

National Transportation Safety Board

Office of Railroad, Pipeline and Hazardous Materials

Washington, DC 20594



RRD24FR003

OPERATIONS GROUP

Group Chair's Factual Report

April 10, 2024

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A ACCIDENT

NTSB Accident Number: RRD24FR003
Keys# 193443
Location: Manhattan, NY
Date: November 29, 2023
Time: 12:13 am (local time)
Train 1: Train 2317-D STL/205
Fatalities: 1
Injuries: 0

B OPERATIONS GROUP

Group Chair	Shane Richardson NTSB NTSB Group Chair
Group Member	Philip Herbert Federal Transit Administration Group Member
Group Member	Jonathan Fazio Metropolitan Transportation Authority Group Member
Group Member	Darpan Telwala New York City Transit Group Member
Group Member	Celeste Kirkland TWU Local 100 Union Group Member
Group Member	Joseph Degeilh New York State Department of Transportation Group Member

C SUMMARY

See Docket for full description of accident.

D DETAILS OF THE INVESTIGATION

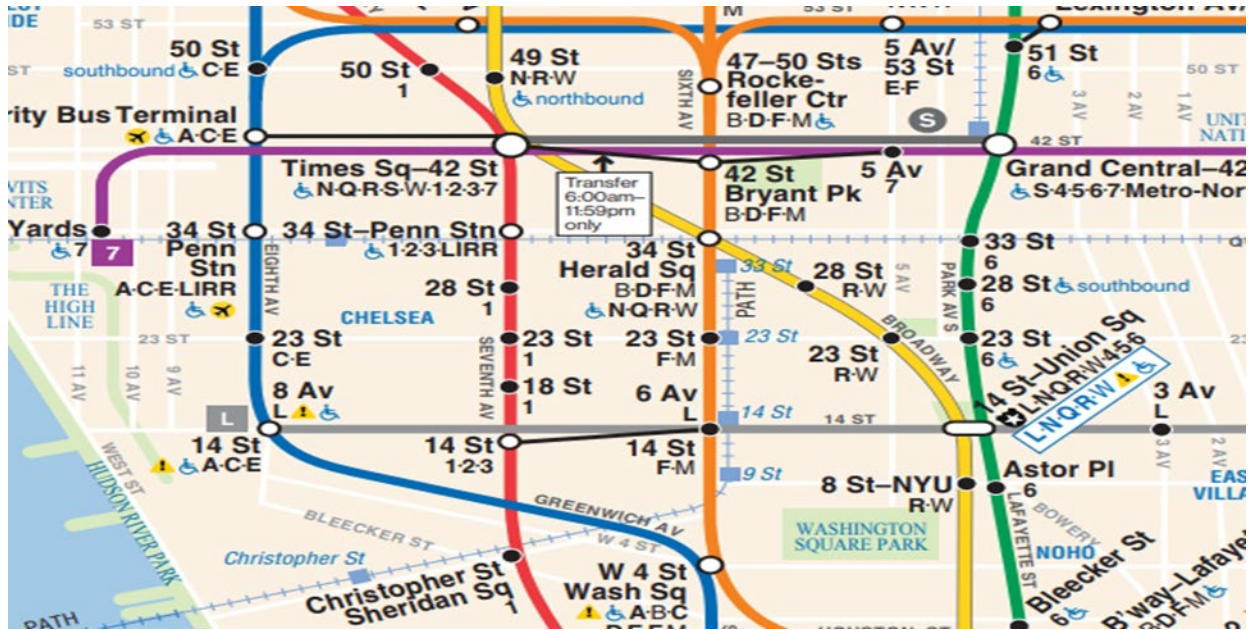


Figure 1: Map depicting NYCT subway system. Source NYCT Website

1.0 Description of New York City Transit Commuter Operations

NYC Transit is the subway system in the New York City Metropolitan area serving the five boroughs of New York City. It is the largest public transportation agency in North America and one of the largest in the world. In 2022, the subway had a daily ridership of approximately 3.2 million, and an annual ridership of 1 billion. The system includes:

- More than 6,455 subway cars, which collectively traveled about 331 million miles in 2021.
- 472 stations
- 665 miles of track

2.0 Post Accident Observations and Site Distance Analysis

On December 1, 2023, at approximately 12:00 am local time, the investigative group met at the accident location. During the sight distance analysis, the team rode the head end of an exemplar train from 23rd street to the accident location at 34th street. As the train approached 34th street the team observed the locations of where the two yellow lights were placed and where the red light and portable trip block were on the day of the accident.¹ The line of sight (northward) was straight, and the track is tangent with a slight increase in elevation. The 23rd Street Station located directly south could not be seen from accident area POI (Point of Impact) but the yellow flag lights set up for the accident investigation were clearly illuminated and could be observed from the southern portion of the platform and the accident area. The investigative team took no exception with the sight line. Conditions along the catwalk was largely free of tripping hazards but some refuse and debris were observed. There was a string of overhead lights along the catwalk that were non-

¹ A trip block is a track-mounted safety device that causes a BIE application if a train traverses a trip block in the up position. A trip block works by actuating an external valve handle mounted on the underside a railcar, activating the train's brakes.

operational. Some of the bulb housings appeared to be damaged and made of an orange plastic. The tunnel of B2 track past the station limits appeared dark.



Figure 1 Photograph of accident seen looking north. Source NTSB

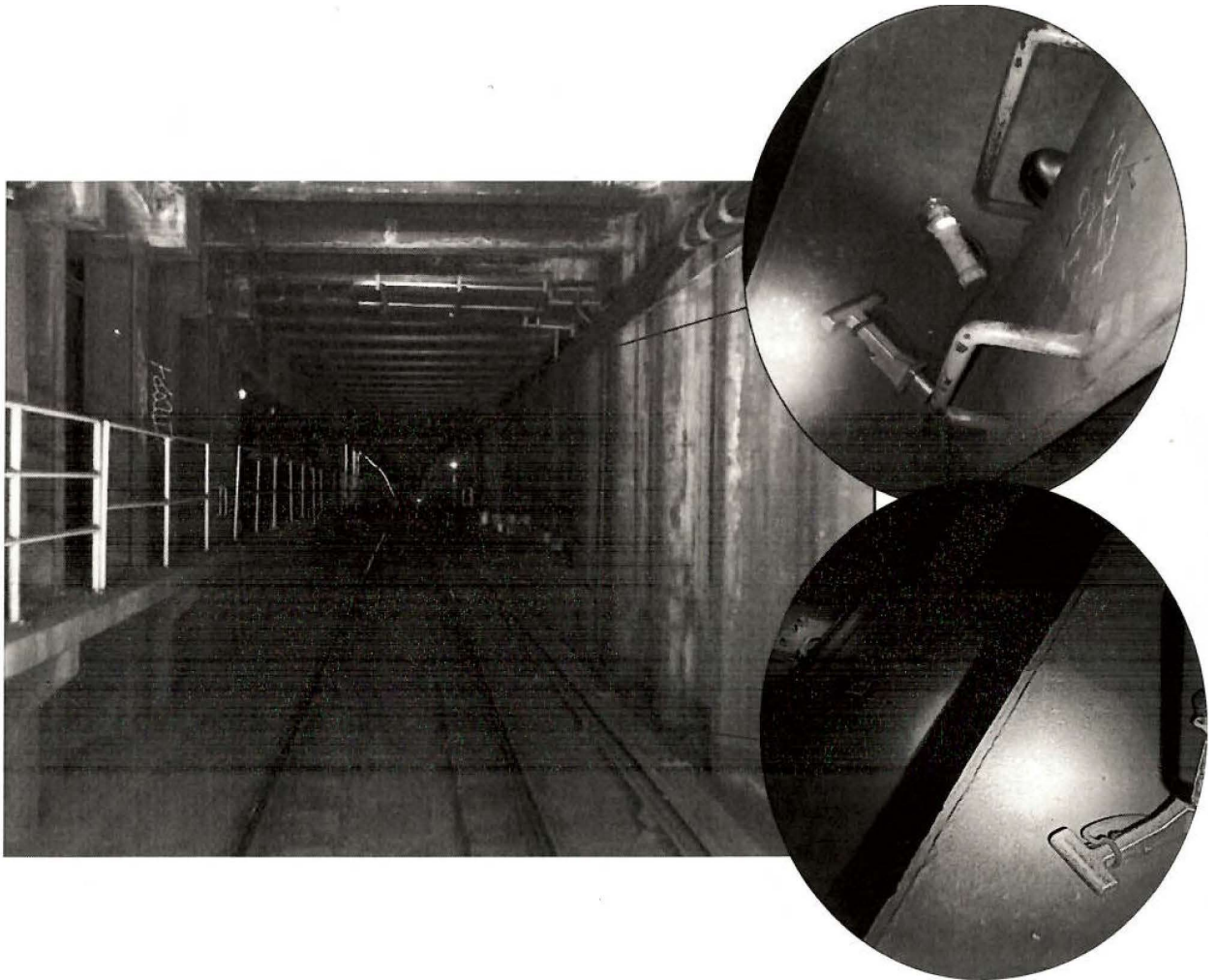


Figure 3 Photo of Portable Trip Stop and Light, post-accident. Source NYCT

3.0 Audio Tape Review

The NTSB Operations group chairman reviewed the audio and stars report and nothing of interest was noted relating to the accident. Therefore, no additional review was warranted.

4.0 Train Operators Personal Information

The operator was hired by NYCT on April 10, 2016.

A review of the operator's training records indicated that she completed her last evaluation on November 18, 2023.

A review of the operator's discipline history indicated that the operator had been disciplined. On September 22, 2023, the operator had a station overrun. On September 9, 2023, the operator had a station overrun. On November 5, 2017, the operator accidentally placed the train into emergency. On October 21, 2016, the operator had a home signal overrun and wrong route while posting.

A review of the operator's work history shows no work/rest issues, the operator had been off duty from November 19, 2023, until November 28, 2023, 10 consecutive days off work prior to the accident.

5.0 Applicable Rules Governing New York Transit Operators

Rule 3.82

3.82(a) Train Operators upon encountering any caution lights or flags on the track on which they are operating must immediately adjust the speed of their trains to not more than ten (10) miles per hour, sound two (2) long blasts of the train horn or whistle as a warning to personnel at the point of the work or obstruction and be prepared to stop within one-half (1/2) the range of vision. If the view ahead is obstructed by a curve or otherwise, they must repeat the two (2) long blasts of the horn or whistle at short intervals and be prepared to stop within one-half the range of vision until the flaggers or personnel are in sight, or until they pass the green light or flag.

3.82(b) Train Operators observing three (3) yellow lights or flags will reduce speed, to no more than ten (10) miles per hour, sound two (2) long blasts of the horn/whistle and blow a series of short blasts of the horn/whistle every 75 feet to 120 feet expecting workers on the adjacent track until the green resume signal is passed.

3.82(c) In instances where a green flag or green light is missing or unlit, Train Operators will proceed at no more than ten (10) miles per hour to the next station {express or local} (on an express track the train can resume normal speed for the area when the train is adjacent to the next local station), notify the Rail Control Center and then proceed at the normal speed for that area.

3.82(d) Train Operators enroute observing one (1) FLASHING YELLOW LIGHT or ORANGE FLUORESCENT FLAG must immediately reduce speed of their trains to no more than ten (10) miles per hour, sound two (2) blasts of the horn or whistle, if the view ahead is obstructed by a curve or otherwise, they must repeat the two (2) long blasts of the horn or whistle at short intervals, and be prepared to stop their trains within one half (1/2) the range of vision, expecting to find workers performing work on said track in accordance with Rules 3.73(b), 3.73(c), 3.76(a) and 3.76(c). Train Operators will resume normal speed after the entire train passes the work area.

3.82(e) Train Operators must stop their train at least one (1) car length from flaggers, red flags or red lights.

3.82(f) If a proceed signal is given with a yellow flag or light, Train Operators must expect to encounter another flagger on the roadway before reaching the Resume Speed Signal.

3.82(g) Train Operators proceeding through an area protected by caution lights or flags must obey only a prescribed proceed signal given by a flagger. They must interpret any

other signal given as a stop signal. They must not proceed until they have a clear understanding of the meaning of such other signal.

3.82(h) Employees stationed at the front of trains as flaggers must relay immediately to Train Operators operating from other than the forward cab of the leading car, the indications of flagging signals prescribed in these rules, whenever such signals are encountered.

3.82(i) Train Operators must sound their train horn or whistle whenever they observe lights, flags, hand lamps or banks of lights along the track, whether or not workers are visible.

3.82(j) To avoid the possibility of injury to persons who may be on the roadway or structure, Train Operators, upon observing a person on or around the tracks, must immediately reduce the speed of their train and sound their horn or whistle; they must not pass such person until the person is in the clear and the Train Operator has received a proper proceed signal.

5.1 Post Accident Actions

New York City Transit issued a bulletin on November 29, 2023, for a 24-hour standdown.

POST ON ALL BULLETIN BOARDS

NEW YORK CITY TRANSIT

DEPARTMENT OF SUBWAYS

OFFICE OF THE SENIOR VICE PRESIDENT

DATE: November 29, 2023

TO: All Subways Employees

FROM: Demetrius Crichlow, Senior Vice President, Department of Subways

SUBJECT: SUBWAYS BULLETIN 23-40

**24 HOUR SAFETY STANDOWN AND SPECIAL SAFETY BRIEFING: TRACK FLAGGING
& TRACK SAFETY**

All employees who perform or supervise work on the right-of-way under flagging conditions, are directed to immediately conduct a special safety briefing relating to flagging and track safety. A 24-hour Safety Standdown has been implemented which includes a suspension of right of way flagging (with the exception for emergencies). This morning, a Track Worker experienced fatal injuries when they were struck by a northbound D Train south of the 34th Street - Herald Square Station.

While the investigation of the incident is still under investigation, all employees who perform or supervise work on the right-of-way under flagging protection must participate in an 8-hour special safety briefing on track flagging and track safety commencing today, Wednesday, November 29, 2023, utilizing the attached material, which, must be reviewed between Supervisors and hourly employees, giving ample time to ensure that they are understood. Ensure this bulletin is discussed by managers with all supervisors and hourly employees during safety/toolbox talks.

6.0 Internal Oversight:

- **Public Transportation Agency Safety Plan (PTASP)** - As required by 49 CFR 673,

NYCT Department of Subways and Department of Buses are required to have an

PTASP which includes NYCT's Safety Policy, Safety Risk Management process, Safety Assurance process, and Safety Promotion process. The PTASP also includes agency information, designation of Accountable Executive(s), outline of how the PTASP is reviewed and maintained, and Safety Performance Targets. The PTASP also includes the Accountable Executive's commitment to safety and the Safety Management System (SMS) approach.

- **Joint labor-management safety committees** - Where provided for in NYC Transit labor agreements, may be used to identify and address local safety concerns at various work locations. The Labor Management Safety Committee include the responsibility center head or designee and the designated Union representative, who shall jointly chair the monthly meetings. Additional personnel may attend such meetings for the purpose of providing support or information update to the proceedings of the meeting. Labor/management 'Safety Committee' facility walk-through inspections are conducted at various work locations utilizing the Local Safety Committee checklist. All findings are documented and tracked utilizing the Safety Inspection Tracking form.
- **General Safety Audits, Inspections, Investigation - OSS makes recommendations to resolve or minimize the risk of hazards identified as a result of inspections, surveys, investigations, reviews, trend analysis** etc. The recommendations are submitted to responsible departments for corrective action.

OSS maintains recommendation tracking databases whereby all recommendations are logged and tracked until corrective actions are implemented and the hazard is resolved and tracked to closure.

- **Safety Dispute Resolution Forms (SDRF)** - Is a means where an employee or group of employees who allege that supervision directed an employee or group of employees to violate a departmental or applicable NYC Transit-wide safety rule or applicable law can utilize the SDRF procedure/form to have the situation immediately reviewed by a supervisor and manager, if necessary. A Divisional Review Panel convenes quarterly, chaired by the division heads, with representation from OSS to review the forms. Reports are provided to the Senior Vice President, Subways, and the Vice President, OSS.
- **Safety Goal Action Plans (SGAP)** - SGAPs are documents that outline safety goals (statement of a target result, to be achieved within a specific period of time) and action plans (a list of tasks, to be completed within a specific period of time) both of which when achieved, will have a positive, measurable effect toward the achievement of overall customer and employee safety. SGAPs goals are developed by each department, updated quarterly, audited, and reviewed annually. In the event that an audit identifies an unachieved goal, a corrective action plan is generated and tracked to closure.

- **Policy Instructions (P/I)** - Documents approved by NYCT's President representing NYCT's position with respect to major issues that affect all departments. P/I's provide a definite course or method of action to guide and determine present and future decisions. In addition, all P/I's must meet one of the following criteria:
 - The consequence of a statute, government regulation or Board approval,
 - Addresses matters that have a significant effect on all NYCT Departments and/or that has an impact on/or the potential to substantially impact core operations,
 - Presents information that significantly affects all NYCT employees,
 - Presents matter that materially affect outside Agencies.

- **Safety Rule Books** - In addition to New York City Transit's agency rule book, Departmental rule books are developed, reviewed and updated on as needed. System wide rules include instructing all employees of their duty to report unsafe conditions.

- **Job Task Hazard Assessments (JTHA)** - JTHA are a specific evaluation of a job task identified during a hazard walk through, where an employee may be exposed to hazards that warrant personal protection. Specifically, the job task is observed by management to determine if any potential hazards can be eliminated or mitigated through implementing engineering controls, administrative controls, or prescribing the appropriate PPE required to safely perform the task. JTHAs for each task are evaluated and updated annually.

- **Safety Certification Hazard Logs** - The purpose of safety certification at NYC Transit is to ensure that hazards and safety concerns are adequately addressed prior to the initiation of passenger operations for new starts such as Communication Based Train Control. A Certifiable Items List defines items that require certification including identification of Safety Certifiable Items that are primarily based on hazards which have been identified and documented in a Hazard Log.
- **Employee Safety Call Center** - NYCT has an Employee Safety Call Center for personnel to identify a non-emergency safety concern in the system. It does not replace departmental incident reporting protocols for unsafe conditions; but serves as a critical complement to existing procedures. The Employee Safety Call Center also provides employees with the option to anonymously report their safety concerns. Call center representatives use a web-based system to route the safety concerns to the appropriate departmental contact for resolution and to track the process through to closure. Employees can also call back to the hotline to find out more information about their report with a reference number.
- **Departmental Safety Training Matrices** - Each Department is required to have a training matrix which identifies required training for each title within their department. The training matrices are reviewed and updated annually.

- **Safety Management Techniques for Supervisors** - This is a training course designed to give newly inducted supervisors an understanding of their roles as supervisors in our current safety culture. This course covers techniques for reducing accidents, and specific actions a supervisor can take to make a positive impact on safety performance. Participants are encouraged to explore, and practice key supervisory skill sets through classroom workshops, and hands on training exercises to recognize and solve safety issues in the workplace. Upon completion of this course participants will be able to correctly demonstrate procedures for reducing accidents and improving safety in their individual areas by:
 - Conducting audits and inspections
 - Approaching employees who are acting unsafely.
 - Encouraging employees who are acting safely.
 - Building a framework for accident prevention

- **Action Employees Can Take (AECT)** - This course is designed to give participants the skills needed to identify unsafe acts and conditions in the workplace. Participants are taught how to report unsafe conditions and how to effectively deal with employees who are acting in an unsafe manner. Upon completion of this course employees will be able actively participate in our current safety culture by:
 - Understanding the effects and causes of accidents.
 - Knowing how to identify unsafe conditions.
 - Discussing the proper reporting procedures

- Learning how to ensure a safe climate by helping fellow employees work safely.

7.0 External Oversight:

7.1 FTA External Oversight:

An agency within the U.S. Department of Transportation (DOT), FTA is headed by an administrator appointed by the President of the United States. FTA is one of DOT's 10 modes of transportation and is run by a headquarters in Washington, D.C. as well as 10 regional offices that assist transit agencies in all states and U.S. territories. The FTA has an Office of Safety in Washington D.C. that conducts triennial audits of the State Safety Oversight Agency's (SSOA) compliance with Federal requirements. The FTA Region 2 Office, is located in New York, NY, attends SSOA quarterly meetings and site visits at NYCT as appropriate.

FTA is required to implement and maintain a national public transportation safety program to improve the safety of all public transportation systems that receive federal funding. The safety program includes:

- 1) The National Public Transportation Safety Plan, detailing safety performance criteria and minimum transit safety standards.

2) The Safety Certification Training Program, a safety training regime for personnel who conduct transit safety audits.

3) The Public Transportation Agency Safety Plan, a requirement for each transit agency to detail what it will do to ensure the safety of its system; and

4) The State Safety Oversight Program, which establishes independent state-based rail transit safety oversight agencies, with enforcement authority to compel the rail public transit agency to complete necessary safety actions

7.2 New York State Department of Transportation

The Public Transportation Safety Board (PTSB) was created in 1984 and is responsible for safety oversight of all public transportation systems operating in New York State that receive State Transit Operating Assistance (STOA), as defined in 17 CRR-NY 990. Transit modes and systems include:

1. Rail transit – Metropolitan Transportation Authority (MTA) New York City Transit (NYCT), including Staten Island Railway (SIR), and Niagara Frontier Transportation Authority (NFTA) Metro Rail.
2. Safety oversight of 90 bus systems receiving STOA funding
3. Commuter railroads – MTA Metro-North Railroad and Long Island Railroad, New York State operations of New Jersey Transit

PTSB rail inspection activities are performed in a cooperative partnership with the Federal Railroad Administration (FRA) for commuter railroads and rail transit State Safety Oversight with the Federal Transit Administration (FTA). PTSB bus investigators work across the state with public bus operations responsible for investigating serious bus accidents and making recommendations to reduce accidents in the future.

The PTSB is managed by the New York State Department of Transportation (NYSDOT), with staff support provided by the Office of Rail Safety & Intermodal Security Bureau. This NYSDOT staff support is provided from the Main Office in Albany, NY and the Region 11 Office in Long Island City, NY in Queens.

E INTERVIEW

1.0 Crystal Chapman-Train Operator

On Friday December 1, 2023, at 1200, hours we conducted an interview of the Train Operator. The operator was represented by a Union Rep from TWU Local 100. For a full transcript of the interview please see the docket.

F TOXICOLOGY TESTING OF THE TRAIN OPERATOR

The Federal Transit Administration (FTA) drug and testing regulations require that safety sensitive employees involved in a public transportation vehicle accident involving the loss of human life submit tests for alcohol misuse and prohibited drug

use as soon as practicable following the accident. Title 49 Code of Federal Regulations (CFR) Part 655 requires the testing of any other safety sensitive employee whose performance could have contributed to the accident, as determined by the employer at the scene using the best information available at the time of the decision.

In accordance with Title 49 CFR Part 655, post-accident toxicology testing for alcohol and other drugs was performed. See medical officers report for results.

G SUBMITTED BY AND CHIEF REVIEW

Submitted by:

Shane Richardson

NTSB Operations

April 2024

Approved by:

Zach Zagata

Branch Chief/ RPH-140

April 2024