describes the results of a review of 78 accidents that occurred during calendar year 2013 and involved some aspect of agricultural (ag) operations, pilot training, or other crop protection activities.

The safety issues identified in this report include the following:

- Lack of ag operations specific fatigue management guidance;
- Lack of ag operations specific risk management guidance;
- Inadequate aircraft maintenance; and
- Lack of guidance for pilot knowledge and skills tests.

As a result of this investigation, the NTSB made safety recommendations to the FAA and the National Agricultural Aviation Research and Education Foundation.



Figure 11: Wreckage of a Weatherly 602B airplane

Ongoing Investigations (as of December 31, 2014)

- National Air Cargo crash on takeoff, Bagram, Afghanistan, April 29, 2013
- Rediske Air DHC-3 crash on takeoff from Soldotna Airport, Soldotna, Alaska, July 6, 2013
- Southwest Airlines flight 345, hard landing at LaGuardia International Airport, Flushing, New York, July 22, 2013
- USAirways flight 1702, aborted takeoff at Philadelphia International Airport, Philadelphia, Pennsylvania, March 13, 2014
- Gulfstream IV runway excursion, Bedford, Massachusetts, May 31, 2014
- SpaceShip 2 inflight breakup, Mojave, California October 31, 2014
- Embraer Phenom 500, crash on approach, Gaithersburg, Maryland, December 8, 2014

International Accident Investigations

The NTSB participates in the investigation of aviation accidents and serious incidents outside the United States in accordance with the Chicago Convention of ICAO and the Standards and Recommended Practices (SARPS) provided in Annex 13 to the Convention.

If an accident or serious incident occurs in a foreign state involving a civil aircraft of US registry, a US operator, or an aircraft of US design or

manufacture, and the foreign state is a signatory to the ICAO Convention, that state is responsible for the investigation. In accordance with the ICAO Annex 13 SARPS, upon receipt of ICAO notification of the accident or serious incident, the NTSB designates a US-accredited representative and appoints advisors to carry out the obligations, receive the entitlements, provide consultation, and receive safety recommendations from the state of occurrence.

If an accident or serious incident occurs in a foreign state not bound by the provisions of Annex 13 to the ICAO Convention, if a foreign state delegates all or part of an investigation by mutual consent to the NTSB, or if the accident or serious incident involves a public aircraft, the conduct of the investigation shall be in consonance with any agreement entered into between the United States and the foreign state.

The following are ongoing major international investigations.

- On July 12, 2013, an Ethiopian Airlines Boeing 787-8 fire event occurred on a parked, unoccupied, and electrically unpowered Boeing 787 aircraft at London Heathrow Airport (LHR). The investigation is being conducted by the Air Accidents Investigation Branch of the United Kingdom. The NTSB appointed a US-accredited representative to assist the investigation under the provisions of ICAO Annex 13, because the United States is the state of design and manufacturer of the airplane.
- On November 13, 2013, Tatarstan Airlines flight 363, a Boeing 737-500, crashed while attempting to land on runway 29 at Kazan Airport (UWKD), Kazan, Russia. All 44 passengers and six crewmembers aboard were fatally injured. The Russian Interstate Aviation Committee Accident Investigation Commission is investigating the accident. The NTSB appointed a US-accredited representative to assist the investigation under the provisions of ICAO Annex 13, because the United States is the state of design and manufacturer of the airplane.
- On March 8, 2014, Malaysia Airlines flight MH370, a Boeing 777-200, was declared missing while en route from Kuala Lumpur International Airport (KUL), Kuala Lumpur, Malaysia to Beijing-Capital International Airport (PEK), Beijing, China. There were 227 passengers and 12 crewmembers aboard. The Air Accident Investigation Bureau (AAIB) of Malaysia is investigating the accident. The NTSB appointed a US-accredited representative in accordance with ICAO Annex 13, because the United States is the state of manufacture and design of the airplane.
- On July 17, 2014, Malaysia Airlines flight MH17, a Boeing 777-200, crashed over eastern Ukraine while en route from Amsterdam-Schiphol International Airport (AMS), Schiphol, Netherlands, to KUL, Kuala Lumpur, Malaysia. All 283 passengers and 15 crewmembers aboard the airplane were fatally injured. The accident is being investigated by the Dutch Safety Board. The NTSB has appointed a US-accredited representative in accordance with ICAO Annex 13, because the United States is the state of manufacture and design of the airplane.
- On July 24, 2014, Air Algérie flight AH5017, a McDonnell Douglas MD-83, crashed near Gossi, Mali, while en route from Ouagadougou Airport (OUA), Ouagadougou, Burkina Faso, to Algiers-Houari Boumediene Airport (ALG), Algiers, Algeria. All 227 passengers and 12 crewmembers aboard were fatally injured. The accident is being investigated by a Malian Commission of Inquiry. The NTSB has appointed a US-accredited representative in accordance with ICAO Annex 13, because the United States is the state of manufacture and design of the airplane.
- On October 29, 2014, a SkyWay Enterprises cargo flight, a Shorts 360100, crashed shortly after takeoff from Sint Maarten-Juliana Airport (SXM), Netherlands Antilles. Both crewmembers aboard were fatally injured. The accident is being investigated by the Sint Maarten Civil Aviation Authority. The NTSB has

appointed a US-accredited representative in accordance with ICAO Annex 13, because the United States is the state of registry of the operator.

NTSB Board Member Earl Weener was a featured presenter, and attendees heard from NTSB staff who have investigated these types of accidents.

Safety Seminar

Technically Advanced Aircraft

On November 8, 2014, the NTSB presented a seminar at the NTSB Training Center highlighting the lessons learned from NTSB's accident investigations involving technically advanced aircraft.

This was the fifth in a series of safety seminars presented by the NTSB focused on general aviation accidents. The 4-hour event explored some of the causes of these accidents, the current government and industry efforts to prevent them, and the resources available to the pilot community. It was free of charge, designed for pilots, mechanics and other members of the GA community.

Safety Alerts

- [Pilots: Understand Impairment Risk \(SA-037\)](#)
- [Preventing Obstacle Collision Accidents in Agricultural Aviation \(SA-035\)](#)
- [Landing at the Wrong Airport \(SA-033\)](#)
- [Helicopter Safety Starts in the Hangar \(SA-032\)](#)
- [Safety Through Helicopter Simulators \(SA-031\)](#)

Office of Highway Safety

The Office of Highway Safety (HS) investigates accidents that have a significant impact on public confidence in highway transportation safety, highlight national safety issues, or generate high public interest and media attention. Such accidents may include collapses of highway bridge or tunnel structures, mass casualties and injuries on public transportation vehicles (such as motorcoaches and school buses), collisions at highway–rail grade crossings, and accidents that involve new safety issues or technologies. In addition, HS conducts studies based on trends emerging from NTSB accident investigations and from other research and accident data to identify common risks or underlying causes of accidents. To accomplish these tasks, HS is organized into two primary units: the Investigations Division and the Report Development Division.

Completed Investigations

Collapse of the Interstate 5 Skagit River Bridge, Following a Strike by an Oversize Combination Vehicle, Mount Vernon, Washington (0 fatalities, 3 injured)

On May 23, 2013, a 2010 Kenworth truck-tractor in combination with a 1997 Aspen flatbed semitrailer hauling an oversize load was traveling south on Interstate 5 (I-5) near Mount Vernon, Washington. As the oversize combination vehicle traveled across the I-5 bridge above the Skagit River, its oversize load struck the bridge, damaging the structure.

Safety issues identified during the investigation include the following:

- Permitting and route surveying for oversize loads;
- Pilot/escort vehicle operations, guidelines, and driver training;
- Commercial driver operations for transporting oversize loads;

- State practices for high load bridge strikes; and,
- Requirements for low-clearance signage.

Table 6: 2014 HS Statistics

Recommendations Issued	29
Recommendations Implemented	33
Recommendations Closed Unacceptable	8
Major Reports	2
Major Accident Launches	4
Field Investigation Accident Launches	5
Special Investigative Reports/Public Forums	2

The NTSB determined that the probable cause of the Interstate 5 Skagit River Bridge span collapse was a strike to the bridge structure by an oversize combination vehicle that failed to travel in a lane with adequate overhead clearance due to deficiencies in the interdependent system of safeguards for oversize load movements. These deficiencies included (1) insufficient route planning by Mullen Trucking LP and the oversize combination vehicle driver; (2) failure of the certified pilot/escort vehicle driver to perform required duties and to communicate potential hazards, due in part to distraction caused by cell phone use; and (3) inadequate evaluation of oversize load permit requests and no provision of low-clearance warning signs in advance of the bridge by the Washington State Department of Transportation.

As a result of this investigation, the NTSB made safety recommendations to the Federal Highway Administration, the Specialized Carriers & Rigging Association, the Commercial Vehicle Safety Alliance, the 50 states, the District of Columbia, the Commonwealth of Puerto Rico, the Washington State Department of Transportation, the American Association of State Highway and

Transportation Officials, the American Association of Motor Vehicle Administrators, Nokia HERE, Google Inc. and Rand McNally.



Figure 12: Bridge span 8 in the Skagit River.

Highway-Railroad Grade Crossing Collision, Rosedale, Maryland (0 fatalities, 5 injured)

On May 28, 2013, a 2003 Mack Granite truck, operated by Alban Waste, LLC, was traveling northwest on a private road in Rosedale, Maryland, toward a private grade crossing. About the same time, a CSX Transportation Company (CSXT) freight train—which consisted of two locomotives, 31 empty cars, and 14 loaded cars—was traveling southwest at a speed of 49 mph. As the train approached the crossing, the train horn sounded three times. The truck did not stop and was hit by the train. Three of the 15 derailed cars contained hazardous materials. Following the derailment, a postcrash fire resulted in an explosion at 2:04 p.m., which caused widespread property damage.

Safety issues identified in the investigation include the following:

- Distraction;
- Federal oversight of new entrant motor carriers;
- Obstructive sleep apnea;
- Safety systems at private grade crossings; and,
- Oxidizing and flammable or combustible materials.

The NTSB determined that the probable cause of the Rosedale, Maryland, crash was the truck driver's failure to ensure that the tracks were clear before traversing the highway–railroad grade crossing. Contributing to the crash were (1) the truck driver's distraction due to a hands-free cell phone conversation; (2) the limited sight distance due to vegetation and roadway curvature; and (3) the Federal Motor Carrier Safety Administration's inadequate oversight of Alban Waste, LLC, which allowed the new entrant motor carrier to continue operations despite a serious and consistent pattern of safety deficiencies. Contributing to the severity of the damage was the postcrash fire and the resulting explosion of a rail car carrying sodium chlorate, an oxidizer.

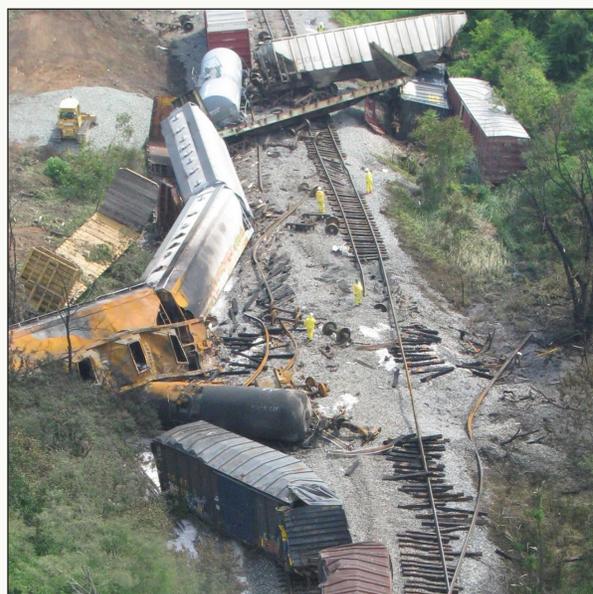


Figure 13: Aerial photograph, May 29, 2013, showing explosion site, derailed cars, and damaged tracks.

As a result of this investigation, the NTSB made safety recommendations to the Federal Motor Carrier Safety Administration (FMCSA); the Federal Railroad Administration (FRA); the 50 states, the District of Columbia, and the Commonwealth of Puerto Rico; the state of Maryland, the Association of American Railroads; the American Short Line and Regional Railroad

Association; the National Fire Protection Association; and CSXT. The NTSB reiterated recommendations to the FMCSA and to the 50 states and the District of Columbia. In addition, two recommendations were reclassified to the U.S. Department of Transportation.

Multivehicle Collision and Subsequent Vehicle Fall From Chesapeake Bay Bridge Annapolis, Maryland (0 fatalities, 1 injured)

On July 19, 2013, a Chrysler Sebring was traveling eastbound on US Route 50/301 near Annapolis, Maryland. Less than a mile past the toll plaza, after vehicles had merged from 11 toll lanes into two travel lanes, traffic began to slow as the bridge ascended above the Chesapeake Bay and curved to the left. The Chrysler was in the right lane and had reduced speed to 4 mph due to the traffic queue when it was struck from behind by an International truck-tractor and refrigerated semitrailer combination unit traveling 47 mph. The truck-tractor pushed the Chrysler into the adjacent concrete barrier and then collided with a Mazda CX-5. During the collision sequence, the Chrysler was pushed up onto the barrier wall and then rode along the top of it, before falling approximately 27 feet into the bay and coming to rest in 7 feet of water. The driver of the Chrysler received minor injuries. She was able to swim to one of the nearby bridge piers, from which she was rescued and transported to an area hospital.

The other drivers and one vehicle occupant were uninjured.

The Maryland Transportation Authority now requires headlight use on both the eastbound and westbound spans at all times. The state also improved speed limit signage and speed transition areas, installed mounted static signs with flashing lights to be illuminated during congestion or heavy traffic to warn of the potential for stopped vehicles at strategic locations on the bridge, installed mounted electronic digital speed readout signs (“YOUR SPEED IS”) at strategic locations on the bridge, and installed a “DO NOT TAILGATE” sign on the eastbound bridge approach to be illuminated during congestion or heavy traffic.

Ongoing Investigations (as of December 31, 2014)

- A truck tractor crossed the center median of Interstate 35 and collided with a medium-sized bus Davis, OK, May 27, 2014.
- FedEx tractor-trailer combination unit crossed center median and collided with motorcoach traveling in opposite direction in Orland, CA, April 10, 2014.
- Wal-Mart tractor-trailer combination unit collided with limo van and 4 other vehicles in Cranbury, NJ, June 7, 2014.



Figure 14: At left, collision scene view of 2010 International truck-tractor and 2014 Mazda CX-5 at final rest. At right, 2007 Chrysler Sebring being recovered from Chesapeake Bay. (Courtesy of Maryland Transportation Authority)

- School bus departed the roadway and collided with two trees in Anaheim, California on April 24, 2014.
- Passenger vehicle experienced tire-tread separation, crossed highway median, and collided with school bus in Centerville, LA, February 15, 2014.
- Combination vehicle collided with disabled truck- tractor semitrailer and two other vehicles stopped in traffic lane in Naperville, IL, January 27, 2014.
- A 15-passenger van experienced a tire failure resulting in the vehicle departing the roadway and rolling over near Lake City, Florida on February 21, 2014.
- A motorcoach rolled over on an exit ramp in Red Lion Delaware on September 21, 2014.
- Two school buses collided at an intersection causing one bus to roll onto its side in Knoxville, Tennessee on December 12, 2014.

Public Hearings, Forums, and Symposiums

Awake, Alert, Alive: Overcoming the Dangers of Drowsy Driving

On October 21, 2014, the NTSB held a public forum to discuss the problem of drowsy driving, its prevalence, and how it affects driving safety in noncommercial vehicles. Expert panelists examined the risks associated with sleepiness and driving, and considered various countermeasures to address this issue.



Figure 15: Dr. Jana Price, Highway Safety Chief, listens to presentations delivered by panelists during the Drowsy Driving forum.

The forum panels included:

- Introduction and scope of the problem
- Workplace issues
- Concerns for novice drivers
- Health issues
- In-vehicle and roadway factors
- Consideration of countermeasures and future directions

Highway Safety: Passenger Vehicle Tire Safety Symposium

On December 9-10, 2014, the NTSB held a two-day symposium to gather information and expert opinion on the causes of tire disablement, the role of safety recalls and consumer awareness, ongoing safety-related initiatives, and advances in tire technology. The primary focus was on passenger vehicle and light truck tires, although many issues apply to all pneumatic tires. The NTSB published a transcript of the symposium, and may use information gathered from the symposium to develop safety recommendations that, if implemented, could reduce the incidence of tire disablement-related crashes.

The symposium panels included:

- Tire Disablement and Vehicle Dynamics
- Identifying and Analyzing Tire Disablement-related Crashes
- Tire Registration and Recall
- Tire Aging and Service Life
- Advances in Tire Technology
- Tire Maintenance and Consumer Awareness

Office of Marine Safety

The Office of Marine Safety (MS) investigates major marine casualties on or under the territorial waters of the United States, including accidents involving US-flagged merchant vessels worldwide and those involving both US public and nonpublic vessels in the same casualty. In addition, the office investigates selected catastrophic marine accidents or those of a recurring nature.

The US Coast Guard (USCG) conducts preliminary investigations of all marine accidents and notifies the NTSB if an accident qualifies as a major marine casualty, which is defined as resulting in at least one of the following:

- The loss of six or more lives;
- The loss of a mechanically propelled vessel of 100 or more gross tons;
- Property damage initially estimated as \$500,000 or more; or
- Serious threat (as determined by the Coast Guard Commandant and concurred in by the Chairman) to life, property, or the environment due to hazardous materials.

Table 7: 2014 MS Statistics

Recommendations Issued	13
Recommendations Implemented	7
Recommendations Closed Unacceptable	4
Major Reports	1
Major Accident Launches	1
Accident Briefs	23
Field Investigation Accident Launches	22
International Marine Investigations	2
Safety Alerts	2

MS investigates and determines the probable cause of all major marine casualties. For select major marine casualties, the office launches a full investigative team and presents the investigative product to the Board. In all other major marine

casualties, MS launches marine investigators to the scene to gather sufficient factual information to develop a marine accident brief report. The majority of these brief investigation reports are adopted by the MS director through delegated authority; the remainder are adopted by the Board.

MS is also responsible for overall management of the NTSB international marine safety program, under which the NTSB investigate major marine casualties involving foreign-flagged vessels in US territorial waters and US-flagged vessels involved in major marine casualties anywhere in the world. Accidents involving foreign-flagged vessels accounted for 27 percent of NTSB marine accident investigations in the past 5 years.

MS also participates with the Coast Guard in investigating serious marine casualties involving foreign-flagged vessels in international waters as a substantially interested state (SIS), for example, when a casualty involves a foreign-flagged cruise ship with US citizens onboard. Every year, more than 10 million Americans are carried aboard foreign-flagged cruise ships.

Who has the Lead: USCG or NTSB?

In a memorandum of understanding (MOU) signed December 18, 2008, the NTSB and the Coast Guard agreed that when both agencies investigate a marine casualty, one agency will serve as the lead federal agency for the investigation. The NTSB Chairman and the Coast Guard Commandant, or their designees, will determine which agency will lead the investigation. The NTSB may lead the investigation of “significant marine casualties,” defined in the MOU as a loss of three or more lives on a commercial passenger vessel; loss of life or serious injury to 12 or more persons on any commercial vessel; loss of a mechanically propelled commercial vessel of 1,600 or more gross tons; loss of life involving a highway, bridge, railroad, or other shoreside structure; serious threat, as determined by the NTSB Chairman and the Coast Guard Commandant or their designees, to life, property, or the environment by hazardous materials; and significant safety issues, as determined by the NTSB Chairman and the Coast Guard Commandant, or their designees, relating to Coast Guard marine safety functions.

The international program involves reviewing US Administration position papers related to marine accident investigations and participating in select International Maritime Organization (IMO) meetings. In the last year, the NTSB attended IMO meetings on review and classification of maritime accidents and accident reporting, certification and training of mariners, and technical standards and requirements for voyage data recorders.

Under the MS international program, the NTSB also coordinates with other US and foreign agencies to ensure consistency with IMO conventions, most notably in joint US-flag state marine accident investigations. The NTSB also cooperates with other accident investigation organizations worldwide, such as the Marine Accident Investigators' International Forum (MAIIF), and track developments in marine accident investigation and prevention.

MS is organized into the Major Investigations Division and the Product Development Division.

Completed Investigations

Allision of the Passenger Vessel Seastreak Wall Street with Pier 11, Lower Manhattan (0 fatalities, 80 injured)

The high-speed passenger ferry *Seastreak Wall Street* was carrying commuters traveling between New Jersey and New York City when it struck a Manhattan pier at about 12 knots on January 9, 2013, injuring 80 people.

Safety issues identified in the report include the following:

- Oversight of vessel operations;
- Control panel design;
- Management of passenger access to stairwells to mitigate possible injury;
- The importance of marine safety management systems; and,
- The need for information captured by voyage data recorders in investigating and analyzing accident causes and identifying remedial actions to help prevent their recurrence.

The NTSB determined that the probable cause of the *Seastreak Wall Street's* allision with the pier was the captain's loss of vessel control while unaware the vessel's propulsion system was in backup mode. In addition, his usual method of transferring control from one bridge station to another during the approach to the pier allowed insufficient time and distance to react to such an emergency. Contributing to the accident was *Seastreak Wall Street* operator Seastreak LLC's ineffective oversight of vessel operations. Contributing to the severity of injuries was Seastreak's lack of procedures to limit passenger access to stairwells on the *Seastreak Wall Street* during potentially high-risk situations such as vessel docking and undocking.



Figure 16: Parasail canopy and associated flight gear shown during operational testing.

As a result of this investigation, the NTSB issued safety recommendations to the Coast Guard, Seastreak LLC, and Scana Mar-EI AS.

Special Investigation Report: Parasailing Safety

This special investigation report examined the types of accidents that occur in the parasailing industry in the United States and its territories and areas where the associated risk can be mitigated. The overall goal of the study was to reduce the number of fatalities and injuries associated with parasailing and to identify relevant recommendations to enhance safety both for parasailing passengers and vessel operators. In

reviewing parasailing accident investigations, the report focused on the effect of combined vessel and wind speeds on towlines, the capabilities of winches affixed to the vessels, and the several components of the flight gear involved in parasailing. The report examined existing regulatory oversight of the parasailing industry.

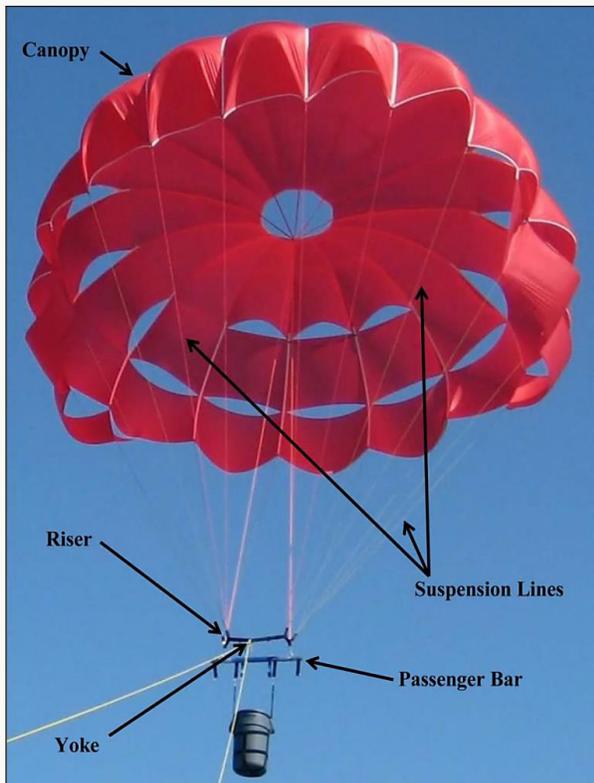


Figure 17: Parasail canopy and associated flight gear shown during operational testing.

As a result of this investigation, the NTSB made safety recommendations to the Coast Guard, the Federal Aviation Administration, and the National Association of State Boating Law Administrators.

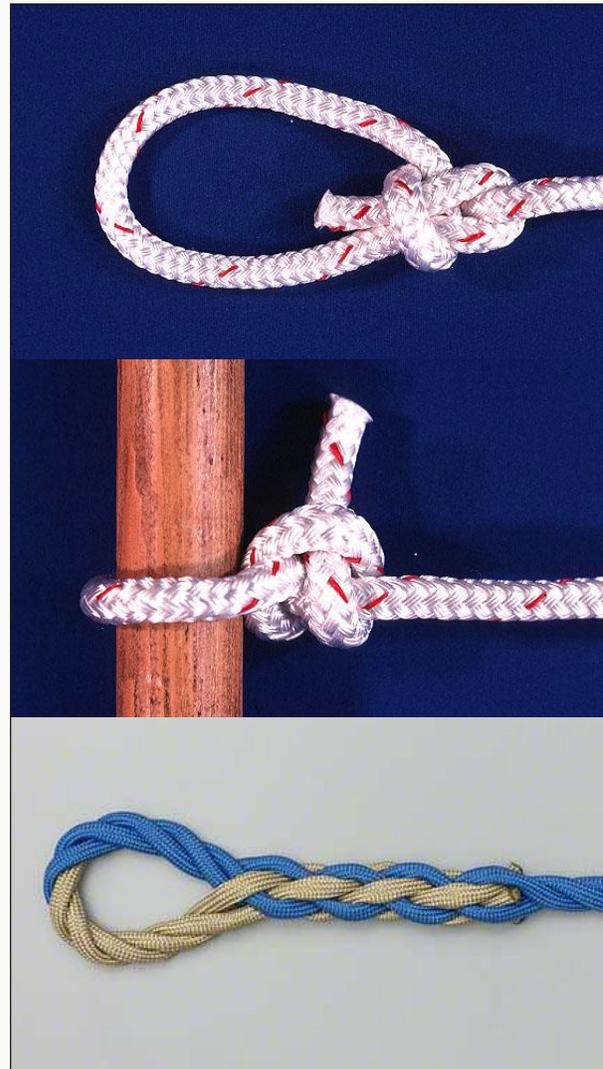


Figure 18: Three ways to fasten a rope (top to bottom): a bowline knot, the most commonly used knot in parasailing operations; a hitch knot; and a spliced eye. (Bowline and hitch knot photos by James Aber; spliced eye photo by Grog LLC)

Marine Accident Briefs

Allision of Tanker Wawasan Ruby with CSX Bayside Coal Pier (0 fatalities, 1 injured)

The 477-foot-long tanker *Wawasan Ruby*, with 24 persons on board, allided with the CSX Bayside Coal Pier in Baltimore Harbor, Maryland, on August 25, 2012, while the tanker was turning toward its destination berth. One person on the

pier was injured in the accident. Damage to the pier totaled more than \$2 million; the *Wawasan Ruby* sustained an estimated \$15,000 in damage.



Figure 19: The CSX Pier after the allision. (Photo by Coast Guard)

The NTSB determined that the probable cause of the allision of the tanker *Wawasan Ruby* with the CSX Bayside Coal Pier was the high rate of speed at which the pilot and the master were operating the vessel while attempting a 70 degree turn into Curtis Creek.

Sinking of the Tall Ship Bounty (2 fatalities, 3 injured)

The tall ship *Bounty* sank off Cape Hatteras, North Carolina, on October 29, 2012, while attempting to transit through the forecasted path of Hurricane Sandy. Three of the 16 people on board were seriously injured, one crewmember died, and the captain was never found. The vessel's estimated value was \$4 million.

The NTSB determined that the probable cause of the sinking of the *Bounty* was the captain's reckless decision to sail the vessel into the well-forecasted path of Hurricane Sandy, which subjected the aging vessel and the inexperienced crew to conditions from which the vessel could not recover. Contributing to the sinking was the lack of effective safety oversight by the vessel organization.



Figure 20: The *Bounty*, photographed from a Coast Guard aircraft after the crew had abandoned the vessel.

Grounding of Towing Vessel Justice (0 fatalities, 0 injured)

The towing vessel *Justice* was heading to Buzzards Bay, Massachusetts, with five crewmembers when it grounded on a hard, rocky bottom southwest of Cape Cod Canal, just outside Hog Island Channel, on March 21, 2013. The impact sheared the starboard stern drive from the vessel and resulted in the discharge of 232 gallons of gear oil. The vessel docked 15 minutes later without further incident using its remaining port stern drive. Repairs cost about \$1.2 million.



Figure 21: Stern view of *Justice* in dry-dock post-accident. Inset, lower part of starboard azimuthing stern drive after salvage. (Photos by Coast Guard)

The NTSB determined that the probable cause of the grounding of the commercial towing vessel *Justice* in Hog Island Channel was the mate's ineffective use of the vessel's autopilot to maintain a course within the navigable channel and his delay in taking manual control as the vessel approached charted hazards.

Bollard Failure Causing Breakaway of Cruise Ship Carnival Triumph (1 fatality, 1 injured)

The cruise ship *Carnival Triumph* was moored and undergoing repairs at the BAE Systems shipyard in Mobile, Alabama, when the Port of Mobile experienced a period of high wind gusts. The vessel broke free from its moorings and drifted across the Mobile River, where it collided with the moored US Army Corps of Engineers dredge *Wheeler* on April 1, 2013. A responding towing vessel, *Noon Wednesday*, became pinned between the cruise ship and the dredge. One shipyard employee died in the accident, and another was injured. The total damage amount was estimated to be more than \$2.9 million.



Figure 22: Image captured by Coast Guard investigators from the bulkhead of a ship repair facility shortly after the collision shows (left to right) *Carnival Triumph*, *Noon Wednesday*, and *Wheeler*.

The NTSB determined that the probable cause of the breakaway of the *Carnival Triumph* from its moorings and the subsequent collision with the dredge *Wheeler* and the towing vessel *Noon Wednesday* was the successive failure of multiple mooring bollards, which were known

by BAE Systems to be in poor condition with an undetermined mooring load capability.

Engine Room Fire On Board the Fishing Vessel Arctic Storm (0 fatalities, 0 injured)

A fire broke out in the engine room of the uninspected fishing vessel *Arctic Storm* as it was under way in the North Pacific Ocean, about 46 nautical miles west of Aberdeen, Washington, conducting fish processing operations on the afternoon of May 20, 2013. The crew extinguished the fire through the combined use of portable extinguishers, fixed suppression, and fire hoses, and no injuries or pollution resulted from the accident. The estimated damage to the *Arctic Storm* was \$5 million.



Figure 23: Fishing vessel *Arctic Storm* during the fire emergency. (Photo by Coast Guard)

The NTSB determined that the probable cause of the fire on board fishing vessel *Arctic Storm* was a fractured fitting on a fuel oil vent valve located on the main propulsion engine, which resulted in fuel oil spraying onto a hot engine surface and igniting.

Ongoing Domestic Investigations (as of December 31, 2014)

- Grounding of the Marshall Islands-flagged MODU *Kulluk*, Kodiak Island, Alaska, December 31, 2012
- Collision between the fishing vessel *American Dynasty* (US) and the moored HMCS *Winnipeg*, Esquimalt Harbour, British Columbia, Canada, April 23, 2013

- Foundering of the fishing vessel *Celeste Ann* (US), 20 nautical miles southwest of Grand Isle, Louisiana, June 14, 2013
- Collision between the towing vessel *Krystal Sea* (US) and the moored US Coast Guard cutter *Sycamore*, Cordova, Alaska, July 28, 2013
- Foundering of the fishing vessel *Pacific Queen* (US), Lung Island, Alaska, August 14, 2013
- Collision between the US Coast Guard cutter *Hollyhock* and the bulker *Mesabi Miner* (US), northern Lake Michigan, January 5, 2014
- Fire on board the fishing vessel *Juno* (US), Grays Harbor, Westport, Washington, January 6, 2014
- Collision of the offshore supply vessel *Tristan Janice* (US), 15 nautical miles south of Callou Bay, Louisiana, February 18, 2014
- Collision of the Liberia-flagged bulker *Summer Wind* with the tow *Miss Susan* (US), Texas City “Y” intersection, Houston Ship Channel, Texas, March 22, 2014
- Stability issues of the recreational vessel *Baaden* (US), Anacortes, Washington, May 18, 2014
- Foundering of the barge *Nash* (US), North Pacific Ocean off California, June 8, 2014
- Foundering of the towing vessel *Jim Marko* (US), St. Louis, Missouri, July 1, 2014
- Fire on board the recreational vessel *LaPietra* (US), 3 nautical miles west of Destruction Island, Washington, July 1, 2014
- Allision of Marshall Islands-flagged bulker *Anna Smile* with Louis Dreyfus grain terminal, Houston, Texas, July 14, 2014
- Collision of towing vessel *Riley Elizabeth* (US) with USACE barges, Waterproof, Louisiana, July 18, 2014
- Collision of the Malta-flagged freight vessel *Flag Gangos*, Gretna, Louisiana, August 13, 2014
- Allision of the towing vessel *Cory Michael* (US), New Orleans, Louisiana, August 13, 2014
- Collision of fishing vessel *Captain Lee* (US) and OSV *Gloria May* (US), 16 nautical miles south of Pascagoula, Mississippi, August 25, 2014
- Foundering of fishing vessel *Christopher’s Joy* (US), Southwest Pass, Louisiana, September 23, 2014
- Collision of Coast Guard cutter *Key Largo* with fishing vessel *Sea Shepard* (US), Virgin Passage, US Virgin Islands, USA, September 23, 2014
- Fire on board tow vessel *Dennis Hendrix* (US), New Roads, Louisiana, October 31, 2014
- Collision of tow vessel *Valiant* (US) and barge *Everglades*, 120 nautical miles southeast of Galveston, Texas, November 17, 2014
- Foundering of fishing vessel *Blazer* (US), Siletz Bay, Oregon, November 29, 2014
- Fire on board fishing vessel *Miss Eva* (US), Port Fouchon, Louisiana, December 1, 2014
- Vessel(s) damaged resulting from Eastport Pier collapse, Eastport, Maine, December 4, 2014
- Grounding of fishing vessel *Titan* (US), Columbia River, Ilwaco, Washington, December 5, 2014
- Foundering of passenger *Spirit of Adventure* (US), Seward, Alaska, December 7, 2014
- Grounding of the small passenger vessel *King Neptune* (US), Avalon, Catalina Island, California, December 30, 2014

International Investigations

Given the international nature of the marine transportation system and the number of foreign-registered cruise and cargo ships operating from US ports, the investigation of accidents involving both domestic and foreign-registered vessels promotes marine safety worldwide. MS investigates casualties involving foreign-registered vessels operating in US waters and has investigated accidents involving US-registered ships as far away as the Persian Gulf and the South China Sea.

The NTSB (MS) also participates with the Coast Guard in cooperating with foreign marine casualty investigation authorities under standards established by the IMO Code for the Investigation of Marine Casualties and Incidents (Casualty Investigation Code) as a substantially interested state (SIS). In 2014, MS investigated two international marine casualties in this capacity:

- Grounding of Bahamas-flagged passenger vessel passenger *Bahamas Celebration*, Freeport, Bahamas, IMO-SIS investigation with US Coast Guard, October 31, 2014
- Engine room fire on board the Marshall Islands-flagged passenger vessel *Insignia*, St. Lucia, SIS investigation with US Coast Guard, December 11, 2014

Public Hearings, Forums, and Symposiums

Cruise Ships: Examining Safety, Operations, and Oversight

On March 25, 2014, the NTSB held a 2-day public forum on cruise ship safety and oversight to review the regulatory framework, ship design, fire protection, operations, and corporate oversight of cruise ships. The forum's goal was to encourage dialogue among industry stakeholders, regulators, and the general public to better understand cruise ship safety and oversight. Participants included regulators such as the Coast Guard, vessel owners and operators, researchers, and industry groups.

Safety Alerts

- [Towline Failure is the Leading Cause of Injury and Death in Parasailing Accidents \(SA-036\)](#)
- [Passenger Vessels: Stairway Hazards during Docking and Undocking \(SA-034\)](#)

Office of Railroad, Pipeline, and Hazardous Materials Investigations

The Office of Railroad, Pipeline, and Hazardous Materials Investigations (RPH) investigates accidents in two major modes of transportation: railroads and pipelines. Also, the office investigates accidents involving releases of hazardous materials.

The majority of railroad investigations involve freight train accidents, such as collisions and derailments, but the office places special emphasis on train accidents that involve the traveling public, such as passenger train and rail transit accidents. The criteria for investigating a railroad accident include fatalities or substantial damage. On the basis of the investigations conducted by this office, the NTSB issues safety recommendations to Federal and state regulatory agencies, industry and safety standards organizations, railroads, rail transit agencies, and pipeline operators, equipment and container manufacturers, producers and shippers of hazardous materials, and emergency response organizations.

The office also investigates pipeline accidents involving a fatality or substantial property damage. Once notified of an accident, the NTSB dispatches to the site an investigator who takes charge of a team composed of investigative personnel from agencies such as the state public utility commission, local fire and police units, pipeline companies, and the U.S. DOT.

The office also investigates accidents involving the release of hazardous materials in all modes of transportation, including fatal accidents or those causing major disruptions to a community. The investigations focus on the effects of materials released in public areas, the emergency response by local authorities, and the adequacy of federal standards for the transportation of hazardous materials. When the accident involves bulk transportation of a hazardous materials, the investigation focuses on the performance of the

containers, the preparation for and handling of the material during transport, the health and safety hazards of the material, the markings and hazard communications for the shipments, and the effectiveness of the emergency response and public awareness.

RPH consists of four divisions: Railroad, Pipeline and Hazardous Materials, Human Performance and Survival Factors, and Report Development.

Table 8: 2014 RPH Statistics

Recommendations Issued	
Railroad	76
Pipeline	4
Recommendations Implemented	
Railroad	26
Pipeline	16
Recommendations Closed Unacceptable	
Railroad	2
Pipeline	0
Major Reports	
Railroad	2
Pipeline	1
Accident Briefs	
Railroad	13
Pipeline	0
Railroad	2
Major Accident Launches	
Railroad	9
Pipeline	1
HAZMAT	2
International Accident Launches	
HAZMAT	1
Safety Alerts	1

Completed Investigations

Railroad Investigations

Conrail Freight Train Derailment with Vinyl Chloride Release (0 fatalities, 28 injured)

On November 30, 2012, a Consolidated Rail Corporation (Conrail) train derailed while traveling over a moveable bridge in Paulsboro, New Jersey.

Safety issues identified in the investigation include the following:

- Training and qualification of train crews for moveable bridge inspection;
- Conrail safety management;
- Timeliness of hazardous materials communications to first responders;
- Failure of the incident commanders to follow established hazardous materials response protocols;
- Firefighter training and qualifications;
- Inadequacies of emergency planning, emergency preparedness, and public awareness for hazardous materials transported by train; and,
- Rail corridor risk management analysis.

The NTSB determined that the probable cause of this accident was Consolidated Rail Corporation (1) allowing the train to proceed past the red signal aspect with the rail slide locks not fully engaged, which allowed the bridge to rotate and misalign the running rails as the train moved across it, and, (2) relying on a training and qualification program that did not prepare the train crew to examine the bridge lock system.

As a result of this investigation, the NTSB made safety recommendations to the Consolidated Rail Corporation, the US Department of Transportation, the Federal Railroad Administration (FRA), the Pipeline and Hazardous Materials Safety Administration (PHMSA), the Association of American Railroads, the American Short Line and Regional Railroad Association,

the International Association of Fire Chiefs, the National Volunteer Fire Council, the new Jersey State Police Office of Emergency Management, the New Jersey Bureau of Fire Department Services, the New Jersey Department of Labor and Workforce Development, and the New Jersey Department of Health. The NTSB reiterated recommendations to the FRA and PHMSA.



Figure 24: Five derailed tank cars, their commodities, and their condition after the derailment. The inset shows the punctured vinyl chloride tank car.

Collision of Union Pacific Railroad Freight Train with BNSF Railway Freight Train near Chaffee, Missouri (0 fatalities, 7 injured)

On May 25, 2013, near Chaffee, Missouri, a Union Pacific Railroad (UP) freight train collided with a BNSF Railway (BNSF) freight train at Rockview Interlocking, where tracks of the two railroads cross.

Safety issues identified in the report include the following:

- Fatigue awareness;
- The need to implement crew resource management;
- The need for inward- and outward-facing audio and video recorders in locomotive cabs; and,
- Positive train control

The NTSB determined that the probable cause of the accident was the failure of the Union Pacific Railroad train crewmembers to comply with wayside signals leading into

the Rockview Interlocking as a result of their disengagement from their task likely because of fatigue-induced performance degradation. Contributing to the accident was the lack of: (1) a positive train control system, (2) medical screening requirements for employees in safety-sensitive positions for sleep apnea and other sleep disorders, and (3) action by the Federal Railroad Administration to fully implement the fatigue management components required by the Rail Safety Improvement Act of 2008. Likely contributing to the engineer's fatigue was undiagnosed obstructive sleep apnea. Also contributing to the accident was inadequate crew resource management.

As a result of this investigation, the NTSB made safety recommendations to Union Pacific Railroad. The NTSB reiterated and reclassified recommendations to the FRA.



Figure 25: Aerial view of accident scene and wreckage.

Pipeline Investigations

Columbia Gas Transmission Corporation Pipeline Rupture, Sissonville, West Virginia (3 fatalities, 0 injured)

On December 11, 2012, a buried 20-inch-diameter interstate natural gas transmission pipeline, owned and operated by Columbia Gas Transmission Corporation, ruptured in a sparsely populated area, about 106 feet west of Interstate 77 near

Route 21 and Derricks Creek Road, in Sissonville, West Virginia.

Safety issues identified in the report include the following:

- External corrosion mitigation of the ruptured pipeline;
- Supervisory control and data acquisition alert setpoint configuration;
- Use of automatic shutoff valves and remote control valves to improve isolation of high-pressure pipelines; and,
- Exclusion of pipelines in the vicinity of highways from integrity management regulation.



Figure 26: Accident scene facing east.

The NTSB determined that the probable cause of the pipeline rupture was (1) external corrosion of the pipe wall due to deteriorated coating and ineffective cathodic protection and (2) the failure to detect the corrosion because the pipeline was not inspected or tested after 1988. Contributing to the poor condition of the corrosion protection systems was the rocky backfill used around the buried pipe. Contributing to the delay in the controller's recognition of the rupture was Columbia Gas Transmission Corporation management's inadequate configuration of the alerts in the supervisory control and data acquisition system. Contributing to the delay in isolating the rupture was the lack of automatic shutoff or remote control valves.

As a result of this investigation, the NTSB made safety recommendations to Columbia Gas Transmission Corporation and the Pipeline and Hazardous Materials Safety Administration.

*Special Investigation Report on Railroad and Rail Transit Roadway Worker Protection
(15 fatalities, 0 injured)*

During 2013, 11 railroad roadway workers died while doing their jobs, representing the largest number of railroad roadway workers killed while on duty in 1 year since 1995, when 12 died. Also in 2013, four rail transit roadway workers died. This special investigation report describes the results of a NTSB investigation of these 15 deaths. The report identifies and discusses the circumstances of these deaths, which included falls from bridges, incidents involving bucket lifts, strikes by moving equipment, and natural hazards, including a mudslide. The report also identifies the following recurring safety issues: job briefings, regulation and safety oversight, the Fatality Analysis of Maintenance-of-Way Employees and Signalmen Committee, and safety culture and safety management systems.



Figure 27: Wreckage of S-65 Trax lift bucket.

As a result of this investigation, the NTSB made safety recommendations to the Federal Railroad Administration, the Federal Transit Administration, the Occupational Safety and Health Administration,

and the Fatality Analysis of Maintenance-of-Way Employees and Signalmen Committee.

Special Investigation Report: Organizational Factors in Metro-North Railroad Accidents (6 fatalities, 126 injured)

During the time period between May 2013 and March 2014, the NTSB launched investigative teams to five significant accidents on the Metro-North Railroad (Metro-North): (1) the May 17, 2013, derailment and subsequent collision in Bridgeport, Connecticut; (2) the May 28, 2013, employee fatality in West Haven, Connecticut; (3) the July 18, 2013, CSX derailment on Metro-North tracks in The Bronx, New York; (4) the December 1, 2013, derailment in The Bronx, New York; and (5) the March 10, 2014, employee fatality in Manhattan, New York. In combination, these accidents resulted in 6 fatalities, 126 injuries, and more than \$28 million in damages.

This special investigation report discusses all five of the recent Metro-North accidents investigated by the NTSB, examines some of the common elements of these accidents, and addresses the steps that Metro-North, the Metropolitan Transit Authority (MTA), and the FRA have taken as a result of these investigations. This report also highlights lessons learned and provides recommendations to Metro-North, MTA, and several other entities to improve railroad safety on Metro-North and elsewhere.



Figure 28: Amtrak train video still shows the missing rail segment before the accident.

As a result of this special investigation, the NTSB made safety recommendations to Metro-North Railroad; the Long Island Railroad; the Metropolitan Transportation Authority; the FRA; the Association of American Railroads; the American Public Transportation Association; the American Short Line and Regional Railroad Association; the Brotherhood of Locomotive Engineers; and the International Association of Sheet Metal, Air, Rail and Transportation Workers; the American College of Physicians; the American Academy of Family Physicians. Three previously issued recommendations to the FRA and the Metro-North Railroad were reclassified. Three safety recommendations to the FRA were reiterated.

CSX Transportation Coal Train Derailment Killed Two Individuals, Ellicott City, Maryland (2 fatalities, 0 injured)

On August 20, 2012, an eastbound CSX Transportation (CSXT) coal train, U81318, derailed the first 21 cars at milepost (MP) 12.9 while crossing the railroad bridge over Main Street on the Old Main Line (OML) Subdivision in Ellicott City, Maryland. The train consisted of two locomotives and 80 loaded coal cars; the train length was 4,227 feet and the weight was 9,873 trailing tons. Seven of the derailed cars fell into a public parking area that was below and north of the tracks. The remainder of the derailed cars overturned and spilled coal along the north side of the tracks.



Figure 29: Derailed train on the railroad bridge. (Photo by the Howard County Police Department)

Prior to the train crossing the bridge, two individuals entered the railroad right-of-way on the north side of the railroad bridge that crossed Main Street. They climbed over a short wooden fence and entered CSXT property without authorization to access the railroad bridge. They were sitting on the bridge during the derailment. Both individuals were killed by the spilled coal.

The CSXT train crew consisted of an engineer, a conductor, and an engineer trainee. No crewmembers were injured. At the time of the accident, the sky was cloudy and dark, the wind was calm, and the temperature was 65°F. The damage was estimated to be \$1.9 million. The NTSB determined that the probable cause of the accident was a broken rail with evidence of rolling contact fatigue.

Highway-rail Grade Crossing Collision, Madison, Illinois (1 fatality, 0 injured)

On February 28, 2012, southbound Amtrak train 301-28, traveling on Union Pacific Railroad (UP) Springfield Subdivision main track 2, collided with an eastbound vehicle at the Bissell Street highway-rail grade crossing (crossing) in Madison, Illinois. Two UP signal employees were working in the UP warning system signal bungalow for the crossing when the accident occurred. Locomotive video recorder data indicated that the crossing warning system did not activate before or during the collision. The vehicle driver died as a result of the collision.

The NTSB determined that the probable cause of the accident was the failure of the Union Pacific Railroad signal inspector and signal technician to provide for the safety of train movements and highway users prior to disabling the highway-rail grade crossing warning system at the Bissell Street crossing. Contributing to the accident was the failure of Union Pacific Railroad management to ensure proper procedures were followed during the software upgrades to provide for the safety of train movements and highway users.

Ongoing International Accident Investigations

RPH participates in the investigation of hazardous materials-related transportation accidents and serious incidents outside the United States. Two ongoing accident investigations are:

- Aviation – Crew reportedly declared an emergency due to an in-flight fire, Asiana Flight 991, Jeju Is, Korea.
- Railroad – Crude Oil Train Derailment, Plaster Rock, New Brunswick, Canada

Ongoing Investigations (as of December 31, 2014)

Railroad

- Union Pacific Train Collision in Non-Signaled Territory, Hays, Kansas, July 16, 2013
- Collision of Three BNSF Trains, Amarillo, Texas, September 25, 2013
- Empty Chicago Transit Authority Train Collided With Stopped Train, Forest Park, Illinois, September 30, 2013
- Bay Area Rapid Transit (BART) Train Struck and Killed Two Roadway Workers, Walnut Creek, California, October 18, 2013
- BNSF Grain Train Derailed and Subsequent Fire and Town Evacuation, Casselton, North Dakota, December 30, 2013
- Chicago Transit Authority Train Derailed at O'Hare Airport, Chicago, Illinois, March 24, 2014
- CSX Train Derailed, Subsequent Fire and Evacuation, Lynchburg, Virginia, April 30, 2014
- UP Train Engineer had Epileptic Seizure, Arden, Nevada, August 7, 2014
- Two Union Pacific Trains Collided, and Subsequent Town Evacuation, Hoxie, Arkansas, August 17, 2014
- Two Union Pacific Trains Collided, Galva, Kansas, September, 25, 2014

- BNSF Worker Pinned Between Two Trains, Colorado Springs, Colorado, October 8, 2014
- Collision of Arkansas & Missouri Locomotive (A&M) and A&M Passenger Train, Brentwood, Arkansas, October 16, 2014
- Amtrak Train Struck an Amtrak Signal Maintainer, Clermont, New York, October 29, 2014

Pipeline

- Cast Iron Main Pipeline Explodes and Destroys 2-story Apartment Building, Birmingham, Alabama, December 17, 2013
- Explosion and subsequent fire, Manhattan, New York, March 12, 2014

Hazardous Materials

- Crew reportedly declared an emergency due to an in-flight fire, Asiana Flight 991, Jeju Is, Korea.
- Crude Oil Train Derailment, Plaster Rock, New Brunswick, Canada, January 8, 2014
- Collision of Two Ships (Summerwind and Miss Susan) in the Channel, Houston, Texas, March 22, 2014

Public Hearings, Forums, and Symposiums

Transportation of Crude Oil and Ethanol

On April 22-23, 2014, the NTSB held a 2-day forum to address rail safety on transportation of crude oil and ethanol. A number of rail accidents, both in the United States and Canada, involving dedicated trains or large blocks of flammable liquid tank cars, have highlighted the vulnerabilities of the DOT-111 tank car and the need for comprehensive risk mitigation and emergency response strategies. The severe consequences resulting from the release of flammable liquids

have underscored areas of concern identified in recent NTSB safety recommendations. The NTSB invited researchers, crude oil and ethanol shippers, tank car builders, railroad carriers, emergency responders, and federal regulatory agencies to discuss the safety of crude oil and ethanol transportation by railroad. The invited panelists provided presentations about current and proposed initiatives affecting these issues. Panelists also discussed ways to reduce the consequences from accidents involving flammable liquids through tank car design, railroad operations, and emergency preparedness.

The forum panels included:

- Tank Car Design, Construction and Crashworthiness
- Rail Operations and Approaches to Risk Management
- Emergency Response to Tank Car Releases of Crude Oil and Ethanol
- Federal Oversight and Industry Initiatives Related to Crude Oil and Ethanol

Safety Alerts

- [Railroad Signal Visibility \(Conspicuity\) \(SA-038\)](#)



Figure 30: The NTSB technical panelists during day one at the NTSB forum, Rail Safety: Transportation of Crude Oil and Ethanol.

Office of Research and Engineering

The Office of Research and Engineering (RE) provides technical support to NTSB accident investigations in all modes of transportation, and conducts safety studies, generates periodic statistical reviews of aviation accidents, and provides medical and toxicology support for investigations in all modes. RE comprises the following four divisions: Safety Research, Vehicle Performance, Recorders Laboratory, and Materials Laboratory.

In 2014, the office continued to work to expand the NTSB's technological capabilities by developing close relationships with outside transportation agencies, both in the United States and abroad. For example, the office hosted the Accident Investigator's Materials (AIM) International conference at NTSB HQ and the Training Center. This conference enabled technical staff from international accident investigation boards' materials laboratories to discuss new methods and techniques and to benchmark capabilities and technical approaches to laboratory work. Office staff gave technical presentations on the Boeing 787 lithium battery fire investigation and taught a half-day course on the elements of fire investigations in transportation.

Upgrades to the office's laboratory equipment in 2014 allowed the NTSB to maintain its state-of-the-art analytic capabilities in accident investigations. The first stage of the RE lab renovation included the flight data recorder laboratories, the chip recovery laboratory, and the cockpit voice recorder working room. The second stage of the renovation included the materials laboratory. The final stage involved the construction of three new recorder group audio/video rooms, a renovated wet chemistry laboratory, a recorder disassembly room, and a laboratory for large part breakdown.

Table 9: 2014 RE Statistics

Major Reports	1
Major Accident Launch Support	12
Field Investigation Accident Launch Support	1
Vehicle Recorders Received	566
Vehicle Recorders Readout	521
Material Laboratory Exam Reports	197
Vehicle Performance Products	26
Safety Studies	1



Figure 31: NTSB Metallurgist, Joe Epperson, conducting an evaluation of the structure for the collapse of the interstate 5 Skagit River Bridge, Mount Vernon, Washington.

Further, on October 7, the NTSB convened a forum on Emerging Flight Data and Locator Technology. Due to challenges in recent years involving the location and recovery of lost airplanes and recorders, the NTSB held the forum to highlight effective flight data and locator technologies currently being used, explore technologies in development, and determine what policy, industry, and technological impediments need to be addressed. This forum provided the input for future NTSB recommendations addressing improvements in locating downed

airplanes and ways to obtain critical, tamper-proof flight data faster without depending on immediate underwater retrieval.

- The Safety Research Division staff completed one safety study, continued research for one other safety study, produced an annual aviation accident data report, generated five rapid reports and nine data reports to support investigations, and participated in numerous presentations and training sessions for internal and external organizations.
- The Materials Laboratory Division staff completed 197 reports for 137 accident cases and launched to 3 accident sites.
- Graphic and visual arts specialists from the Vehicle Performance Division produced accident reconstruction animations for two Board Meetings in 2014.
- Vehicle Performance Division staff completed 26 products (aircraft and surface vehicle performance studies, animations, laser scanning reports and video/photograph studies) in support of accident investigations and launched to 4 accident sites. One of those products was a major aircraft performance study for the August 14, 2013, crash on approach to landing of UPS flight 1354 in Birmingham, Alabama.
- The Vehicle Recorder Division received 566 devices and completed 521 readouts, transcripts, and studies in support of aviation, rail, marine, and highway investigations in 2014, and launched to 8 accident sites. (34 of the recorders were from foreign accidents).
- Vehicle Recorder Division staff continued to assist in special foreign investigations including assistance to the Dutch Safety Board for MH17 investigation and assistance to Mali for the Air Algerie MD-83 investigation.

Medical Factors staff participated in more than 80 NTSB accident investigations in all transportation modes in 2014. This included evaluating and addressing medical issues through formal factual

and analytical reports, safety recommendations, coordination with other agencies, and formal presentations to the NTSB and external audiences. Staff played important roles in the final reports for the crash of Asiana Flight 214 in San Francisco, California; the Special Investigation Report regarding five Metro-North accidents; and the final report regarding the collision of two freight trains and the collapse of a highway overpass in Chaffee, Missouri.



Figure 32: NTSB Materials Engineer, Joseph Panagitou evaluating a lithium ion battery that had failed by thermal runaway in an auxiliary power unit battery fire on a Japan Airlines Boeing 787-8.

Completed Safety Studies

Drug Use Trends in Aviation: Assessing the Risk of Pilot Impairment

The NTSB has a longstanding and ongoing goal of understanding and reducing transportation accidents caused by operator impairment. In support of this goal, the Safety Research Division, in conjunction with the Chief Medical Officer, conducted a study to provide insight into the prevalence of pilot drug use in aviation accidents. This study analyzed the FAA Civil Aerospace Medical Institute toxicology testing records to characterize the prevalence of drug use in fatally

injured pilots. The study also evaluated trends associated with prescription, over-the-counter, and illicit drug use. A study of this type was currently only possible in aviation due to the availability of comprehensive accident and toxicology data, but highlights the importance of toxicology data in every mode.

Ongoing Safety Studies
(as of December 31, 2014)

Integrity Management of Gas Transmission Pipelines in High Consequence Areas

A review of Pipeline and Hazardous Materials Safety Administration (PHMSA) incidents during 2010–2012 shows that 35 percent of all gas transmission pipeline incidents involved issues such as corrosion, environmental cracking, or failure of pipe or weld due to installation problems. This study will address two items on the 204 NTSB's Most Wanted List: preserve the integrity of transportation infrastructure and enhance pipeline safety.

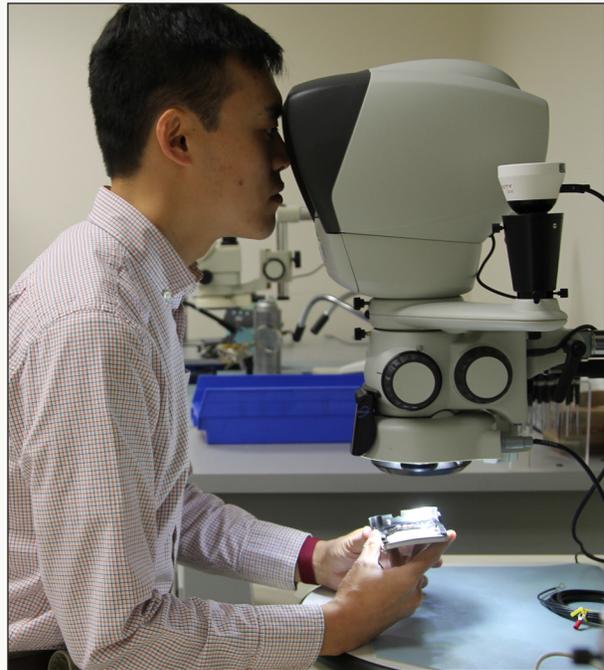


Figure 33: NTSB Engineer Ben Hsu examines a solid state hard drive that was recovered from Virgin Galactic SpaceShipTwo at the NTSB laboratory in Washington, DC.

Office of Communications

The Office of Communications' (OC) mission is to ensure that the NTSB's vision and actions are accurately and effectively communicated to congressional stakeholders, victims of transportation accidents and their families, state and local governments, the media, and the public.

The desired result is a clear understanding of the NTSB mission and how implementation of NTSB recommendations addresses critical transportation safety issues. OC staff produces and updates information for the agency's website and creates videos to support the agency's advocacy efforts. OC includes four divisions: Safety Advocacy, Public Affairs, Government & Industry Affairs, and Transportation Disaster Assistance.



Figure 34: NTSB Safety Advocate Nicholas Worrell addressed Caribbean leaders and transportation professionals at the International Road Federation's 3rd Caribbean Regional Congress.

The OC develops and administers the NTSB's Most Wanted List (MWL) based, in part, on open safety recommendations. The MWL is the agency's preeminent advocacy tool, highlighting issue areas whose resolution would have significant impact on transportation safety at the national and state levels and a new list is announced annually at a press conference. Although the NTSB actively advocates for the acceptance of all its safety recommendations, follow-up efforts for the recommendations supporting MWL issue

areas are generally more aggressive. This includes tracking agency-wide advocacy efforts and coordinating the NTSB's overall strategy for safety advocacy through traditional media outlets, as well through social media, with industry and other non-governmental organizations engaged in safety advocacy at the federal and state levels.

Table 10: 2014 OC Statistics

Aviation Accident Launch Support	5
Highway Accident Launch Support	2
Marine Accident Launch Support	0
Railroad Accident Launch Support	5
Pipeline Accident Launch Support	1
Testimony to Congressional Committees	5
Testimony or legislative support to State Legislative Committees	1
Agency-wide Safety Advocacy Activities	190
Distracted Driving Webinar	1

Transportation Disaster Assistance

This division is responsible for responding to all major aviation accidents and rail passenger disasters, as defined in 49 USC § 1136 and 1139. Increasingly, staff are launched to or otherwise engaged in other modal accident investigations that are not mandated by statute. Staff also manage ongoing requests for information from family members via phone and e-mail. Primary responsibilities of the team upon arrival at an accident site include coordinating resources of local, state, and federal agencies; establishing a Joint Family Support Operations Center; and ensuring that the airline or railroad establishes a Family Assistance Center. In addition, the team maintains contact with family members following the on-scene phase of an accident investigation to provide updates about the investigation, notifies them of public hearings and/or Board Meetings,

and answers various other questions and concerns. When staff respond to an accident, the team sent consists of specialists with expertise in victim services, emergency operations, and victim recovery and identification.



Figure 35: TDA specialist Elias Kontanis with local officials at the scene of the Virgin Galactic spaceship accident in Mojave, California.

Operating Authority

In 1996, Congress passed the Aviation Disaster Family Assistance Act (49 USC § 1136, 41113), which charged the NTSB with assisting victims of aviation disasters and their families. The agency's primary responsibility involves coordination among federal agencies, commercial airlines, state and local authorities, and the families of victims. In 1997, Congress enacted the Foreign Air Carrier Family Support Act (49 USC § 41313) to require that foreign air carriers operating flights to and from the United States meet the same standards of victim assistance as their US counterparts. In 2008, the Rail Passenger Disaster Family Assistance Act (49 USC § 1139, 24316) gave similar responsibilities to the NTSB following rail passenger accidents involving Amtrak and interstate/intercity high speed passenger rail.

Activities and Partnerships

During 2014, staff participated in 9 accident launches, supported nearly 522 outreach activities/requests, and conducted 3 training courses at the NTSB Training Center. They provided support to family members attending ten Board Meetings and public forums. Staff also supported family member inquiries for information related to over 400 general aviation and other modal accidents.

The NTSB has formal agreements with the American Red Cross and such federal agencies as the US Department of Homeland Security, the US Department of Defense, the US Department of Health and Human Services, Department of State, and the FBI. These agencies support the NTSB in both the investigative and family assistance efforts at major accidents.

Accident Launch Support

Rail and Pipeline (in coordination with Office of RPH)

- March 12: Manhattan, New York. Staff coordinated with local authorities following the a natural gas explosion and fire that destroyed two multi-use, five story buildings.
- October 16: Brentwood, Arkansas. Staff coordinated with the operator and local authorities following the crash of a Arkansas & Missouri Railroad (A&M) locomotive which struck a stopped, southbound A&M passenger excursion train.

Highway (in coordination with Office of HS)

- April 11: Orland, California. Staff coordinated with local authorities following the crash of a truck that crossed over the center median of Interstate 5 and collided with a motor coach.
- September 27: Davis, Oklahoma. Staff coordinated with local authorities following the crash of a tractor-trailer combination and a mid-sized bus transporting the North Central Texas College women's softball team.

Aviation (in coordination with Office of AS)

- April 8: Kwethluk, Alaska. Staff coordinated with local authorities and the operator (Hageland Aviation Services, Inc., dba RAVN Connect) following the crash of a Cessna 208B.
- May 31: Bedford, Massachusetts. Staff coordinated with local authorities following the crash of a Gulfstream IV operated by SK Travel LLC.

- October 30: Wichita, Kansas. Staff coordinated with local authorities and a business owner following the crash of King Air B200 into building located on airport property.
- October 31: Mojave, California. Staff coordinated with the operator and local authorities following the crash of SpaceShipTwo during a test flight.
- December 8: Gaithersburg, Maryland. Staff coordinated with local authorities following the crash of Embraer EMB-500 into several residences.

Non-Launch Support

- Staff provided support for 128 new accidents this year, with a total of 454 cases managed over the course of year.



Figure 36: Chairman Hart addresses media representatives during the on-scene phase of the Space Ship 2 accident investigation as NTSB public affairs specialist, Eric Weiss and senior aviation accident investigator and IIC Lorenda Ward look on.

Public Hearings, Forums, and Symposiums

The OC supported multiple forums, investigative hearings and Board meetings in 2014, including:

- Investigative Hearing: UPS Flight 1345
- Forum: Cruise Ships – Examining Safety, Operations and Oversight
- Board Meeting: Seastreak Wall Street Ferry Accident
- Forum: Rail Safety – Transportation of Crude Oil and Ethanol
- Board Meeting: Crash of Asiana Airlines Flight 214
- Board Meeting: Paulsboro Train Derailment and Hazmat Release
- Board Meeting: UPS Flight 1354
- Board Meeting: Safety Study on Drug Use in Aviation
- Board Meeting: Alaska State Troopers Helicopter Crash
- Board Meeting: Special Investigation Report on Organizational factors in Metro-North Railroad Accidents
- Symposium: Passenger Vehicle Tire Safety

Office of Administrative Law Judges

Since 1967, the NTSB has served as the “court of appeals” for holders of airman, mechanic, air carrier, and mariner certificates when the FAA or the Coast Guard suspends or revokes a certificate, and when a certificate application is denied.

The judges within the agency’s Office of Administrative Law Judges (ALJ) hear and consider the cases, and issue initial decisions on administrative appeals regarding FAA aviation enforcement actions. The judges also adjudicate, under the Equal Access to Justice Act (EAJA), claims from certificate holders for fees and expenses stemming from FAA certificate actions; and civil penalty actions assessed against any individual by the FAA. The certificate holder, the person being assessed, or the FAA may appeal the judges’ decisions to the five-member Board. The Board’s review on appeal of an administrative law judge’s decision is based on the record of the proceeding, which includes hearing testimony (transcript), exhibits, the judge’s decision, and appeal briefs submitted by the parties.



Figure 37: Administrative Law Judge Alfonso Montano presiding over a case.

Table 11: 2014 ALJ Statistics

Total Cases Received	231
Total Cases Closed	216
Emergency Cases Closed	101
Challenges to Emergency Determinations	26
Hearings Held	34
Board Opinions and Orders (O&O)	20
Board O&O appealed to US Federal Courts ¹	13
¹ Public Law 112-153 (the “Pilot’s Bill of Rights”), which became effective on August 3, 2012, vested authority to review the Board’s decisions in both the US Federal District Courts and US Courts of Appeals. Previously, only the Courts of Appeals had jurisdiction to review Board decisions.	

Marine certificate actions are heard first by Coast Guard administrative law judges and may be appealed to the Vice Commandant of the Coast Guard. The ruling of the Vice Commandant may then be appealed to the NTSB. The same appellate process is followed for marine certificate actions as is conducted for aviation actions.

The NTSB currently has four judges: three are assigned to headquarters in Washington, DC, and one is assigned to the NTSB’s Denver, Colorado, office. One of the judges assigned to the headquarters office is stationed in the Dallas-Fort Worth, Texas, area. The judges hold hearings primarily based on their circuit assignments.

We are committed to providing fair and speedy hearings for individuals and entities facing FAA enforcement actions. We have successfully implemented the changes to our system passed by Congress in the 2012 Pilot’s Bill of Rights. Among the changes are the removal of deference to the FAA and the adherence by our law judges to the Federal Rules of Evidence and Federal Rules of Civil Procedure, to the extent practicable. The safety of our airspace system depends on a thoughtful, experienced, and timely review of

the cases brought before us, and the NTSB will continue to provide all of these.

In 2014, ALJ disposed of 64 percent of its caseload.

- 231 aviation certificate appeals were filed with the NTSB's administrative law judges.
- The judges held 34 hearings and closed 216 cases.
- The judges received 89 emergency cases, which, by statute, require expedited handling and hearing, and these numbers are reflected in figure 38. Emergency cases are those in which the certificate, because of a serious concern for aviation safety, is taken immediately from the certificate holder by the FAA during the pendency of the case.
- Twenty-five of the judges' decisions were appealed to the Board. The Board decided 32 appeals on the merits, affirming the judge in 19, modifying 0, reversing 1, and remanding 1 case to the judges for further proceedings. Thirteen of the Board's decisions were appealed to the federal courts, which, to date, rendered one decision affirming the Board and one decision remanding back to the Board.
- Four new EAJA applications were filed in 2014. The judges decided a total of seven EAJA cases, granting fees in two and denying fees in five. None of the EAJA decisions were appealed to the NTSB Board, and the Board did not issue any rulings in EAJA cases.

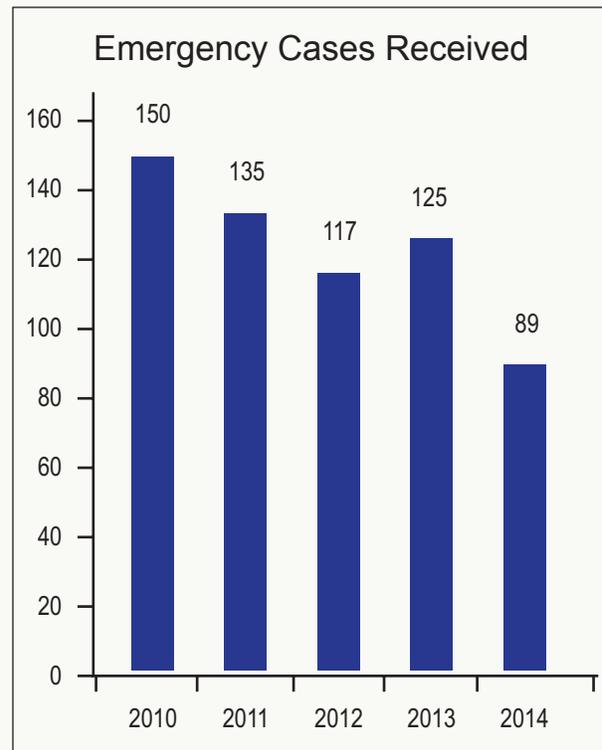


Figure 38: Emergency cases received by ALJ.

NTSB Training Center

The NTSB Training Center, located in Ashburn, Virginia, provides training opportunities for NTSB employees and others from the transportation community through a variety of course offerings related to the various modes of transportation. The core of the training program continues to be key investigative courses that focus on competencies important to safety investigations for NTSB staff and outside participants. The laboratory area contains the reconstruction of TWA flight 800, as well as other wreckage and materials that are used in the Training Center's investigative courses, so that participants can gain hands-on experience with real-world items. The Workforce Development curriculum, open specifically to NTSB staff, offers employees access to additional courses focused on career development and improvement of management, leadership, and other mission critical skills. Vacant seats are open to employees of other federal agencies to maximize training opportunities and knowledge management for the federal workforce, and to provide the best stewardship of taxpayers' training dollars. Investigators from the NTSB and other organizations in the transportation community use the Training Center as a means of improving their accident investigation techniques.



Figure 39: NTSB training facility in Ashburn, Virginia

Table 12: 2014 Training Center Statistics

Courses, Programs, Seminars Offered	43
Workforce Development Courses	18
Student (Individual) Attendance	1541
External Participants	1157
Foreign Participants	152
NTSB Participants	357
Federal Partnerships	1

Training Offerings

In 2014, the NTSB Training Center provided a comprehensive array of training courses to NTSB staff, as well as to domestic and international participants. Because NTSB's mission is the key focus of NTSB Training Center programs and courses, training center staff focus heavily on improving investigative programs and courses for agency employees and for the public. In addition to core accident investigation classes, the Training Center offered a variety of courses ranging in length from 1 day to 2 weeks, with wide applicability, such as Cognitive Interviewing for Accident Investigators, Investigating Human Fatigue Factors, and Family Assistance.



Figure 40: NTSB Safety and Occupational Health Manager Gary Helmer provides safety instruction at the OSHA 6000 Collateral Duty Course for Other Federal Agencies Course.

The majority of those attending Training Center courses are from transportation and emergency response communities. Recognizing the importance of using the training material in the real-world environment, Training Center courses emphasize and rely heavily on examples, demonstrations (see figure 41), and, when appropriate, hands-on training. The Training Center received a fully intact UH-1 Iriquois (“Huey”) from the US Army for use in hands-on exercises in the newly developed NTSB Helicopter Accident Investigation.

New and continuing courses in 2014 created many unique training opportunities. By continually assessing the needs of external and internal customers, the Training Center not only addressed the current set of necessary skills and abilities in its course offerings, but also anticipated those skills necessary for the future. Ensuring and improving the quality of accident investigations through critical thought, instruction, and research is the center’s goal. Some examples of courses that focus on this include:

- Systems Safety Fundamentals
- Media Relations
- Advocacy
- Project Management
- NTSB Accident Report Writing
- Root Cause Analysis
- Courageous Conversations
- Write and Speak like the News



Figure 41: NTSB Petroleum Engineer Chuck Koval is suited up in a Tyvek protective suit assisted by NTSB Rail Investigator Mike Flanigon in the Hazwoper Refresher Course at the NTSB Training Center.

Transportation Community and Partnerships

Furthering its commitment to meeting the training needs of those in other areas of government, the transportation safety community, and the security and emergency response communities, the NTSB Training Center continues to build upon its alliances with private organizations and federal agencies. Additionally, the Training Center continues to attract attendees from the worldwide transportation community, and many foreign governmental agencies and transportation entities. For example, the Training Center worked with the Army National Guard (ANG) Safety Center at Fort Rucker to develop and present a 2-week Aviation Accident Investigation School exclusively tailored for ANG. It was presented for the fourth time in 2013, and ANG requested that the NTSB present a Helicopter Accident Investigation (ANG) for 1 week during 2015. The Training Center is also working with the USCG and the United States Air Force Reserve to develop and present a two week class in Basic Aviation Accident Investigation (AS101). Whenever possible, the center works with its investigative partners to offer classes to larger groups at other locations. The Office of Railroad, Pipeline and Hazardous Materials Safety offered such a course on Basic Railroad Accident Investigation to the Railroad Systems Suppliers, Inc. (RSSI); several more are planned to other organizations in 2015. Another such an example was our Public Affairs course on Managing Communications During a Transportation Disaster. This was presented in six offerings to:

- Volusia County, FL
- Denver International Airport
- Little Rock, Arkansas
- Gulfstream Aerospace
- Cape Air
- Honda Aircraft

Member Profiles



[Honorable Christopher A. Hart,
Chairman](#)

Christopher A. Hart was sworn in as Chairman of the NTSB on March 17, 2015. Prior to stepping into the role of acting chairman, Hart had served as vice chairman and a member of the Board since 2009. President Barack Obama nominated Hart to serve as chairman in January 2015, and the U.S. Senate confirmed him on March 12, 2015. He has been serving as acting chairman since April 26, 2014. He also served as a member of the Board from 1990 to 1993. His 5-year term as a Member will end December 31, 2017.



[Honorable T. Bella Dinh-Zarr,
Vice Chairman](#)

T. Bella Dinh-Zarr, PhD, MPH, took the oath of office as the 42nd Member of the National Transportation Safety Board in March 2015, whereupon President Barack Obama designated her as Vice Chairman of the Board for a two-year term. She is concurrently serving a three-year term as board member, which runs through December 2018.



[Honorable Robert L. Sumwalt,
Member](#)

Robert L. Sumwalt was sworn in as the 37th Member of the NTSB in August 2006 and shortly thereafter the president designated him as Vice Chairman of the Board for a 2-year term. In November 2011, the president reappointed Member Sumwalt to an additional 5-year term. His term of office as a Board Member will run until December 31, 2016.



[Honorable Earl F. Weener,
Member](#)

Earl F. Weener, PhD, took the oath of office as the 41st Member of the NTSB on June 30, 2010. He was nominated by the president and confirmed by the Senate for a term that expires December 31, 2015.

**APPENDIX A: ACCIDENTS EXCEEDING THE EXPECTED TIME ALLOTTED FOR
COMPLETION BY BOARD ORDER**

Mode	Accident Date	Accident Location	Accident Circumstances	Reason not investigated
Aviation	6/17/2012	Las Vegas, Nevada	Dual hydraulic failure	Limited Resources
Aviation	4/29/2013	Bagram, Afghanistan	Cargo load shift during takeoff	Accident delegated to NTSB
Aviation	7/7/2013	Soldotna, Alaska	Crash shortly after takeoff	Limited Resources
Aviation	7/22/2013	New York, New York	Hard landing at LaGuardia Airport	Limited Resources
Highway			<i>None to Report</i>	
Marine	12/21/2012	Sitkalidak Island, Kodiak Island, Alaska	Grounding of the Marshall Islands- flagged MODU <i>Kulluk</i>	Need to review report content and revise after USCG report published
Railroad	7/16/2013	Hays, KS	UP train collision in non-signaled territory	Limited Resources
Railroad	9/25/2013	Amarillo, TX	Collision of 3 BNSF trains	Limited Resources
Railroad	9/30/2013	Forest Park, IL	Empty train collided with stopped train	Limited Resources
HazMat	12/30/2013	Casselton, ND	Oil Train struck derailed Grain Train; subsequent fire and evacuation	Limited Resources
HazMat	12/17/2013	Birmingham, AL	Cast iron main leak destroyed 2- story Apartment; killed 1	Limited Resources

APPENDIX B: ACCIDENTS REQUIRED TO BE INVESTIGATED UNDER SECTION 1131 BUT NOT INVESTIGATED

Mode	Accident Date	Accident Location	Accident Circumstances	Reason not investigated
Aviation			None to Report	
Highway			None to Report	
Marine			None to Report	
Railroad, Pipeline and Hazardous Materials				
Pipeline and Hazardous Materials				
Pipeline/HazMat	2/13/2014	Knifely, Kentucky	Gas transmission pipeline failure & explosion	Limited Resources
Pipeline	10/26/2014	Newark, Ohio	Distribution gas pipeline failure & explosion	Limited Resources
Pipeline	10/31/2014	Seeley Lake, Montana	Distribution gas pipeline fire & explosion	Limited Resources
Pipeline	9/12/2014	Timbalier Bay, Louisiana	Offshore gas gathering pipeline failure	Limited Resources
Pipeline	8/12/2014	Rusk Country, Texas	Natural gas transmission pipeline struck by machine	Limited Resources
Pipeline	9/15/2014	Benton Harbor, Michigan	Distribution gas pipeline failure; house explosion	Limited Resources
Pipeline	3/31/2014	Plymouth, Washington	A pipeline at LNG plant failed; 1,000 evacuated	Limited Resources
Pipeline	3/18/2014	Hamilton County, Ohio	Crude oil transmission pipeline failed	Limited Resources
Railroad				
Accidents involving Transit Trains				
Transit	1/1/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	1/2/2014	San Diego Metropolitan Transit System	Motor Vehicle	Limited Resources
Transit	1/3/2014	Niagara Frontier Transportation Authority	Motor Vehicle	Limited Resources
Transit	1/4/2014	Los Angeles County Metropolitan Transportation Authority dba: Metro	Train struck person	Limited Resources
Transit	1/4/2014	San Francisco Municipal Railway	Motor Vehicle	Limited Resources
Transit	1/6/2014	Utah Transit Authority	Train struck person	Limited Resources
Transit	1/6/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	1/8/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	1/10/2014	San Francisco Municipal Railway	Motor Vehicle	Limited Resources
Transit	1/12/2014	Metro Transit	Train struck person	Limited Resources
Transit	1/12/2014	MTA New York City Transit	Train struck person	Limited Resources

APPENDIX B: ACCIDENTS REQUIRED TO BE INVESTIGATED UNDER SECTION 1131 BUT NOT INVESTIGATED

Transit	1/13/2014	Chicago Transit Authority	Train struck person	Limited Resources
Transit	1/15/2014	Metropolitan Transit Authority of Harris County, Texas	Motor Vehicle	Limited Resources
Transit	1/15/2014	Tri-County Metropolitan Transportation District of Oregon	Motor Vehicle	Limited Resources
Transit	1/17/2014	Santa Clara Valley Transportation Authority	Train struck person	Limited Resources
Transit	1/20/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	1/23/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	1/30/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	1/31/2014	New Orleans Regional Transit Authority	Motor Vehicle	Limited Resources
Transit	1/31/2014	Port Authority of Allegheny County	Motor Vehicle	Limited Resources
Transit	1/31/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	2/1/2014	Metro Transit	Motor Vehicle	Limited Resources
Transit	2/1/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	2/2/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	2/3/2014	Dallas Area Rapid Transit	Train struck person	Limited Resources
Transit	2/4/2014	Tri-County Metropolitan Transportation District of Oregon	Train struck person	Limited Resources
Transit	2/5/2014	Miami-Dade Transit	Train struck person	Limited Resources
Transit	2/5/2014	Washington Metropolitan Area Transit Authority	Train struck person	Limited Resources
Transit	2/5/2014	Utah Transit Authority	Train struck person	Limited Resources
Transit	2/6/2014	Denver Regional Transportation District	Other	Limited Resources
Transit	2/6/2014	San Francisco Municipal Railway	Motor Vehicle	Limited Resources
Transit	2/7/2014	Sacramento Regional Transit District	Train struck person	Limited Resources
Transit	2/9/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	2/9/2014	Chicago Transit Authority	Motor Vehicle	Limited Resources
Transit	2/9/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	2/11/2014	Los Angeles County Metropolitan Transportation Authority dba: Metro	Motor Vehicle	Limited Resources
Transit	2/12/2014	Dallas Area Rapid Transit	Train struck person	Limited Resources

APPENDIX B: ACCIDENTS REQUIRED TO BE INVESTIGATED UNDER SECTION 1131 BUT NOT INVESTIGATED

Transit	2/13/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	2/15/2014	San Francisco Municipal Railway	Train struck person	Limited Resources
Transit	2/17/2014	San Diego Metropolitan Transit System	Motor Vehicle	Limited Resources
Transit	2/18/2014	Southeastern Pennsylvania Transportation Authority	Motor Vehicle	Limited Resources
Transit	2/19/2014	Los Angeles County Metropolitan Transportation Authority dba: Metro	Train struck person	Limited Resources
Transit	2/20/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	2/20/2014	Los Angeles County Metropolitan Transportation Authority dba: Metro	Motor Vehicle	Limited Resources
Transit	2/20/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	2/20/2014	North County Transit District	Motor Vehicle	Limited Resources
Transit	2/22/2014	Southeastern Pennsylvania Transportation Authority	Motor Vehicle	Limited Resources
Transit	2/22/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	2/24/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	2/24/2014	Southeastern Pennsylvania Transportation Authority	Motor Vehicle	Limited Resources
Transit	2/26/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	2/27/2014	Metropolitan Transit Authority of Harris County, Texas	Motor Vehicle	Limited Resources
Transit	2/28/2014	Southeastern Pennsylvania Transportation Authority	Train struck person	Limited Resources
Transit	3/1/2014	Dallas Area Rapid Transit	Motor Vehicle	Limited Resources
Transit	3/1/2014	Los Angeles County Metropolitan Transportation Authority dba: Metro	Motor Vehicle	Limited Resources
Transit	3/4/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	3/4/2014	Los Angeles County Metropolitan Transportation Authority dba: Metro	Motor Vehicle	Limited Resources
Transit	3/6/2014	The Greater Cleveland Regional Transit Authority	Motor Vehicle	Limited Resources
Transit	3/7/2014	MTA New York City Transit	Train struck person	Limited Resources

APPENDIX B: ACCIDENTS REQUIRED TO BE INVESTIGATED UNDER SECTION 1131 BUT NOT INVESTIGATED

Transit	3/8/2014	Chicago Transit Authority	Train struck person	Limited Resources
Transit	3/8/2014	San Francisco Municipal Railway	Motor Vehicle	Limited Resources
Transit	3/8/2014	Valley Metro Rail, Inc.	Motor Vehicle	Limited Resources
Transit	3/8/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	3/9/2014	Southeastern Pennsylvania Transportation Authority	Motor Vehicle	Limited Resources
Transit	3/10/2014	Southeastern Pennsylvania Transportation Authority	Motor Vehicle	Limited Resources
Transit	3/10/2014	Valley Metro Rail, Inc.	Train struck person	Limited Resources
Transit	3/11/2014	Metropolitan Transit Authority of Harris County, Texas	Motor Vehicle	Limited Resources
Transit	3/13/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	3/14/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	3/16/2014	Los Angeles County Metropolitan Transportation Authority dba: Metro	Motor Vehicle	Limited Resources
Transit	3/18/2014	Valley Metro Rail, Inc.	Other	Limited Resources
Transit	3/21/2014	Southeastern Pennsylvania Transportation Authority	Motor Vehicle	Limited Resources
Transit	3/22/2014	San Diego Metropolitan Transit System	Other	Limited Resources
Transit	3/25/2014	New Jersey Transit Corporation	Train struck person	Limited Resources
Transit	3/26/2014	Metropolitan Transit Authority of Harris County, Texas	Motor Vehicle	Limited Resources
Transit	3/26/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	3/26/2014	San Francisco Municipal Railway	Train struck person	Limited Resources
Transit	3/27/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	3/28/2014	Southeastern Pennsylvania Transportation Authority	Motor Vehicle	Limited Resources
Transit	3/29/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	3/30/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	3/31/2014	Southeastern Pennsylvania Transportation Authority	Motor Vehicle	Limited Resources
Transit	3/31/2014	City of Portland	Train struck person	Limited Resources

APPENDIX B: ACCIDENTS REQUIRED TO BE INVESTIGATED UNDER SECTION 1131 BUT NOT INVESTIGATED

Transit	4/1/2014	Tri-County Metropolitan Transportation District of Oregon	Motor Vehicle	Limited Resources
Transit	4/1/2014	Tri-County Metropolitan Transportation District of Oregon	Train struck person	Limited Resources
Transit	4/5/2014	Massachusetts Bay Transportation Authority	Train struck person	Limited Resources
Transit	4/6/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	4/6/2014	Dallas Area Rapid Transit	Train struck person	Limited Resources
Transit	4/9/2014	Tri-County Metropolitan Transportation District of Oregon	Train struck person	Limited Resources
Transit	4/10/2014	Chicago Transit Authority	Other	Limited Resources
Transit	4/13/2014	Massachusetts Bay Transportation Authority	Rail Vehicle	Limited Resources
Transit	4/15/2014	Los Angeles County Metropolitan Transportation Authority dba: Metro	Motor Vehicle	Limited Resources
Transit	4/17/2014	San Francisco Municipal Railway	Motor Vehicle	Limited Resources
Transit	4/17/2014	Southeastern Pennsylvania Transportation Authority	Train struck person	Limited Resources
Transit	4/19/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	4/19/2014	Los Angeles County Metropolitan Transportation Authority dba: Metro	Motor Vehicle	Limited Resources
Transit	4/20/2014	Southeastern Pennsylvania Transportation Authority	Train struck person	Limited Resources
Transit	4/20/2014	San Diego Metropolitan Transit System	Other	Limited Resources
Transit	4/21/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	4/22/2014	Tri-County Metropolitan Transportation District of Oregon	Other	Limited Resources
Transit	4/25/2014	Los Angeles County Metropolitan Transportation Authority dba: Metro	Motor Vehicle	Limited Resources
Transit	4/26/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	4/26/2014	Los Angeles County Metropolitan Transportation Authority dba: Metro	Motor Vehicle	Limited Resources
Transit	4/26/2014	Tri-County Metropolitan Transportation District of Oregon	Other	Limited Resources

APPENDIX B: ACCIDENTS REQUIRED TO BE INVESTIGATED UNDER SECTION 1131 BUT NOT INVESTIGATED

Transit	4/27/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	4/29/2014	Tri-County Metropolitan Transportation District of Oregon	Other	Limited Resources
Transit	5/1/2014	Southeastern Pennsylvania Transportation Authority	Motor Vehicle	Limited Resources
Transit	5/2/2014	Metropolitan Transit Authority of Harris County, Texas	Motor Vehicle	Limited Resources
Transit	5/4/2014	New Jersey Transit Corporation	Train struck person	Limited Resources
Transit	5/5/2014	Bi-State Development Agency of the Missouri-Illinois Metropolitan District, d.b.a.(St. Louis) Metro	Train struck person	Limited Resources
Transit	5/5/2014	New Jersey Transit Corporation	Train struck person	Limited Resources
Transit	5/6/2014	Sacramento Regional Transit District	Train struck person	Limited Resources
Transit	5/6/2014	Metropolitan Transit Authority of Harris County, Texas	Train struck person	Limited Resources
Transit	5/6/2014	Valley Metro Rail, Inc.	Motor Vehicle	Limited Resources
Transit	5/6/2014	Metropolitan Transit Authority of Harris County, Texas	Motor Vehicle	Limited Resources
Transit	5/7/2014	Southeastern Pennsylvania Transportation Authority	Motor Vehicle	Limited Resources
Transit	5/7/2014	Los Angeles County Metropolitan Transportation Authority dba: Metro	Train struck person	Limited Resources
Transit	5/12/2014	Southeastern Pennsylvania Transportation Authority	Motor Vehicle	Limited Resources
Transit	5/15/2014	Dallas Area Rapid Transit	Motor Vehicle	Limited Resources
Transit	5/15/2014	Massachusetts Bay Transportation Authority	Motor Vehicle	Limited Resources
Transit	5/16/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	5/16/2014	Sacramento Regional Transit District	Train struck person	Limited Resources
Transit	5/16/2014	Utah Transit Authority	Motor Vehicle	Limited Resources
Transit	5/17/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	5/17/2014	New Orleans Regional Transit Authority	Motor Vehicle	Limited Resources
Transit	5/18/2014	MTA New York City Transit	Train struck person	Limited Resources

APPENDIX B: ACCIDENTS REQUIRED TO BE INVESTIGATED UNDER SECTION 1131 BUT NOT INVESTIGATED

Transit	5/18/2014	Valley Metro Rail, Inc.	Train struck person	Limited Resources
Transit	5/20/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	5/21/2014	San Francisco Municipal Railway	Train struck person	Limited Resources
Transit	5/21/2014	New Jersey Transit Corporation	Motor Vehicle	Limited Resources
Transit	5/22/2014	Valley Metro Rail, Inc.	Motor Vehicle	Limited Resources
Transit	5/24/2014	Metropolitan Transit Authority of Harris County, Texas	Motor Vehicle	Limited Resources
Transit	5/25/2014	San Francisco Municipal Railway	Train struck person	Limited Resources
Transit	5/25/2014	Los Angeles County Metropolitan Transportation Authority dba: Metro	Motor Vehicle	Limited Resources
Transit	5/28/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	5/29/2014	Staten Island Rapid Transit Operating Authority, dba: MTA Staten Island Railway	Fixed Object	Limited Resources
Transit	5/29/2014	Southeastern Pennsylvania Transportation Authority	Motor Vehicle	Limited Resources
Transit	5/30/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	6/2/2014	Chicago Transit Authority	Train struck person	Limited Resources
Transit	6/3/2014	Washington Metropolitan Area Transit Authority	Train struck person	Limited Resources
Transit	6/4/2014	Tri-County Metropolitan Transportation District of Oregon	Train struck person	Limited Resources
Transit	6/5/2014	Valley Metro Rail, Inc.	Motor Vehicle	Limited Resources
Transit	6/9/2014	San Francisco Municipal Railway	Motor Vehicle	Limited Resources
Transit	6/9/2014	San Francisco Municipal Railway	Train struck person	Limited Resources
Transit	6/10/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	6/11/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	6/12/2014	Los Angeles County Metropolitan Transportation Authority dba: Metro	Motor Vehicle	Limited Resources
Transit	6/19/2014	New Orleans Regional Transit Authority	Motor Vehicle	Limited Resources
Transit	6/20/2014	Metropolitan Transit Authority of Harris County, Texas	Motor Vehicle	Limited Resources
Transit	6/22/2014	Santa Clara Valley Transportation Authority	Train struck person	Limited Resources

APPENDIX B: ACCIDENTS REQUIRED TO BE INVESTIGATED UNDER SECTION 1131 BUT NOT INVESTIGATED

Transit	6/22/2014	Valley Metro Rail, Inc.	Other	Limited Resources
Transit	6/23/2014	Southeastern Pennsylvania Transportation Authority	Other	Limited Resources
Transit	6/24/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	6/24/2014	Southeastern Pennsylvania Transportation Authority	Motor Vehicle	Limited Resources
Transit	6/25/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	6/26/2014	Chicago Transit Authority	Train struck person	Limited Resources
Transit	6/26/2014	Tri-County Metropolitan Transportation District of Oregon	Train struck person	Limited Resources
Transit	6/27/2014	Utah Transit Authority	Motor Vehicle	Limited Resources
Transit	6/28/2014	Los Angeles County Metropolitan Transportation Authority dba: Metro	Train struck person	Limited Resources
Transit	6/29/2014	Los Angeles County Metropolitan Transportation Authority dba: Metro	Train struck person	Limited Resources
Transit	6/29/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	6/29/2014	Metro Transit	Motor Vehicle	Limited Resources
Transit	6/29/2014	Southeastern Pennsylvania Transportation Authority	Motor Vehicle	Limited Resources
Transit	6/30/2014	Dallas Area Rapid Transit	Train struck person	Limited Resources
Transit	6/30/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	6/30/2014	Southeastern Pennsylvania Transportation Authority	Motor Vehicle	Limited Resources
Transit	7/2/2014	Massachusetts Bay Transportation Authority	Motor Vehicle	Limited Resources
Transit	7/4/2014	Southeastern Pennsylvania Transportation Authority	Motor Vehicle	Limited Resources
Transit	7/5/2014	Southeastern Pennsylvania Transportation Authority	Motor Vehicle	Limited Resources
Transit	7/5/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	7/6/2014	Port Authority of Allegheny County	Motor Vehicle	Limited Resources
Transit	7/7/2014	Sacramento Regional Transit District	Motor Vehicle	Limited Resources

APPENDIX B: ACCIDENTS REQUIRED TO BE INVESTIGATED UNDER SECTION 1131 BUT NOT INVESTIGATED

Transit	7/9/2014	Metropolitan Transit Authority of Harris County, Texas	Train struck person	Limited Resources
Transit	7/10/2014	New Orleans Regional Transit Authority	Motor Vehicle	Limited Resources
Transit	7/11/2014	Southeastern Pennsylvania Transportation Authority	Motor Vehicle	Limited Resources
Transit	7/12/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	7/15/2014	Los Angeles County Metropolitan Transportation Authority dba: Metro	Motor Vehicle	Limited Resources
Transit	7/15/2014	Port Authority of Allegheny County	Motor Vehicle	Limited Resources
Transit	7/18/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	7/20/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	7/20/2014	Chicago Transit Authority	Train struck person	Limited Resources
Transit	7/22/2014	Maryland Transit Administration	Motor Vehicle	Limited Resources
Transit	7/23/2014	Metropolitan Transit Authority of Harris County, Texas	Motor Vehicle	Limited Resources
Transit	7/25/2014	Los Angeles County Metropolitan Transportation Authority dba: Metro	Motor Vehicle	Limited Resources
Transit	7/28/2014	New Orleans Regional Transit Authority	Motor Vehicle	Limited Resources
Transit	7/29/2014	Santa Clara Valley Transportation Authority	Train struck person	Limited Resources
Transit	7/31/2014	Denver Regional Transportation District	Other	Limited Resources
Transit	8/1/2014	San Francisco Municipal Railway	Motor Vehicle	Limited Resources
Transit	8/1/2014	Central Puget Sound Regional Transit Authority	Motor Vehicle	Limited Resources
Transit	8/4/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	8/4/2014	Tri-County Metropolitan Transportation District of Oregon	Motor Vehicle	Limited Resources
Transit	8/5/2014	Utah Transit Authority	Motor Vehicle	Limited Resources
Transit	8/6/2014	Denver Regional Transportation District	Other	Limited Resources
Transit	8/7/2014	Tri-County Metropolitan Transportation District of Oregon	Train struck person	Limited Resources
Transit	8/7/2014	Southeastern Pennsylvania Transportation Authority	Train struck person	Limited Resources

APPENDIX B: ACCIDENTS REQUIRED TO BE INVESTIGATED UNDER SECTION 1131 BUT NOT INVESTIGATED

Transit	8/7/2014	Utah Transit Authority	Motor Vehicle	Limited Resources
Transit	8/9/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	8/9/2014	Southeastern Pennsylvania Transportation Authority	Motor Vehicle	Limited Resources
Transit	8/11/2014	North County Transit District	Train struck person	Limited Resources
Transit	8/11/2014	Southeastern Pennsylvania Transportation Authority	Train struck person	Limited Resources
Transit	8/14/2014	Sacramento Regional Transit District	Train struck person	Limited Resources
Transit	8/14/2014	Bi-State Development Agency of the Missouri-Illinois Metropolitan District, d.b.a.(St. Louis) Metro	Train struck person	Limited Resources
Transit	8/15/2014	Sacramento Regional Transit District	Train struck person	Limited Resources
Transit	8/15/2014	Metropolitan Transit Authority of Harris County, Texas	Train struck person	Limited Resources
Transit	8/16/2014	Tri-County Metropolitan Transportation District of Oregon	Train struck person	Limited Resources
Transit	8/16/2014	Port Authority of Allegheny County	Motor Vehicle	Limited Resources
Transit	8/17/2014	Santa Clara Valley Transportation Authority	Other	Limited Resources
Transit	8/18/2014	San Francisco Municipal Railway	Train struck person	Limited Resources
Transit	8/23/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	8/24/2014	Metro Transit	Motor Vehicle	Limited Resources
Transit	8/25/2014	Denver Regional Transportation District	Other	Limited Resources
Transit	8/25/2014	Metro Transit	Train struck person	Limited Resources
Transit	8/26/2014	San Diego Metropolitan Transit System	Train struck person	Limited Resources
Transit	8/27/2014	Sacramento Regional Transit District	Train struck person	Limited Resources
Transit	8/27/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	8/28/2014	City of Portland	Motor Vehicle	Limited Resources
Transit	8/28/2014	Tri-County Metropolitan Transportation District of Oregon	Motor Vehicle	Limited Resources
Transit	8/30/2014	Southeastern Pennsylvania Transportation Authority	Motor Vehicle	Limited Resources
Transit	8/31/2014	Metro Transit	Train struck person	Limited Resources

APPENDIX B: ACCIDENTS REQUIRED TO BE INVESTIGATED UNDER SECTION 1131 BUT NOT INVESTIGATED

Transit	9/8/2014	San Francisco Municipal Railway	Train struck person	Limited Resources
Transit	9/8/2014	Los Angeles County Metropolitan Transportation Authority dba: Metro	Motor Vehicle	Limited Resources
Transit	9/10/2014	Metropolitan Transit Authority of Harris County, Texas	Motor Vehicle	Limited Resources
Transit	9/11/2014	Sacramento Regional Transit District	Train struck person	Limited Resources
Transit	9/11/2014	San Francisco Municipal Railway	Motor Vehicle	Limited Resources
Transit	9/11/2014	Massachusetts Bay Transportation Authority	Motor Vehicle	Limited Resources
Transit	9/12/2014	Los Angeles County Metropolitan Transportation Authority dba: Metro	Motor Vehicle	Limited Resources
Transit	9/12/2014	Southeastern Pennsylvania Transportation Authority	Train struck person	Limited Resources
Transit	9/12/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	9/15/2014	Chicago Transit Authority	Train struck person	Limited Resources
Transit	9/15/2014	Santa Clara Valley Transportation Authority	Motor Vehicle	Limited Resources
Transit	9/17/2014	Utah Transit Authority	Motor Vehicle	Limited Resources
Transit	9/18/2014	Dallas Area Rapid Transit	Train struck person	Limited Resources
Transit	9/18/2014	Metropolitan Transit Authority of Harris County, Texas	Motor Vehicle	Limited Resources
Transit	9/19/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	9/24/2014	San Diego Metropolitan Transit System	Train struck person	Limited Resources
Transit	9/24/2014	Utah Transit Authority	Motor Vehicle	Limited Resources
Transit	9/25/2014	San Francisco Municipal Railway	Train struck person	Limited Resources
Transit	9/25/2014	Utah Transit Authority	Motor Vehicle	Limited Resources
Transit	9/25/2014	Metro Transit	Train struck person	Limited Resources
Transit	9/27/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	9/27/2014	San Francisco Municipal Railway	Motor Vehicle	Limited Resources
Transit	9/28/2014	Metro Transit	Motor Vehicle	Limited Resources
Transit	9/29/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	9/29/2014	New Orleans Regional Transit Authority	Train struck person	Limited Resources
Transit	9/30/2014	San Francisco Municipal Railway	Motor Vehicle	Limited Resources

APPENDIX B: ACCIDENTS REQUIRED TO BE INVESTIGATED UNDER SECTION 1131 BUT NOT INVESTIGATED

Transit	10/1/2014	Southeastern Pennsylvania Transportation Authority	Train struck person	Limited Resources
Transit	10/1/2014	Santa Clara Valley Transportation Authority	Train struck person	Limited Resources
Transit	10/2/2014	San Diego Metropolitan Transit System	Motor Vehicle	Limited Resources
Transit	10/3/2014	Dallas Area Rapid Transit	Motor Vehicle	Limited Resources
Transit	10/3/2014	Transportation District Commission of Hampton Roads, dba: Hampton Roads Transit	Train struck person	Limited Resources
Transit	10/4/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	10/4/2014	Southeastern Pennsylvania Transportation Authority	Motor Vehicle	Limited Resources
Transit	10/4/2014	New Jersey Transit Corporation	Motor Vehicle	Limited Resources
Transit	10/5/2014	Southeastern Pennsylvania Transportation Authority	Train struck person	Limited Resources
Transit	10/6/2014	Bi-State Development Agency of the Missouri-Illinois Metropolitan District, d.b.a.(St. Louis) Metro	Motor Vehicle	Limited Resources
Transit	10/7/2014	Chicago Transit Authority	Train struck person	Limited Resources
Transit	10/8/2014	Sacramento Regional Transit District	Train struck person	Limited Resources
Transit	10/9/2014	Metro Transit	Train struck person	Limited Resources
Transit	10/9/2014	Metropolitan Transit Authority of Harris County, Texas	Motor Vehicle	Limited Resources
Transit	10/10/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	10/11/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	10/11/2014	Port Authority of Allegheny County	Motor Vehicle	Limited Resources
Transit	10/11/2014	San Francisco Municipal Railway	Train struck person	Limited Resources
Transit	10/12/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	10/16/2014	Port Authority of Allegheny County	Motor Vehicle	Limited Resources
Transit	10/18/2014	Los Angeles County Metropolitan Transportation Authority dba: Metro	Motor Vehicle	Limited Resources
Transit	10/18/2014	Los Angeles County Metropolitan Transportation Authority dba: Metro	Train struck person	Limited Resources

APPENDIX B: ACCIDENTS REQUIRED TO BE INVESTIGATED UNDER SECTION 1131 BUT NOT INVESTIGATED

Transit	10/21/2014	Southeastern Pennsylvania Transportation Authority	Motor Vehicle	Limited Resources
Transit	10/22/2014	Metropolitan Transit Authority of Harris County, Texas	Motor Vehicle	Limited Resources
Transit	10/23/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	10/24/2014	San Francisco Municipal Railway	Motor Vehicle	Limited Resources
Transit	10/25/2014	City of Portland	Motor Vehicle	Limited Resources
Transit	10/28/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	10/29/2014	Sacramento Regional Transit District	Train struck person	Limited Resources
Transit	10/29/2014	Massachusetts Bay Transportation Authority	Train struck person	Limited Resources
Transit	10/30/2014	MTA New York City Transit	Fixed Object	Limited Resources
Transit	10/31/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	11/2/2014	San Francisco Bay Area Rapid Transit District	Rail Vehicle	Limited Resources
Transit	11/3/2014	Bi-State Development Agency of the Missouri-Illinois Metropolitan District, d.b.a.(St. Louis) Metro	Train struck person	Limited Resources
Transit	11/3/2014	San Francisco Bay Area Rapid Transit District	Train struck person	Limited Resources
Transit	11/3/2014	Metro Transit	Motor Vehicle	Limited Resources
Transit	11/5/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	11/6/2014	Southeastern Pennsylvania Transportation Authority	Motor Vehicle	Limited Resources
Transit	11/6/2014	Massachusetts Bay Transportation Authority	Train struck person	Limited Resources
Transit	11/10/2014	Southeastern Pennsylvania Transportation Authority	Train struck person	Limited Resources
Transit	11/10/2014	Valley Metro Rail, Inc.	Motor Vehicle	Limited Resources
Transit	11/10/2014	Sacramento Regional Transit District	Motor Vehicle	Limited Resources
Transit	11/10/2014	Southeastern Pennsylvania Transportation Authority	Motor Vehicle	Limited Resources
Transit	11/12/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	11/13/2014	Sacramento Regional Transit District	Train struck person	Limited Resources

APPENDIX B: ACCIDENTS REQUIRED TO BE INVESTIGATED UNDER SECTION 1131 BUT NOT INVESTIGATED

Transit	11/13/2014	Utah Transit Authority	Motor Vehicle	Limited Resources
Transit	11/13/2014	San Francisco Municipal Railway	Motor Vehicle	Limited Resources
Transit	11/14/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	11/14/2014	Metropolitan Transit Authority of Harris County, Texas	Other	Limited Resources
Transit	11/14/2014	San Francisco Municipal Railway	Motor Vehicle	Limited Resources
Transit	11/15/2014	Dallas Area Rapid Transit	Motor Vehicle	Limited Resources
Transit	11/17/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	11/17/2014	Maryland Transit Administration	Motor Vehicle	Limited Resources
Transit	11/17/2014	Dallas Area Rapid Transit	Train struck person	Limited Resources
Transit	11/18/2014	Sacramento Regional Transit District	Train struck person	Limited Resources
Transit	11/19/2014	San Francisco Municipal Railway	Motor Vehicle	Limited Resources
Transit	11/22/2014	Metropolitan Transit Authority of Harris County, Texas	Motor Vehicle	Limited Resources
Transit	11/23/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	11/25/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	11/26/2014	Massachusetts Bay Transportation Authority	Rail Vehicle	Limited Resources
Transit	11/28/2014	MTA New York City Transit	Train struck person	Limited Resources
Transit	11/29/2014	Bi-State Development Agency of the Missouri-Illinois Metropolitan District, d.b.a.(St. Louis) Metro	Motor Vehicle	Limited Resources
Accidents involving Freight Trains				
Freight	1/8/2014	UT / WEBER / UINTAH	UP, Rear end collision	Limited Resources
Freight	1/16/2014	ND / WILLIAMS / TIOGA	BNSF, Derailments	Limited Resources
Freight	1/17/2014	NM / GUADALUPE / VAUGHN	UP, Derailments	Limited Resources
Freight	1/23/2014	TN / CARROLL / JARRELL DD	CSX, Derailments	Limited Resources
Freight	1/28/2014	FL / ESCAMBIA / MCDAVID	CSX, Derailments	Limited Resources
Freight	1/31/2014	MS / PERRY / NEW AUGUSTA	CN, Derailments	Limited Resources
Freight	2/13/2014	PA / WESTMORELAND / NORTH VANDERGRIFT	NS, Derailments	Limited Resources
Freight	2/16/2014	TX / BEXAR / SAN ANTONIO	UP, Derailments	Limited Resources

APPENDIX B: ACCIDENTS REQUIRED TO BE INVESTIGATED UNDER SECTION 1131 BUT NOT INVESTIGATED

Freight	2/21/2014	IN / NEWTON / KENTLAND	TPW, Derailments	Limited Resources
Freight	2/22/2014	OK / NOBLE / SUMNER	BNSF, Derailments	Limited Resources
Freight	2/24/2014	MT / PRAIRIE / TERRY	BNSF, Derailments	Limited Resources
Freight	2/24/2014	MN / ST LOUIS / HOYT LAKES	CN, Derailments	Limited Resources
Freight	3/1/2014	MT / FLATHEAD / OLNEY	BNSF, Derailments	Limited Resources
Freight	3/4/2014	OH / DELAWARE / DELAWARE	NSDerailments	Limited Resources
Freight	3/16/2014	IL / LA SALLE / WEDRON	IR, Derailments	Limited Resources
Freight	3/28/2014	ID / ELMORE / MOUNTAIN HOME	UP, Derailments	Limited Resources
Freight	4/6/2014	TX / LIMESTONE / KOSSE	UP, Rear end collision	Limited Resources
Freight	4/28/2014	IL / PEORIA / LAURA	BNSF, Derailments	Limited Resources
Freight	5/7/2014	KS / MCPHERSON / MCPHERSON	UP, Derailments	Limited Resources
Freight	5/9/2014	CA / PLACER / GOLD RUN	UP, Derailments	Limited Resources
Freight	5/11/2014	MN / CASS / PILLAGER	BNSF, Derailments	Limited Resources
Freight	5/20/2014	TX / COOKE / GAINESVILLE	BNSF, Derailments	Limited Resources
Freight	6/1/2014	OK / WOODS / WAYNOKA	BNSF, Derailments	Limited Resources
Freight	6/2/2014	KS / MARSHALL / FRANKFORT	UP, Derailments	Limited Resources
Freight	6/3/2014	KS / BROWN / WILLIS	UP, Derailments	Limited Resources
Freight	6/5/2014	AR / CRAIGHEAD / WEINER	UP, Derailments	Limited Resources
Freight	6/16/2014	AL / TUSCALOOSA / BUHL	ABS, Derailments	Limited Resources
Freight	7/2/2014	PA / ALLEGHENY / SEWICKLEY	NS, Rear end collision	Limited Resources
Freight	7/5/2014	WY / LINCOLN / COKEVILLE	UP, Derailments	Limited Resources
Freight	7/6/2014	TX / ELLIS / MIDLOTHIAN	UP, Derailments	Limited Resources
Freight	7/10/2014	MT / YELLOWSTONE / BALLANTINE	BNSF, Derailments	Limited Resources
Freight	7/13/2014	WY / WESTON / NEWCASTLE	BNSF, Derailments	Limited Resources
Freight	7/14/2014	VA / WYTHE / WYTHEVILLE	NS, Derailments	Limited Resources
Freight	7/20/2014	WI / WASHINGTON / SLINGER	CN, Side collision	Limited Resources
Freight	7/24/2014	MO / STODDARD / DEXTER	UP, Derailments	Limited Resources
Freight	8/1/2014	OR / UMATILLA / HERMISTON	UP, Derailments	Limited Resources
Freight	8/11/2014	NC / RUTHERFORD / BRICE	CSX, Derailments	Limited Resources
Freight	8/14/2014	KS / SEDGWICK / PECK	UP, Derailments	Limited Resources
Freight	9/15/2014	IN / ALLEN / NEW HAVEN	NS, Derailments	Limited Resources

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Freight	9/15/2014	AZ / PINAL / PICACHO	UP, Derailments	Limited Resources
Freight	9/20/2014	PA / BLAIR / ALTOONA	NS, Derailments	Limited Resources
Freight	9/21/2014	WY / CARBON / HANNA	UP, Derailments	Limited Resources
Freight	10/5/2014	LA / MOREHOUSE / MER ROUGE	UP, Highway-rail impact	Limited Resources
Freight	10/8/2014	TN / FRANKLIN / SHERWOOD	CSX, Derailments	Limited Resources
Freight	10/10/2014	AR / CRAWFORD / CHESTER	AM, Other events	Limited Resources
Freight	10/19/2014	NE / YORK / WACO	BNSF, Derailments	Limited Resources
Freight	10/26/2014	TN / BENTON / CAMDEN	CSX, Derailments	Limited Resources
Freight	10/26/2014	TX / ATASCOSA / LEMING	UP, Derailments	Limited Resources
Freight	10/28/2014	TX / HALL / ESTELLINE	BNSF, Derailments	Limited Resources
Freight	11/13/2014	ND / CASS / CASSELTON	BNSF, Derailments	Limited Resources
Freight	11/13/2014	MT / MISSOULA / BONNER	MRL, Side collision	Limited Resources
Freight	11/30/2014	FL / SANTA ROSA / MILTON	CSX, Derailments	Limited Resources
Freight	12/1/2014	MN / WADENA / WADENA	BNSF, Derailments	Limited Resources
Freight	12/26/2014	NE / DODGE / NORTH BEND	UP, Derailments	Limited Resources
Accidents involving Railroad Employees				
Employee	4/17/2014	OR / KLAMATH	Shot	Limited Resources
Employee	6/24/2014	AL / JEFFERSON	Derailment	Limited Resources
Employee	7/16/2014	WV / FAYETTE	Struck by object	Limited Resources
Employee	8/17/2014	CA / KERN	Shot	Limited Resources
Employee	8/17/2014	AR / LAWRENCE	Collision - between on track equipment	Limited Resources
Employee	9/23/2014	OH / RICHLAND	Collision/impact - auto, truck, bus, van, etc.	Limited Resources
Accidents involving Passenger Trains				
Passenger	1/6/2014	PA / DELAWARE / CHESTER	Other events	Limited Resources
Passenger	1/6/2014	WA / KING / SEATTLE	Derailments	Limited Resources
Passenger	1/7/2014	MO / ST LOUIS / KIRKWOOD	Highway-rail impact	Limited Resources
Passenger	1/9/2014	IL / MADISON / WOOD RIVER	Derailments	Limited Resources
Passenger	1/12/2014	CT / NEW HAVEN / BRANFORD	Obstruction impact	Limited Resources
Passenger	1/14/2014	NJ / HUDSON / HOBOKEN	Other events	Limited Resources
Passenger	1/14/2014	IL / COOK / ROBBINS	Highway-rail impact	Limited Resources

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<i>Passenger</i>	1/16/2014	CT / FAIRFIELD / BRIDGEPORT	Other events	Limited Resources
<i>Passenger</i>	1/17/2014	PA / BUCKS / WARMINSTER	Highway-rail impact	Limited Resources
<i>Passenger</i>	1/17/2014	MI / LAPEER / LAPEER	Highway-rail impact	Limited Resources
<i>Passenger</i>	1/22/2014	IL / LAKE / ROUND LAKE PARK	Highway-rail impact	Limited Resources
<i>Passenger</i>	1/22/2014	CT / FAIRFIELD / WESTPORT	Other events	Limited Resources
<i>Passenger</i>	2/6/2014	NJ / OCEAN / BAY HEAD	Derailments	Limited Resources
<i>Passenger</i>	2/11/2014	NJ / ESSEX / ORANGE	Derailments	Limited Resources
<i>Passenger</i>	2/12/2014	UT / SALT LAKE / SALT LAKE CITY	Highway-rail impact	Limited Resources
<i>Passenger</i>	2/14/2014	PA / PHILADELPHIA / PHILADELPHIA	Derailments	Limited Resources
<i>Passenger</i>	2/15/2014	CT / FAIRFIELD / NORWALK	Highway-rail impact	Limited Resources
<i>Passenger</i>	2/25/2014	CT / NEW HAVEN / EAST HAVEN	Derailments	Limited Resources
<i>Passenger</i>	3/13/2014	NJ / ESSEX / NEWARK	Other events	Limited Resources
<i>Passenger</i>	3/19/2014	MO / FRANKLIN / WASHINGTON	Highway-rail impact	Limited Resources
<i>Passenger</i>	3/20/2014	TX / TARRANT / HALTOM CITY	Highway-rail impact	Limited Resources
<i>Passenger</i>	3/26/2014	MD / BALTIMORE / BALTIMORE	Other events	Limited Resources
<i>Passenger</i>	3/27/2014	IL / COOK / OAK FOREST	Other events	Limited Resources
<i>Passenger</i>	4/3/2014	MD / PRINCE GEORGE'S / BOWIE	Other events	Limited Resources
<i>Passenger</i>	4/3/2014	PA / PHILADELPHIA / WARMINSTER	Other events	Limited Resources
<i>Passenger</i>	4/4/2014	CT / FAIRFIELD / STRATFORD	Other events	Limited Resources
<i>Passenger</i>	4/18/2014	PA / PHILADELPHIA / PHILADELPHIA	Other events	Limited Resources
<i>Passenger</i>	4/24/2014	NY / NEW YORK / NEW YORK NEW YORK	Other events	Limited Resources
<i>Passenger</i>	4/28/2014	MT / ROOSEVELT / BAINVILLE	Derailments	Limited Resources
<i>Passenger</i>	4/29/2014	PA / PHILADELPHIA / WARMINSTER	Other events	Limited Resources
<i>Passenger</i>	4/29/2014	NJ / MORRIS / BOONTON	Other events	Limited Resources
<i>Passenger</i>	5/5/2014	MA / SUFFOLK / BOSTON	Other events	Limited Resources
<i>Passenger</i>	5/14/2014	PA / PHILADELPHIA / PHILADELPHIA	Fire/violent rupture	Limited Resources
<i>Passenger</i>	5/15/2014	IL / COOK / CHICAGO	Other events	Limited Resources
<i>Passenger</i>	6/1/2014	CA / MADERA / MADERA	Highway-rail impact	Limited Resources
<i>Passenger</i>	6/7/2014	CA / SANTA CLARA / SAN JOSE	Highway-rail impact	Limited Resources
<i>Passenger</i>	6/9/2014	WA / LEWIS / CENTRALIA	Highway-rail impact	Limited Resources
<i>Passenger</i>	6/25/2014	IL / ALEXANDER / MILLER CITY	Obstruction impact	Limited Resources

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<i>Passenger</i>	7/3/2014	PA / BUCKS / EDDINGTON	Other events	Limited Resources
<i>Passenger</i>	7/8/2014	GA / CARROLL / TEMPLE	Highway-rail impact	Limited Resources
<i>Passenger</i>	7/9/2014	NJ / MIDDLESEX / WOODBRIDGE	Other events	Limited Resources
<i>Passenger</i>	7/10/2014	MD / ANNE ARUNDEL / ODENTON	Other events	Limited Resources
<i>Passenger</i>	7/13/2014	RI / PROVIDENCE / CRANSTON	Other events	Limited Resources
<i>Passenger</i>	7/14/2014	LA / TANGIPAHOA / INDEPENDENCE	Highway-rail impact	Limited Resources
<i>Passenger</i>	7/15/2014	DE / NEW CASTLE / NEWARK	Other events	Limited Resources
<i>Passenger</i>	7/17/2014	MD / CECIL / PERRYVILLE	Other events	Limited Resources
<i>Passenger</i>	7/19/2014	VA / FREDERICKSBURG / FREDERICKSBURG	Fire/violent rupture	Limited Resources
<i>Passenger</i>	7/23/2014	AK / SKAGWAY-HOONAH-ANGOO / SKAGWAY	Derailments	Limited Resources
<i>Passenger</i>	7/29/2014	MA / HAMPDEN / SPRINGFIELD	Obstruction impact	Limited Resources
<i>Passenger</i>	8/11/2014	RI / WASHINGTON / KINGSTON	Other events	Limited Resources
<i>Passenger</i>	8/14/2014	CT / FAIRFIELD / WESTPORT	Other events	Limited Resources
<i>Passenger</i>	8/17/2014	CT / MIDDLESEX / SAYBROOK	Other events	Limited Resources
<i>Passenger</i>	8/19/2014	NJ / ESSEX / MONTCLAIR	Derailments	Limited Resources
<i>Passenger</i>	8/25/2014	OR / MARION / MARION	Highway-rail impact	Limited Resources
<i>Passenger</i>	8/29/2014	MD / PRINCE GEORGE'S / BOWIE	Other events	Limited Resources
<i>Passenger</i>	9/1/2014	CA / ALAMEDA / OAKLAND	Highway-rail impact	Limited Resources
<i>Passenger</i>	9/1/2014	PA / PHILADELPHIA / PHILADELPHIA	Other events	Limited Resources
<i>Passenger</i>	9/8/2014	NJ / PASSAIC / LITTLE FALLS	Highway-rail impact	Limited Resources
<i>Passenger</i>	10/2/2014	CT / NEW HAVEN / NEW HAVEN	Other events	Limited Resources
<i>Passenger</i>	10/6/2014	CA / SANTA BARBARA / GUADALUPE	Highway-rail impact	Limited Resources
<i>Passenger</i>	11/1/2014	NE / RED WILLOW / BARTLEY	Derailments	Limited Resources
<i>Passenger</i>	12/6/2014	FL / POLK / LAKELAND	Highway-rail impact	Limited Resources
<i>Passenger</i>	12/9/2014	CA / SAN JOAQUIN / STOCKTON	Highway-rail impact	Limited Resources
<i>Passenger</i>	12/9/2014	MS / HINDS / JACKSON	Highway-rail impact	Limited Resources
<i>Passenger</i>	12/11/2014	MD / PRINCE GEORGE'S / SEABROOK	Other events	Limited Resources
<i>Passenger</i>	12/16/2014	CA / SAN MATEO / ATHERTON	Obstruction impact	Limited Resources
<i>Passenger</i>	12/17/2014	CT / FAIRFIELD / BRIDGEPORT	Other events	Limited Resources
<i>Passenger</i>	12/21/2014	CT / NEW HAVEN / MILFORD	Other events	Limited Resources

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Accidents involving Railroad Trespasser Fatalities				
<i>Trespasser</i>	1/1/2014	NM / CIBOLA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/1/2014	NJ / UNION	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/2/2014	NJ / UNION	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/2/2014	NC / WAKE	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	1/2/2014	TX / FRIO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/3/2014	OH / MUSKINGUM	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/3/2014	CA / SAN DIEGO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/3/2014	IN / VIGO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/4/2014	CA / SHASTA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/5/2014	GA / MORGAN	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	1/5/2014	OH / HURON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/9/2014	FL / PALM BEACH	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/9/2014	CA / LOS ANGELES	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	1/10/2014	FL / MIAMI-DADE	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	1/10/2014	PA / BEAVER	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/10/2014	KY / CHRISTIAN	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	1/11/2014	CA / LOS ANGELES	Other impacts - on track equipment	Limited Resources
<i>Trespasser</i>	1/12/2014	NC / GUILFORD	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/12/2014	NC / DURHAM	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/12/2014	NC / UNION	Other (describe in narrative)	Limited Resources
<i>Trespasser</i>	1/12/2014	NY / QUEENS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/12/2014	FL / BROWARD	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/13/2014	CA / FRESNO	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	1/14/2014	CA / ORANGE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/14/2014	NJ / MONMOUTH	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/14/2014	IL / COOK	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	1/15/2014	VA / FAIRFAX	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/17/2014	MS / HARRISON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/17/2014	PA / BUCKS	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	1/18/2014	TX / CALDWELL	Highway-rail collision/impact	Limited Resources

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<i>Trespasser</i>	1/18/2014	KS / SHAWNEE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/18/2014	WA / KING	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/19/2014	NY / OSWEGO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/20/2014	CA / SANTA CLARA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/20/2014	MN / SHERBURNE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/21/2014	CA / SAN DIEGO	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	1/21/2014	CA / SAN JOAQUIN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/21/2014	AR / PULASKI	Slipped, fell, stumbled, other	Limited Resources
<i>Trespasser</i>	1/22/2014	IL / LAKE	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	1/22/2014	FL / MARION	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/23/2014	CA / FRESNO	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	1/24/2014	CA / SACRAMENTO	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	1/25/2014	MS / HARRISON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/25/2014	TX / HARRIS	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	1/26/2014	NE / THAYER	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/26/2014	IN / PORTER	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/28/2014	KS / SEDGWICK	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	1/28/2014	OK / TULSA	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	1/30/2014	CA / LOS ANGELES	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/31/2014	OH / PICKAWAY	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	1/31/2014	CA / SAN MATEO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	2/2/2014	CA / VENTURA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	2/3/2014	AR / PULASKI	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	2/4/2014	CA / LOS ANGELES	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	2/5/2014	FL / DUVAL	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	2/5/2014	NE / LANCASTER	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	2/6/2014	NY / NASSAU	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	2/6/2014	IL / COOK	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	2/6/2014	FL / BROWARD	Other (describe in narrative)	Limited Resources
<i>Trespasser</i>	2/6/2014	FL / MIAMI-DADE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	2/6/2014	OH / SENECA	Struck by on-track equipment	Limited Resources

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<i>Trespasser</i>	2/7/2014	OH / SUMMIT	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	2/7/2014	NY / NASSAU	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	2/9/2014	NV / HUMBOLDT	Slipped, fell, stumbled, other	Limited Resources
<i>Trespasser</i>	2/11/2014	WI / RUSK	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	2/13/2014	OR / GILLIAM	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	2/13/2014	CO / ADAMS	Slipped, fell, stumbled, other	Limited Resources
<i>Trespasser</i>	2/14/2014	NJ / BERGEN	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	2/15/2014	TX / TRAVIS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	2/16/2014	CA / SAN BERNARDINO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	2/16/2014	MN / CROW WING	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	2/18/2014	CA / ALAMEDA	Other (describe in narrative)	Limited Resources
<i>Trespasser</i>	2/19/2014	MO / CHRISTIAN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	2/20/2014	GA / WAYNE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	2/22/2014	MT / YELLOWSTONE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	2/23/2014	WI / CHIPPEWA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	2/23/2014	KY / KENTON	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	2/25/2014	WI / WOOD	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	3/1/2014	MI / SHIAWASSEE	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	3/1/2014	OH / BUTLER	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/2/2014	OK / BRYAN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/2/2014	FL / VOLUSIA	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	3/2/2014	IN / ST JOSEPH	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	3/2/2014	CA / CONTRA COSTA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/3/2014	CA / SAN JOAQUIN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/3/2014	NC / DAVIDSON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/4/2014	MT / MISSOULA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/4/2014	CA / SAN DIEGO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/4/2014	MD / BALTIMORE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/5/2014	GA / WILKINSON	Caught, crushed, pinched, other	Limited Resources
<i>Trespasser</i>	3/7/2014	TX / DALLAS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/7/2014	CA / SACRAMENTO	Highway-rail collision/impact	Limited Resources

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<i>Trespasser</i>	3/7/2014	CA / FRESNO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/7/2014	CA / ORANGE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/7/2014	IL / COOK	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	3/8/2014	MN / HENNEPIN	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	3/9/2014	IL / DOUGLAS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/9/2014	IL / LIVINGSTON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/9/2014	TN / ROANE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/10/2014	MO / ST CHARLES	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/10/2014	IL / WILL	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/10/2014	AL / CLARKE	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	3/11/2014	TN / DAVIDSON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/11/2014	ME / YORK	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/12/2014	FL / MIAMI-DADE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/13/2014	IL / SANGAMON	Other (describe in narrative)	Limited Resources
<i>Trespasser</i>	3/14/2014	TX / ORANGE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/15/2014	CA / SAN MATEO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/17/2014	NM / DONA ANA	Sudden/unexpected movement of on-track equipment	Limited Resources
<i>Trespasser</i>	3/17/2014	PA / PHILADELPHIA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/18/2014	TX / DALLAS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/19/2014	OK / ATOKA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/20/2014	OH / SUMMIT	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/20/2014	TX / RANDALL	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	3/20/2014	KS / JOHNSON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/21/2014	AR / JOHNSON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/21/2014	CA / YUBA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/22/2014	GA / BARTOW	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/22/2014	PA / ALLEGHENY	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/24/2014	KY / PULASKI	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/24/2014	TX / FORT BEND	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	3/24/2014	TX / HARRIS	Struck by on-track equipment	Limited Resources

APPENDIX B: ACCIDENTS REQUIRED TO BE INVESTIGATED UNDER SECTION 1131 BUT NOT INVESTIGATED

<i>Trespasser</i>	3/25/2014	NJ / MIDDLESEX	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/26/2014	CA / SANTA CLARA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/26/2014	CA / SACRAMENTO	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	3/26/2014	FL / BROWARD	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/26/2014	GA / DE KALB	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/27/2014	MN / STEARNS	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	3/28/2014	NV / LYON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/28/2014	IL / LOGAN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/29/2014	MA / HAMPDEN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/30/2014	KS / SEDGWICK	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	3/30/2014	OR / MALHEUR	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/30/2014	ND / BURLEIGH	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	3/30/2014	CA / SANTA BARBARA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/1/2014	KS / JOHNSON	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	4/2/2014	KY / LAUREL	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/2/2014	LA / RAPIDES	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/2/2014	NY / SUFFOLK	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/2/2014	DE / NEW CASTLE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/4/2014	CA / VENTURA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/4/2014	CA / LOS ANGELES	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/4/2014	AL / MONTGOMERY	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	4/5/2014	WA / FRANKLIN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/6/2014	KY / WARREN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/6/2014	NY / SUFFOLK	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/6/2014	NY / NEW YORK	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/7/2014	FL / PALM BEACH	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/7/2014	PA / MONTGOMERY	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/7/2014	PA / BUCKS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/8/2014	GA / WHITFIELD	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	4/9/2014	CA / NEVADA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/9/2014	NJ / SOMERSET	Struck by on-track equipment	Limited Resources

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<i>Trespasser</i>	4/10/2014	CA / SACRAMENTO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/10/2014	CA / KERN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/13/2014	SC / BERKELEY	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	4/14/2014	PA / WESTMORELAND	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/14/2014	FL / MARION	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/14/2014	CA / FRESNO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/14/2014	NM / BERNALILLO	Slipped, fell, stumbled, other	Limited Resources
<i>Trespasser</i>	4/15/2014	NY / ORANGE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/16/2014	NY / QUEENS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/16/2014	TX / HARRIS	Slipped, fell, stumbled, other	Limited Resources
<i>Trespasser</i>	4/17/2014	PA / ALLEGHENY	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/17/2014	SC / AIKEN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/18/2014	PA / MONTGOMERY	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/18/2014	AL / JEFFERSON	Collision/impact - auto, truck, bus, van, etc.	Limited Resources
<i>Trespasser</i>	4/18/2014	GA / BUTTS	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	4/18/2014	LA / TANGIPAHOA	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	4/19/2014	NY / BROOME	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/20/2014	IL / DU PAGE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/20/2014	IA / POLK	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	4/20/2014	AR / FAULKNER	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/21/2014	MS / ALCORN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/21/2014	TX / DENTON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/21/2014	IN / VANDERBURGH	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/21/2014	CA / CONTRA COSTA	On track equipment, other incidents	Limited Resources
<i>Trespasser</i>	4/22/2014	IN / MARION	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	4/21/2014	CA / YOLO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/22/2014	TX / KENEDY	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/23/2014	LA / CADDO	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	4/24/2014	FL / PALM BEACH	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	4/25/2014	CA / LOS ANGELES	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/26/2014	CA / SAN DIEGO	Struck by on-track equipment	Limited Resources

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<i>Trespasser</i>	4/26/2014	OH / OTTAWA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/26/2014	IL / KANE	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	4/27/2014	NY / ONEIDA	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	4/27/2014	OK / MUSKOGEE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/27/2014	OH / ASHTABULA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	4/29/2014	TX / ECTOR	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/1/2014	CA / LOS ANGELES	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	5/2/2014	OR / MARION	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	5/2/2014	MO / STONE	Collision/impact - auto, truck, bus, van, etc.	Limited Resources
<i>Trespasser</i>	5/3/2014	CA / CONTRA COSTA	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	5/3/2014	AL / CALHOUN	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	5/5/2014	MD / BALTIMORE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/5/2014	OR / UMATILLA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/5/2014	CT / NEW LONDON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/6/2014	FL / ESCAMBIA	Other (describe in narrative)	Limited Resources
<i>Trespasser</i>	5/8/2014	IN / MARION	Other (describe in narrative)	Limited Resources
<i>Trespasser</i>	5/9/2014	CA / ALAMEDA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/9/2014	CT / NEW HAVEN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/11/2014	WA / KING	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	5/12/2014	NC / DURHAM	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/12/2014	PA / DELAWARE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/13/2014	IL / COOK	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	5/13/2014	WV / JEFFERSON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/15/2014	TX / TARRANT	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/16/2014	MD / PRINCE GEORGE'S	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/17/2014	AZ / COCONINO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/17/2014	KS / SHAWNEE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/17/2014	PA / MONTGOMERY	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/18/2014	FL / BRADFORD	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/18/2014	FL / OSCEOLA	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	5/18/2014	NY / WASHINGTON	Struck by on-track equipment	Limited Resources

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<i>Trespasser</i>	5/19/2014	CA / ALAMEDA	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	5/19/2014	NC / CLEVELAND	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/20/2014	NC / ALAMANCE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/21/2014	GA / FLOYD	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/21/2014	IL / WILL	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/22/2014	IN / GIBSON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/22/2014	LA / VERNON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/23/2014	IL / KANE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/24/2014	WI / WINNEBAGO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/26/2014	PA / ERIE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/26/2014	MA / ESSEX	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/27/2014	MN / MARTIN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/27/2014	TX / HARRIS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/27/2014	NY / NASSAU	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	5/29/2014	NY / WESTCHESTER	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/29/2014	GA / TURNER	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/29/2014	TX / REEVES	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/29/2014	MA / WORCESTER	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/30/2014	AL / JEFFERSON	Slipped, fell, stumbled, other	Limited Resources
<i>Trespasser</i>	5/31/2014	ME / CUMBERLAND	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/31/2014	IL / KANE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/31/2014	TN / BLOUNT	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	5/31/2014	FL / BROWARD	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	6/2/2014	GA / CRISP	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/3/2014	AZ / PIMA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/3/2014	CA / VENTURA	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	6/5/2014	LA / CADDO	Thrill seeking	Limited Resources
<i>Trespasser</i>	6/5/2014	TX / BEXAR	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/6/2014	CA / MERCED	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/7/2014	FL / BROWARD	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/7/2014	NC / NASH	Struck by on-track equipment	Limited Resources

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<i>Trespasser</i>	6/7/2014	OR / MULTNOMAH	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/8/2014	TX / HARRIS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/9/2014	PA / PHILADELPHIA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/7/2014	CA / ORANGE	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	6/8/2014	CA / KERN	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	6/9/2014	IL / LA SALLE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/10/2014	NM / CURRY	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/10/2014	CA / MADERA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/11/2014	CA / YOLO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/11/2014	NY / NASSAU	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/11/2014	WY / ALBANY	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/12/2014	TN / SHELBY	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/12/2014	FL / MIAMI-DADE	Other (describe in narrative)	Limited Resources
<i>Trespasser</i>	6/12/2014	CA / CONTRA COSTA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/13/2014	TX / FORT BEND	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/13/2014	NV / ELKO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/14/2014	PA / LAWRENCE	Struck against object	Limited Resources
<i>Trespasser</i>	6/14/2014	TX / ECTOR	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/14/2014	MO / PETTIS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/15/2014	CA / SAN BERNARDINO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/15/2014	AL / JEFFERSON	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	6/16/2014	CA / SOLANO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/16/2014	KS / SUMNER	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/16/2014	FL / DUVAL	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/17/2014	WV / UPSHUR	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/17/2014	AZ / COCONINO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/17/2014	TN / HAMBLEN	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	6/18/2014	CA / SANTA CLARA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/18/2014	NJ / PASSAIC	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/18/2014	GA / FULTON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/21/2014	KS / CRAWFORD	Struck by on-track equipment	Limited Resources

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<i>Trespasser</i>	6/22/2014	CA / BUTTE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/22/2014	CA / SANTA CLARA	Collision/impact - auto, truck, bus, van, etc.	Limited Resources
<i>Trespasser</i>	6/22/2014	MA / BRISTOL	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/23/2014	KS / SEDGWICK	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	6/23/2014	TX / CAMP	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/23/2014	GA / BARTOW	Other (describe in narrative)	Limited Resources
<i>Trespasser</i>	6/23/2014	NE / LANCASTER	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	6/25/2014	PA / DELAWARE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/26/2014	TX / HENDERSON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/26/2014	CA / SAN DIEGO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/27/2014	TX / BEXAR	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	6/28/2014	MD / PRINCE GEORGE'S	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/28/2014	IL / COOK	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/29/2014	VA / SMYTH	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/29/2014	OH / SUMMIT	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	6/29/2014	LA / MOREHOUSE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/29/2014	NC / GUILFORD	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/30/2014	NY / WESTCHESTER	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	6/30/2014	MI / KALAMAZOO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/2/2014	CA / LOS ANGELES	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/3/2014	NC / CATAWBA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/3/2014	FL / MIAMI-DADE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/4/2014	LA / ST TAMMANY	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/5/2014	OR / WASCO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/5/2014	TX / EL PASO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/5/2014	NH / HILLSBOROUGH	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/8/2014	NV / WASHOE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/8/2014	IL / KANE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/8/2014	TX / VAN ZANDT	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/9/2014	KY / BULLITT	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/10/2014	LA / ST LANDRY	Struck by on-track equipment	Limited Resources

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<i>Trespasser</i>	7/10/2014	CA / SAN MATEO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/11/2014	CA / SANTA CLARA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/12/2014	CA / ORANGE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/12/2014	TX / EL PASO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/12/2014	NY / SCHENECTADY	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/12/2014	TN / BLOUNT	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	7/12/2014	NM / VALENCIA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/12/2014	MI / BERRIEN	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	7/13/2014	TN / SHELBY	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/13/2014	CA / MONTEREY	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/14/2014	VA / JAMES CITY	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/14/2014	GA / MUSCOGEE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/14/2014	NE / YORK	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	7/14/2014	WV / LOGAN	Caught, crushed, pinched, other	Limited Resources
<i>Trespasser</i>	7/15/2014	FL / VOLUSIA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/15/2014	NY / NASSAU	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/15/2014	IL / MASSAC	Slipped, fell, stumbled, other	Limited Resources
<i>Trespasser</i>	7/16/2014	TX / GALVESTON	Bitten by animal	Limited Resources
<i>Trespasser</i>	7/17/2014	TX / WEBB	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/17/2014	GA / CHATHAM	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	7/18/2014	NV / WASHOE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/18/2014	MS / HARRISON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/18/2014	FL / PALM BEACH	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/19/2014	AR / COLUMBIA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/19/2014	CA / STANISLAUS	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	7/19/2014	IN / ALLEN	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	7/20/2014	PA / WESTMORELAND	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/21/2014	PA / LEHIGH	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/21/2014	NJ / PASSAIC	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/22/2014	OH / BELMONT	Other (describe in narrative)	Limited Resources
<i>Trespasser</i>	7/22/2014	OR / LINN	Highway-rail collision/impact	Limited Resources

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<i>Trespasser</i>	7/22/2014	KS / JOHNSON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/23/2014	ME / YORK	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/23/2014	CA / VENTURA	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	7/23/2014	NY / STEUBEN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/24/2014	CA / KERN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/25/2014	CA / SACRAMENTO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/27/2014	WI / WOOD	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	7/27/2014	TX / MIDLAND	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	7/27/2014	SC / SPARTANBURG	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/28/2014	CA / BUTTE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/28/2014	CA / LOS ANGELES	Slipped, fell, stumbled, other	Limited Resources
<i>Trespasser</i>	7/28/2014	GA / FLOYD	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/28/2014	IN / LAKE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/30/2014	WI / WOOD	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	7/30/2014	NJ / ESSEX	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/30/2014	NY / CORTLAND	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/30/2014	MO / HOLT	Slipped, fell, stumbled, other	Limited Resources
<i>Trespasser</i>	7/31/2014	NC / GUILFORD	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	7/31/2014	AL / TUSCALOOSA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/1/2014	CA / CONTRA COSTA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/1/2014	ND / MCHENRY	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/1/2014	NJ / MIDDLESEX	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/1/2014	UT / TOOELE	Climatic condition, exposure to environmental heat	Limited Resources
<i>Trespasser</i>	8/1/2014	TX / DALLAS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/2/2014	IL / COOK	Slipped, fell, stumbled, other	Limited Resources
<i>Trespasser</i>	8/3/2014	FL / MIAMI-DADE	Other (describe in narrative)	Limited Resources
<i>Trespasser</i>	8/3/2014	PA / ALLEGHENY	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/3/2014	NY / QUEENS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/3/2014	NY / KINGS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/4/2014	CA / KINGS	Struck by on-track equipment	Limited Resources

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<i>Trespasser</i>	8/4/2014	IL / COOK	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	8/4/2014	GA / WHITFIELD	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/4/2014	FL / PALM BEACH	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	8/5/2014	CA / ALAMEDA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/6/2014	CA / LOS ANGELES	Slipped, fell, stumbled, other	Limited Resources
<i>Trespasser</i>	8/6/2014	CA / PLACER	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/6/2014	OH / PORTAGE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/7/2014	OH / FRANKLIN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/7/2014	CA / SAN DIEGO	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	8/7/2014	IL / COOK	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/8/2014	IL / COOK	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/8/2014	AZ / PIMA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/9/2014	WV / MINGO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/9/2014	CA / SAN DIEGO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/10/2014	CO / PUEBLO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/12/2014	OK / OKLAHOMA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/12/2014	MD / BALTIMORE	Other (describe in narrative)	Limited Resources
<i>Trespasser</i>	8/12/2014	MA / ESSEX	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	8/15/2014	MD / WASHINGTON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/15/2014	NJ / BERGEN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/16/2014	NJ / PASSAIC	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/16/2014	CA / STANISLAUS	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	8/18/2014	NJ / PASSAIC	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/19/2014	CA / TULARE	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	8/19/2014	MI / WAYNE	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	8/20/2014	NC / ROWAN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/21/2014	MN / MOWER	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/21/2014	WV / MCDOWELL	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/22/2014	CO / LARIMER	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/22/2014	TX / MEDINA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/22/2014	CA / LOS ANGELES	Struck by on-track equipment	Limited Resources

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<i>Trespasser</i>	8/23/2014	CA / STANISLAUS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/23/2014	CA / MONTEREY	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/23/2014	WA / CHELAN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/24/2014	TN / DAVIDSON	Other (describe in narrative)	Limited Resources
<i>Trespasser</i>	8/24/2014	DE / NEW CASTLE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/24/2014	MT / CUSTER	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/24/2014	AL / MOBILE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/25/2014	WI / DOUGLAS	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	8/25/2014	CA / SAN JOAQUIN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/25/2014	GA / FULTON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/26/2014	CT / NEW HAVEN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/26/2014	IN / MARION	Other impacts - on track equipment	Limited Resources
<i>Trespasser</i>	8/28/2014	WI / MILWAUKEE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/28/2014	WI / DANE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/29/2014	CA / KERN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/29/2014	KY / FAYETTE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/30/2014	TX / EL PASO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/31/2014	IA / JEFFERSON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	8/31/2014	IL / FULTON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/1/2014	TX / HARRIS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/1/2014	CA / ALAMEDA	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	9/1/2014	NJ / MONMOUTH	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/2/2014	KS / LINN	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	9/2/2014	CA / LOS ANGELES	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	9/4/2014	MS / HINDS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/4/2014	SD / PENNINGTON	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	9/4/2014	WA / PIERCE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/5/2014	TN / DAVIDSON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/6/2014	TX / FORT BEND	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	9/6/2014	CA / BUTTE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/6/2014	CT / FAIRFIELD	Struck by on-track equipment	Limited Resources

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<i>Trespasser</i>	9/6/2014	SC / SPARTANBURG	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/6/2014	KY / BOYD	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/6/2014	MD / MONTGOMERY	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/7/2014	MN / ANOKA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/7/2014	IL / COOK	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/7/2014	TN / RUTHERFORD	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/7/2014	CA / SAN DIEGO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/9/2014	NC / DURHAM	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/11/2014	NJ / ESSEX	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/12/2014	CA / LOS ANGELES	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/13/2014	CA / CONTRA COSTA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/13/2014	CO / MORGAN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/14/2014	CA / SAN JOAQUIN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/16/2014	CA / SANTA BARBARA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/16/2014	IL / DU PAGE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/16/2014	CA / ALAMEDA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/16/2014	WA / PIERCE	Other (describe in narrative)	Limited Resources
<i>Trespasser</i>	9/17/2014	TX / HOWARD	Struck against object	Limited Resources
<i>Trespasser</i>	9/19/2014	MI / GENESEE	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	9/20/2014	ME / YORK	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/20/2014	FL / SEMINOLE	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	9/21/2014	FL / POLK	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/21/2014	IL / CHRISTIAN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/22/2014	CA / RIVERSIDE	Slipped, fell, stumbled, other	Limited Resources
<i>Trespasser</i>	9/23/2014	SC / CHARLESTON	Shot	Limited Resources
<i>Trespasser</i>	9/24/2014	NH / ROCKINGHAM	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/24/2014	NH / STRAFFORD	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/24/2014	AZ / MOHAVE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/25/2014	WI / RACINE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/26/2014	IN / DELAWARE	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	9/26/2014	IN / KNOX	Struck by on-track equipment	Limited Resources

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<i>Trespasser</i>	9/26/2014	NV / LYON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/26/2014	CO / BOULDER	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/27/2014	CT / FAIRFIELD	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/27/2014	PA / ERIE	Struck by object	Limited Resources
<i>Trespasser</i>	9/27/2014	NC / ORANGE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/28/2014	AL / JEFFERSON	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	9/28/2014	PA / PHILADELPHIA	Caught Between Material	Limited Resources
<i>Trespasser</i>	9/28/2014	IL / LAKE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/29/2014	IL / COOK	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/29/2014	TX / EL PASO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/29/2014	KY / JEFFERSON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/29/2014	CA / LOS ANGELES	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/30/2014	NY / QUEENS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	9/30/2014	PA / PHILADELPHIA	Caught Between Material	Limited Resources
<i>Trespasser</i>	10/1/2014	PA / DELAWARE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/1/2014	VT / WINDSOR	Other (describe in narrative)	Limited Resources
<i>Trespasser</i>	10/1/2014	TN / CARROLL	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/2/2014	OR / WASHINGTON	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	10/2/2014	FL / VOLUSIA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/2/2014	IL / COOK	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/2/2014	NY / SCHENECTADY	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/2/2014	CA / ALAMEDA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/3/2014	VA / YORK	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/4/2014	TX / UVALDE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/4/2014	NC / CUMBERLAND	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/5/2014	WA / LEWIS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/5/2014	IL / IROQUOIS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/6/2014	TX / GUADALUPE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/8/2014	GA / WHITFIELD	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/9/2014	CA / STANISLAUS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/10/2014	AL / LIMESTONE	Other (describe in narrative)	Limited Resources

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<i>Trespasser</i>	10/10/2014	MS / COPIAH	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/10/2014	MS / COPIAH	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/10/2014	SC / GREENVILLE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/11/2014	NV / WASHOE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/11/2014	FL / POLK	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/11/2014	CA / SAN LUIS OBISPO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/12/2014	LA / IBERVILLE	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	10/13/2014	MO / ST LOUIS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/13/2014	FL / BROWARD	Other (describe in narrative)	Limited Resources
<i>Trespasser</i>	10/13/2014	CA / BUTTE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/13/2014	WY / CAMPBELL	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/14/2014	NY / CHAUTAUQUA	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	10/15/2014	GA / BARTOW	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/15/2014	KY / CLARK	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	10/15/2014	VA / FAIRFAX	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/15/2014	CA / SANTA CLARA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/15/2014	IL / COOK	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/17/2014	GA / COBB	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/19/2014	KS / MCPHERSON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/19/2014	OK / OKLAHOMA	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	10/20/2014	FL / BROWARD	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	10/20/2014	AL / CULLMAN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/20/2014	TN / DAVIDSON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/21/2014	WA / LEWIS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/21/2014	OR / MULTNOMAH	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/21/2014	OR / MARION	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/21/2014	NY / ULSTER	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/21/2014	CA / SANTA CLARA	Aggravated pre-existing condition	Limited Resources
<i>Trespasser</i>	10/22/2014	LA / ST MARY	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/23/2014	VA / JAMES CITY	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/23/2014	NC / MECKLENBURG	Struck by on-track equipment	Limited Resources

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<i>Trespasser</i>	10/23/2014	CA / MADERA	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	10/24/2014	OK / MURRAY	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	10/25/2014	SC / LEXINGTON	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	10/25/2014	CA / SOLANO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/25/2014	MO / BUCHANAN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/25/2014	NC / UNION	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/26/2014	TN / WASHINGTON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/26/2014	KY / CHRISTIAN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/27/2014	CA / SAN DIEGO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/27/2014	OR / LINN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/27/2014	CT / NEW HAVEN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/28/2014	CA / SHASTA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/28/2014	TX / VAN ZANDT	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/28/2014	TX / CASS	Caught in/crushed by materials	Limited Resources
<i>Trespasser</i>	10/28/2014	IN / DUBOIS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/29/2014	CA / ALAMEDA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/29/2014	WI / DANE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/29/2014	WI / MILWAUKEE	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	10/29/2014	MA / HAMPSHIRE	Other (describe in narrative)	Limited Resources
<i>Trespasser</i>	10/30/2014	IL / FAYETTE	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	10/30/2014	TN / SHELBY	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	10/31/2014	CA / STANISLAUS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/31/2014	CA / VENTURA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/31/2014	NV / ELKO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/31/2014	OK / PAWNEE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	10/31/2014	MA / ESSEX	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/1/2015	CA / MERCED	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/1/2015	IN / DELAWARE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/1/2015	TX / WICHITA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/1/2015	TX / TARRANT	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/2/2015	TX / TAYLOR	Struck by on-track equipment	Limited Resources

APPENDIX B: ACCIDENTS REQUIRED TO BE INVESTIGATED UNDER SECTION 1131 BUT NOT INVESTIGATED

<i>Trespasser</i>	11/2/2015	CA / SANTA CLARA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/3/2015	CA / ALAMEDA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/4/2015	CA / SANTA CLARA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/4/2015	AZ / MARICOPA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/4/2015	NJ / MONMOUTH	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/5/2015	IA / MONROE	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	11/6/2015	CA / FRESNO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/7/2015	PA / ERIE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/8/2015	VA / CAMPBELL	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/8/2015	AZ / COCONINO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/9/2015	CA / FRESNO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/9/2015	TX / MONTGOMERY	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	11/9/2015	UT / UTAH	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/9/2015	NY / SUFFOLK	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/9/2015	CT / FAIRFIELD	Electrical shock due to contact with 3rd rail, catenary, pantograph	Limited Resources
<i>Trespasser</i>	11/11/2015	CA / KINGS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/11/2015	IL / KANE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/13/2015	IL / DE KALB	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/13/2015	IL / MCHENRY	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/13/2015	CA / SACRAMENTO	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	11/13/2015	IN / GIBSON	Other (describe in narrative)	Limited Resources
<i>Trespasser</i>	11/13/2015	TX / FORT BEND	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/14/2015	FL / BROWARD	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	11/14/2015	IL / WINNEBAGO	Burned	Limited Resources
<i>Trespasser</i>	11/15/2015	IL / COOK	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/16/2015	TX / WARD	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/17/2015	CA / SAN BERNARDINO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/17/2015	CT / FAIRFIELD	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/17/2015	FL / HILLSBOROUGH	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/17/2015	MS / JACKSON	Struck by on-track equipment	Limited Resources

APPENDIX B: ACCIDENTS REQUIRED TO BE INVESTIGATED UNDER SECTION 1131 BUT NOT INVESTIGATED

<i>Trespasser</i>	11/18/2015	MI / WAYNE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/18/2015	MI / KALAMAZOO	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	11/18/2015	CA / ORANGE	Slipped, fell, stumbled, other	Limited Resources
<i>Trespasser</i>	11/18/2015	TX / DALLAS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/18/2015	VA / CHESTERFIELD	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/20/2015	MI / WAYNE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/20/2015	CA / LOS ANGELES	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/20/2015	NY / NASSAU	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/21/2015	AL / DALLAS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/22/2015	OH / FRANKLIN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/22/2015	CA / RIVERSIDE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/22/2015	NY / SUFFOLK	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/23/2015	NJ / BERGEN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/23/2015	MI / WAYNE	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	11/24/2015	FL / BROWARD	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/24/2015	GA / HARALSON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/24/2015	WI / BUFFALO	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	11/25/2015	NC / MECKLENBURG	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/25/2015	CA / CONTRA COSTA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/25/2015	CA / KERN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/26/2015	IA / DUBUQUE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/26/2015	FL / BROWARD	Other (describe in narrative)	Limited Resources
<i>Trespasser</i>	11/27/2015	NJ / ESSEX	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/27/2015	CA / SAN JOAQUIN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/28/2015	CA / SAN BERNARDINO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/29/2015	CA / CONTRA COSTA	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	11/29/2015	PA / ERIE	Struck by object	Limited Resources
<i>Trespasser</i>	11/30/2015	PA / BEDFORD	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	11/30/2015	NY / SUFFOLK	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/2/2015	NJ / BERGEN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/2/2015	CA / KINGS	Highway-rail collision/impact	Limited Resources

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<i>Trespasser</i>	12/2/2015	WA / SKAGIT	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	12/3/2015	SC / HAMPTON	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	12/5/2015	WA / KING	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	12/5/2015	TN / SHELBY	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/7/2015	TX / TRAVIS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/7/2015	NC / LINCOLN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/7/2015	LA / POINTE COUPEE	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	12/8/2015	CA / SACRAMENTO	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	12/8/2015	WI / WAUKESHA	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	12/10/2015	MA / ESSEX	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/10/2015	TX / WILLACY	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/10/2015	CA / SACRAMENTO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/12/2015	WA / COWLITZ	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/12/2015	KY / HENRY	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/12/2015	MO / JOHNSON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/13/2015	TX / TARRANT	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/13/2015	MA / BRISTOL	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/14/2015	DE / KENT	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	12/15/2015	FL / PALM BEACH	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/15/2015	MD / PRINCE GEORGE'S	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/16/2015	NC / ALAMANCE	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	12/16/2015	CA / SANTA CLARA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/16/2015	IN / MARION	Caught, crushed, pinched, other	Limited Resources
<i>Trespasser</i>	12/17/2015	CA / SANTA CLARA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/17/2015	PA / DELAWARE	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	12/18/2015	GA / FULTON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/19/2015	IL / COOK	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/19/2015	CA / SANTA CLARA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/19/2015	TX / CAMERON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/19/2015	CA / LOS ANGELES	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/21/2015	KS / DOUGLAS	Struck by on-track equipment	Limited Resources

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<i>Trespasser</i>	12/21/2015	CA / KERN	Struck against object	Limited Resources
<i>Trespasser</i>	12/22/2015	FL / PALM BEACH	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/22/2015	MS / FORREST	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/23/2015	NY / SUFFOLK	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/26/2015	PA / HUNTINGDON	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/26/2015	WA / KING	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	12/26/2015	IL / MCHENRY	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/27/2015	NC / RICHMOND	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/28/2015	IL / DU PAGE	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/28/2015	CA / FRESNO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/28/2015	CA / KINGS	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/28/2015	LA / CADDO	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/29/2015	CA / VENTURA	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/30/2015	LA / TANGIPAHOA	Highway-rail collision/impact	Limited Resources
<i>Trespasser</i>	12/31/2015	NJ / BERGEN	Struck by on-track equipment	Limited Resources
<i>Trespasser</i>	12/31/2015	TN / SHELBY	Highway-rail collision/impact	Limited Resources