Metropolitan Transportation Authority
Staten Island Rapid Transit Operating Authority
Staten Island Railway

SIRTOA
OPERATING RULES
AND
TIMETABLE SPECIAL INSTRUCTIONS

John H. McCabe
Chief Officer – General Manager

Prepared By:

SYSTRA
ENGINEERING

Metropolitan Transportation Authority
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FIRST EDITION

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1.0 GENERAL NOTICE

These rules govern the operation of the Staten Island Rapid Transit Operating Authority (SIRTOA) and apply equally to all employees.

These rules must be observed by all employees whose duties are in any way affected by them.

To enter or remain in the service requires obedience to the rules. To obtain promotion, ability must be shown for greater responsibility.

Use of the male gender throughout these rules is for convenience and clarity only. All rules apply equally to male and female personnel.

These Operating Rules may be modified or superseded by the Timetable Special Instructions then in effect, by the Superintendent's Bulletin then in effect, by the Superintendent's Bulletin Supplements then in effect, and by Form X's and Form Z's then in effect.

When there is a conflict between rules and instructions, the priority in determining applicability from first to last is as follows:

1. Form X or Form Z,
2. Most recent Superintendent's Bulletin Supplement,
3. Superintendent's Bulletin,
4. Timetable Special Instructions, and
5. Operating Rules.

1.1 Safety is First and Paramount

Safety is of the first importance in the performance of duty. Obedience to the Operating Rules and Special Instructions is essential to safety. In cases of doubt or uncertainty, the safe course must be taken.

The welfare of SIRTOA, our passengers, your fellow workers and your family depends upon your performance of assigned tasks in a safe and efficient manner. SIRTOA requires the faithful, intelligent and courteous performance of duty by all employees.

The rules set forth herein prescribing employee conduct relating to safe operations are intended to place a higher standard of care on employees than is required by law, to protect against any, not just negligent, damage, injury or death as the result of the performance of all work on SIRTOA property.

A violation of these rules may result in disciplinary action against an employee even though such violation does not cause injury, damage and/or constitute negligence under the law.

Employees who violate any of these rules may be disciplined in accordance with their collective bargaining agreement or SIRTOA policy, as applicable. Disobedience of these Operating Rules, the Special Instructions or of any other management directive, or any neglect of duty, or causing or being involved in any disorder, or any act or omission prejudicial to efficiency or discipline, or any interference with normal train service, equipment operations, or maintenance activities of SIRTOA shall be reason for charges of misconduct and/or incompetence. Any such misconduct and/or incompetence shall be subject to penalty of dismissal, demotion, suspension or such other penalty as SIRTOA may impose.

Suggestions from employees that are intended to promote safety, economy or to improve service are solicited and shall receive appropriate consideration.

END OF SECTION

2.0 TERMINOLOGY, DEFINITIONS, AND AUTHORIZED ABBREVIATIONS

The abbreviations included herein are authorized for use in the Timetable Special Instructions, the Timetable Schedules, the Superintendent's Bulletin, Superintendent's Bulletin Supplements, Form X's and Form Z's.

Blocks

Block – A contiguous length of track between two successive Controlled Signals governing movement in the same direction, or between a Controlled Signal and the entrance to non-signaled Other Than Main Track, on which the movement of trains and track cars is governed by a Controlled Signal, the Cab Signal, Form X and/or Form Z.

Signals

Fixed Signal – A wayside signal at a fixed location that affects the movement of trains and track cars. Fixed signals include Controlled Signals, speed limit signs and other means for conveying information that affects the movement of trains and track cars.

Controlled Signal (SIG) – A fixed signal capable of conveying information by its display of lights. Controlled Signals are capable of displaying the Stop aspect and one or more aspects indicating that train movement is permissible on the route ahead.

Fixed Stop Signal – A fixed signal capable of displaying only the Stop aspect. An end-of-track bumper also constitutes a Fixed Stop Signal.

Color Position Light (CPL) Signal – A Controlled Signal in which the aspects are displayed by the color and position of lights. A CPL signal consists of a main cluster of colored lights that are illuminated in pairs of the same color. For some indications, a marker light is displayed above or below the main cluster of lights to display a different aspect.

Cab Signal – A component part of the Aspect Display Unit (ADU) located in the locomotive control compartment that displays the maximum signal-system speed applying to the movement of the train. Controlled Signals are used in conjunction with the Cab Signal at interlockings.

Aspect Display Unit (ADU) – A component part of the Cab Signal System (CSS) and the Automatic Train Control System (ATC) located in the engine control compartment that displays current speed, the Cab Signal speed, overspeed status, the status of the ATC and Cab Signal cutouts, and that includes other indicators pertaining to the ATC and Cab Signal Systems. The ADU includes push buttons for a LAMP test and for initiating the Daily Departure Test of the ATC and Cab Signal Systems.

Signal Aspect – The appearance of a fixed signal conveying an indication as seen from the direction of an approaching train. Also, the appearance of the Cab Signal conveying an indication as seen in the engine control compartment.

Signal Indication – The information conveyed by the signal aspect of a fixed signal or Cab Signal.

Approach Speed Limit Sign – A fixed signal (sign) located prior to a speed restriction indicating that a speed restriction is ahead.

Begin Speed Limit Sign – A fixed signal (sign) located at the beginning of a new speed limit.

Signal Systems

Signal System – An arrangement of wayside equipment and electrical circuits under which the use of each block and the use of routes through interlockings are governed by a Controlled Signal and the Cab Signal.

Cab Signal System (CSS) – The overall system of wayside signal system and vehicle equipment that provides for the display of the Cab Signal, the sounding of an alarm in the cab when the cab signal drops to a more restrictive aspect, and the automatic stopping of the train if the alarm is not acknowledged within the prescribed time period.

Automatic Train Control System (ATC) – The overall system of equipment on-board engines that functions to enforce the maximum speed of the train to that indicated by the Cab Signal.

Positive Stop System (PSS) – A system on-board engines that works in conjunction with the CSS and ATC to enforce trains in most circumstances to stop and remain stopped prior to Stop aspects and occupied track circuits. This feature has been designed to function primarily on Main Tracks outside of the St. George and Tottenville terminal areas.

Central Control and Interlockings

Central Control – The location from which the remotely controlled interlocking appliances (signals, switches, derails and movable point frogs) are normally operated/controlled and at which the Dispatcher is located. ("Tower A" is an alternate term that is synonymous with the term "Central Control" in all respects.)

Interlocking (INT) – An arrangement of Controlled Signals with or without switches, derails and/or movable point frogs that are interconnected so that their operations must succeed each other in proper sequence. Interlockings provide protection against conflicting routes and permit Controlled Signals to clear for train movements only if the route is lined and locked. Interlockings and their locations are designated on the Station Pages of the Timetable Special Instructions. Operations within Interlocking Limits are subject to the interlocking rules.

Interlocking Appliances – The parts of an interlocking that are capable of movement, including switches, derails, movable point frogs, etc.

Interlocking Limits – The tracks between the outer opposing Controlled Signals governing entrance to an interlocking.

Extended Interlocking Limits – When specified by the Timetable Special Instructions, interlocking rules shall apply to the Main Tracks between designated interlockings.

Blocking Device – An approved method, dependent on the type of interlocking control machine, for preventing the clearing of a signal, the movement of a switch, derail or movable point frog, or the lining/clearing of an interlocking route. Abbreviations used in conjunction with Blocking Devices are Blocking Device Applied (BDA) and Blocking Device Removed (BDR).

Speeds

Maximum Authorized Speed (MAS) – The highest speed permitted on a track for a particular class/type of train equipment as authorized in the Timetable Special Instructions.

Limited Speed – For Class A Trains, not exceeding 30 MPH. For all other trains, not exceeding 20 MPH.

Medium Speed – For Class A Trains, not exceeding 20 MPH. For all other trains, not exceeding 15 MPH.

Slow Speed – For Class A Trains, not exceeding 15 MPH. For all other trains, not exceeding 10 MPH.

Restricted Speed – A speed that shall permit stopping within one-half the range of vision, and to stop short of any train, equipment, obstruction on or fouling the track, switch or derail improperly lined, broken rail, misaligned track, or any other condition that may require a stop or for which speed should be reduced, but not exceeding fifteen (15) miles per hour for Class A Trains and track cars, and ten (10) miles per hour for all other trains. These restrictions apply to the movement of the entire train or track-car length unless otherwise specified in the rule or instruction that requires Restricted Speed.

Stations

Station – A place designated by name on the Station Pages of the Timetable Special Instructions.

Passenger Station – A station designated on the Station Pages of the Timetable Special Instructions at which revenue passengers may be received and/or discharged.

Timetables, Bulletin Orders and Forms

Timetable Schedules – A document containing the schedules that prescribe number, direction, frequency, station stops and times for the movement of individual scheduled trains.

Timetable Special Instructions (singular form TTSI) – A document containing information supplementing and/or modifying the Operating Rules.

Superintendent's Bulletin (SB) and Superintendent's Bulletin Supplements (SBS) – Documents used to notify employees of changes and supplements to Operating Rules, Timetable Schedules, Timetable Special Instructions, and/or to other documents, procedures and instructions affecting the movement of trains or track cars.

Form X – A form used for issuing and/or copying written authorizations, restrictions, and/or instructions from the Dispatcher to specified/addressed trains, track cars and individuals. When issued to a train or track car, a Form X only applies to that specific trip of that specific train or track car.

Form Z – A form used for issuing and/or copying written authorizations, restrictions, and/or instructions from the Dispatcher to specified/addressed train crews, Track Car Drivers and individuals. When issued to a train crew or Track Car Driver, a Form Z applies to the movement of all trains or track cars by that train crew or Track Car Driver for their entire tour of duty.

Foul Time – A form of protection provided by the Dispatcher for certain activities on or near the track.

Track

Main Track – A track so designated by Timetable Special Instructions that is under the jurisdiction of the Dispatcher.

Other Than Main Track – Any track outside of Interlocking Limits that is not designated to be a Main Track by the Timetable Special Instructions. Unless stipulated otherwise by the Timetable Special Instructions, Other Than Main Tracks are not under the jurisdiction of the Dispatcher. Other Than Main Tracks are non-signaled.

Crossover – A combination of two switches connecting two adjacent tracks.

Derail – A track safety device designed to guide a car off the rails as a means of protection against collisions or other accidents. SIRTOA has three types of derails – sliding block derails, split point derails, and switch point derails.

Fouling Point (FP) – The location at diverging or converging tracks (switches) where the safety clearance-envelope requirements between train equipment on the two tracks/routes are no longer satisfied.

Movable Point Frog – A frog with a moving alignment.

Track Barricade – An approved sign or obstruction fastened to a track to prevent access to that track.

Dual-Control Switch or Derail – A power-operated switch or derail that is also equipped with a hand-throw lever for hand operation**.**

Electrically Locked Switch or Derail – A hand-operated switch or derail that is equipped with an electrically controlled device that restricts the movement of the switch or derail.

Normal Direction of Traffic – The direction in which trains normally operate on a specific track as specified in the Timetable Special Instructions.

Reverse Direction of Traffic – The direction opposite to the Normal Direction of Traffic.

Third Rail - An electrified rail that is provided on designated tracks adjacent to one of the two running rails outside of the gauge to provide electric propulsion power for MUE trains.

Track Car

Track Car (TC) – Equipment, other than trains, operated on a track for inspection or maintenance. Track cars may not shunt or reliably shunt the track circuits of the Signal System. Track cars include hi-rail vehicles, rail detector cars, motor cars, push cars, trailer cars and other Maintenance of Way equipment, including contractor owned and/or operated equipment.

Trains

Engine (ENG) – A self-propelled unit or combination of such units operated from a single control designed for train or switching service to move/haul/push passenger or freight cars. The term engine includes powered multiple-unit cars. ("Locomotive" is an alternate term that is synonymous with the term "Engine" in all respects.)

Train – An engine with or without cars.

Scheduled Train – A train authorized by a Timetable Schedule.

Extra Train (EXTRA) – A train not authorized by a Timetable Schedule.

Class A Train - A train meeting the "Class A Train" requirements as defined in the Timetable Special Instructions.

Multiple Unit Equipment (MUE) Train – A train consisting of electric self-propelled cars designed for passenger service, which MUE cars collect electricity through the use of third-rail contact shoes.

Fully Equipped Train – A train on which the ADU, the Cab Signal and the speed control (ATC) equipment are all fully operational on the leading unit for the direction of movement. The Cab Signal cut-in/cut-out and ATC cut-in/cut-out switches must both be sealed in the cut-in position.

Partially Equipped Train – A train not meeting the definition of a Fully Equipped Train on which the ADU and the Cab Signal equipment are fully operational on the leading unit for the direction of movement. The Cab Signal cut-in/cut-out switch must be sealed in the cut-in position.

Failed Train – A train having Cab Signal and speed control (ATC) equipment that does not meet the definition of a Fully Equipped Train or the definition of a Partially Equipped Train.

Non-Equipped Train – A train not equipped with Cab Signal and speed control (ATC) equipment.

Marker (plural form Markers) – A reflector, flag, or highly visible marking device, in the red-orange-amber color range, affixed to the rear of a train to indicate that the train is complete.

Other Definitions, Terminology and Authorized Abbreviations

Pilot – A qualified Engineer, Conductor or Track Car Driver assigned to a train or track car when the Engineer, Conductor or Track Car Driver is not qualified on the rules or the physical characteristics of the territory to be traversed.

Return Movement – The movement of an uncoupled engine or leading portion of a train back toward the remaining stationary portion of the same train.

Reverse Movement – A movement opposite to the direction previously authorized.

Roadway Worker – Any employee or contractor employee whose duties include and who is engaged in the inspection, construction, maintenance or repair of railroad track, bridges, roadway, signal and communications systems, electric traction systems, roadway facilities or roadway maintenance machinery on or near the track or with the potential of fouling a track, and employees responsible for their protection.

Rules-In-Effect – The specific operating rule or group of operating rules that govern the use of tracks, as designated in the Timetable Special Instructions.

Avenue – AVE

Conductor – CNDR

Conductor and Engineer – C&E

Dispatcher – DSPR

Engineer – ENGR

Foreman – FRM

Interlocking Names – The authorized abbreviation for an interlocking shall be the two alphabetical letters for that interlocking as shown on the Station Pages of the Timetable Special Instructions followed by the letter “X”, such as SGX for St. George Interlocking and TNX for Tottenville Interlocking.

Maintenance of Way – MW

Mile Post – MP

Miles per Hour – MPH

Number (singular or plural) – NUM

Operator – OPR

Overhead Bridge – OH BR

Route Request Pushbuttons – Singular form RRPB; Plural form RRPBs.

Street – ST

Switch – SW

Track – TRK

Track Car Driver – TCD

Undergrade Bridge – UG BR

Except for May, June and July which must be spelled in full, months of the year may be abbreviated as follows: JAN, FEB, MAR, APR, AUG, SEPT, OCT, NOV AND DEC.

NOTE: The following craft titles have been shortened in these Operating Rules and the Special Instructions to reflect common usage:

- The term “Operator” refers to the Tower Operator, and also applies to the Train Dispatcher when operating interlocking appliances.
- The term “Dispatcher” refers to the Train Dispatcher.

END OF SECTION

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3.0 GENERAL RULES

Note: Where the term "Special Instructions" is referred to in these Operating Rules or in the Timetable Special Instructions, the Timetable Schedules, the Superintendent's Bulletin or in the Superintendent's Bulletin Supplements, it refers to the Timetable Special Instructions, the Timetable Schedules, the Superintendent's Bulletin and Superintendent's Bulletin Supplements.

3.1 Required Documents

Employees whose duties are prescribed by these rules must have a current copy of these rules and a current copy of the following documents with them or readily accessible while on duty: Timetable Special Instructions, Timetable Schedules, Superintendent's Bulletin and Superintendent's Bulletin Supplements in effect or that may become effective during their tour of duty. They must read and understand each Superintendent's Bulletin and Supplement they are required to have in their possession.

3.2 Rules and Special Instructions

Employees must read, understand and obey the Operating Rules and Special Instructions that relate to their duties. Although these Operating Rules are subdivided for convenience, they must be observed wherever and whenever they relate in any way to the proper performance of an employee's duties. If in doubt as to the meaning or application of any rule or instruction, employees must ask their supervisor for clarification.

All employees of the Transportation Department and any other employees whose duties in any way affect, or are affected by, the movements of trains or track cars are subject to these Operating Rules and the Special Instructions.

The location of Superintendent's Bulletin (including Superintendent's Bulletin Supplements) Books and Administrative Notice Books shall be designated in the Timetable Special Instructions.

A new Superintendent's Bulletin shall normally be issued by the Superintendent of Transportation on a quarterly basis and become effective at 12:01 AM on the first day of January, April, July and October of each year, and shall supersede the Superintendent's Bulletin and all Superintendent's Bulletin Supplements previously issued.

Superintendent's Bulletin items containing instructions that will be applicable on a continuing basis shall be included in the next quarter's Superintendent's Bulletin.

Superintendent's Bulletins shall be numbered in the format QX – YYYY, where Q stands for quarter, X represents the particular quarter of the year, and YYYY represents the year. Thus, Superintendent's Bulletin Q3 – 2003 would be for the third quarter of 2003 and scheduled to become effective on July 1, 2003.

Superintendent's Bulletin Supplements to the Superintendent's Bulletin then in effect may be issued at any time and shall be numbered in the format S-QX-A – YYYY, where S represents supplement, QX represents the quarter of the year, the letter A represents a sequential letter of the alphabet assigned to that supplement, and YYYY represents the year. Thus, Superintendent's Bulletin Supplement S-Q3-C – 2003 would be the third (A, B, then C) Superintendent's Bulletin Supplement issued during the third quarter of 2003.

When train and engine crews, Track Car Drivers or any other employees having duties that are affected by or affect the movement of trains are instructed to report for duty at a location other than Central Control, the Conductor, Foreman, Track Car Driver or other employee must communicate with the Dispatcher and ascertain the alphabetical letter of the latest Superintendent's Bulletin Supplement in effect or that may become effective during their tour of duty. When necessary, the Dispatcher shall brief the Conductor or other affected employee about any Superintendent's Bulletin Supplement that is not in the crew's or other affected employee's possession. The Dispatcher shall determine that the Conductor or other affected employee fully understands the content thereof. The Conductor shall then brief the Engineer and determine that the Engineer fully understands the content thereof.

Before starting work, Dispatchers, Operators, train and engine service employees, Track Car Drivers and other employees having duties that are affected by or affect the movement of trains must read and sign for the latest Superintendent's Bulletin, Superintendent's Bulletin Supplement and Administrative Notice in effect, including for those that may take effect during their tour of duty.

3.3 Required Examinations

Employees must pass the required examinations. Employees whose duties require them to be qualified on the Operating Rules and Special Instructions must pass a written examination within three (3) months after entering service.

Employees that have NOT performed service for a continuous period of three (3) months must pass a written examination on the Operating Rules and Special Instructions prior to performing duties that are subject to the Operating Rules or Special Instructions.

Employees must be re-examined once every two years or as prescribed by proper authority. When reporting for examination, employees must present their copies of these Operating Rules and Special Instructions for inspection.

3.4 Employee Conduct

Employees must devote themselves exclusively to the Company's service while on duty, rendering every assistance in their power to carry out these Operating Rules and the Special Instructions. Cooperation between all employees is essential and required.

Employees while on duty are under the authority of and must obey the orders of their supervisors. They must, within their qualifications, perform such duties, in addition to those set forth herein, as the supervisors to whom they report may direct.

It is the duty of all employees to immediately report to their supervisors all dangerous, hazardous or defective conditions that they may observe or that may be brought to their attention. If it is a minor condition that they are qualified to correct, they should correct the condition to the extent of their ability and report the work performed by them to their immediate supervisor. Employees are not prohibited, under this or any other SIRTOA rule, from also reporting safety violations to governmental authorities that have jurisdiction over the safety of SIRTOA's operations.

Employees required to be licensed drivers in the performance of their duties must have their license (of the required class and with any required commercial endorsements) in their possession while on duty. They must immediately notify their supervisors of any suspension or revocation of such license and/or of any change in class, commercial endorsements, restrictions, status or identification numbers upon the renewal or change of such license.

Employees are required to avoid behavior that would tend to create adverse criticism of SIRTOA. Their conduct on SIRTOA property, regardless of whether on or off duty, is required to be such as to merit the confidence and respect of their supervisors and of the public.

Employees must not be disloyal, dishonest, insubordinate, immoral, quarrelsome, vicious, careless or incompetent. They must not neglect their duties, endanger life or property, make false statements, or conceal facts concerning matters under investigation.

3.5 Prohibited Behavior

Employees on duty or while in view of customers are prohibited from reading literature not directly concerning their work, and are also prohibited from using unauthorized radios, television sets or other audio-visual devices or games.

Employees on duty or while in view of customers are prohibited from using any cellular telephone or other communication device except for communications prescribed by these Operating Rules or Special Instructions.

Employees must not participate in any unauthorized activity while on duty or while on Company property, whether on or off duty, that may interfere with their duties or with the work of any other employee.

Possession or use of firearms or any other type of weapon on SIRTOA property, regardless of whether on or off duty, is prohibited.

3.6 Reporting Unusual Occurrences

Employees must report to the Dispatcher and appropriate supervisor:

- Any violation of these Operating Rules or Special Instructions; and
- Any physical condition which could imperil the safety of trains or equipment, or the safety of passengers, employees, contractors or other persons.

Written or oral reports must be complete and accurate. Employees who knowingly make or submit reports containing false statements shall be charged with misconduct and incompetence.

3.7 Drugs and Alcohol

(a) Employees are prohibited from using or possessing alcoholic beverages during their tours of duty and from using such beverages off duty when such use would make them unfit to report for duty or to be on duty. An employee shall be presumed to be in an unfit condition if he exhibits alcoholic breath, incoherent speech or staggering. Employees suspected of drinking alcoholic beverages before or during their tours of duty shall be directed to submit to a blood-alcohol examination. Employees failing to submit to such examination shall be subject to immediate suspension and disciplinary action in accordance with applicable labor agreements and/or SIRTOA policy.

(b) Employees are prohibited from using or possessing controlled substances (such as, but not limited to, narcotics, tranquilizers, marijuana, drugs of the amphetamine group, barbiturate derivatives, etc.) or paraphernalia used to administer such controlled substances, at any time, whether on or off SIRTOA property, except upon lawful prescription AND notification to the SIRTOA Medical Services Division AND the written permission of the Assistant Vice President of Medical Services, in accordance with applicable labor agreements and/or SIRTOA policy. Employees are under an affirmative obligation to report to the SIRTOA Medical Services Division his use or possession of any Controlled Substance.

(c) Employees may be required to submit to breath and/or urinalysis testing for alcohol or drugs after certain accidents or incidents, or when required by FTA regulations or SIRTOA policy.

(d) Failure to report as directed for an alcohol and/or drug test, or a failure to complete an alcohol and/or drug test, shall be considered as a refusal and shall subject an employee to immediate suspension and disciplinary action in accordance with applicable labor agreements and/or SIRTOA policy.

3.8 Smoking

Smoking and the use of tobacco are prohibited on SIRTOA property.

3.9 Uniforms and Grooming

(a) While on duty, employees must be suitably attired and must present a neat appearance. Male employees whose duties bring them into contact with the public may wear beards or mustaches so long as they are kept neat and trim. No personal appearance, attire or behavior unsuitable for public service will be permitted.

(b) All employees, at all times while on duty, and at any time while on SIRTOA property not accessible to the public, must wear their employee identification card in a manner that enables immediate viewing and inspection.

(c) Employees that are required to wear uniforms must at all times when on duty wear the prescribed uniform and proper identification badge. The uniform must be kept neat and in good repair. While on duty, uniformed employees (at times when their work assignments involve contact with the public or it is reasonable to conclude that they will come into contact with the public) are not permitted to wear buttons, badges, or other insignia other than those specified as part of the regulation uniform.

(d) While on duty, employees who are required to wear safety vests, hard hats, or other items that identify them as employees of SIRTOA, and employees that operate equipment identifiable as SIRTOA equipment, are not permitted to wear unauthorized buttons, badges or other insignia when their duties involve contact with the public or it is reasonable to conclude that they will come into contact with the public.

(e) Employees while on authorized breaks in areas out of public view (such as crew or lunch rooms) are not subject to this prohibition against wearing non-Authority issued buttons, badges, or other insignia.

(f) Transportation Department employees that are not required to wear a uniform must not wear clothing containing unauthorized lettering or graphics. A shirt or blouse with collar and sleeves is mandatory. Short pants are not allowed.

3.10 Courtesy

Civil and courteous behavior is required of all employees in their dealings with the public and with each other. Boisterous, profane or vulgar language is forbidden. Employees must not enter into altercations, play practical jokes, scuffle or wrestle while on duty or while on Company property.

3.11 Protecting Company Property and Affairs

In case of danger to the Company's property, employees must unite to protect it. Employees are responsible for protection of Company property in their charge. In case of fire that could endanger Company property, employees must take necessary action.

The affairs of the Company must not be disclosed, nor access to the Company's property or records be permitted without authority of the Chief Officer – General Manager.

Information detrimental to the interests of the Company or its patrons must not be disclosed, except by authority of the Chief Officer – General Manager. All information an employee has concerning an accident must be supplied to the immediate supervisory officer of the Company. Such information must not be furnished to other persons except by authority of the Chief Officer – General Manager.

3.12 Property Accountability

(a) Employees, when leaving SIRTOA employment, or upon demand of the supervisory officer, must return all property assigned to them or entrusted to their care.

(b) SIRTOA property must not be sold or in any way disposed of except as authorized by the Company. All articles of value found on SIRTOA property, whether along the right-of-way, in cars, stations, or on trains, must be cared for and promptly reported to Central Control.

(c) Employees must not borrow or take SIRTOA property for personal use, nor shall they willfully damage such property. They shall protect SIRTOA property from damage or theft by others at all times to the best of their ability and must unite, when necessary, to protect SIRTOA property. Employees are required to report promptly any theft of or damage to SIRTOA property.

(d) Employees are responsible for all property entrusted to them and must ensure that such property is not misused and is kept in good order. In the event of fire, wreck, or accident affecting SIRTOA property, or any destruction or theft thereof, the employee responsible for such property must report to such employee's department office, at the earliest opportunity, the extent of damage to or loss of such property.

(e) SIRTOA does not pay for any personal property that may be lost or stolen, except to the extent allowed under SIRTOA policy. Employees who leave personal property at their work location or in lockers or tool boxes do so at their own risk.

(f) Employees must provide a receipt for badges, transit passes, rule books, Special Instructions, keys, tools and other property of SIRTOA that may be issued to them, and must take care of and guard such property. Employees will be required to pay for any property entrusted to their care and use that is lost or damaged. Employees absent from duty for more than thirty (30) consecutive days on account of sickness or otherwise, or when their supervisor so requires, must return to the supervisor, or to a SIRTOA office designated by such supervisor, all SIRTOA property entrusted to them. Upon leaving the service, employees must return all property that has been issued to them. In the event of failure to return such property on the last day of work, they will not be given their final pay until after such property has been returned or until they have paid for such property.

(g) Employees must not change or interfere with, in any manner whatsoever, any SIRTOA equipment except with proper authority and in the performance of their duties.

(h) Employees are forbidden to buy or cause to be made, or otherwise to obtain or possess, without proper authority, keys to fit any door, gate, locker, or other lock on SIRTOA equipment.

3.13 Corrective Lenses

(a) Employees who are required to wear eyeglasses by the SIRTOA Medical Services Division must wear them while on duty.

(b) Employees who are required to wear tinted eyeglass lenses for medical reasons must submit a certificate from his physician or eye specialist and must report to the SIRTOA Medical Services Division with the tinted eyeglasses, and submit to an eye examination.

(c) Unless specifically authorized, employees are strictly prohibited from wearing any form of tinted eyeglasses or lenses, including light-sensitive ("photo-grey") lenses, while on duty and:

1) Driving, operating or guiding any SIRTOA engine, train, equipment or vehicle, regardless of whether on or off the track,
2) Working in a tunnel or indoor facility,
3) In offices, or
4) Outdoors after sunset.

Exception - Employees are permitted to wear sunglasses after sunrise and before sunset when "sun glare" would otherwise hamper their view.

3.14 Communications

Employees using any means of communication in connection with or affecting train or track car movements must know with certainty that they are in communication with the proper persons, and must not consider the conversation finished until all persons taking part are assured that all conversation has been heard and understood.

Except as specifically provided by these Operating Rules or the Special Instructions, all oral instructions affecting train or track-car movements, or involving equipment or track conditions, must be repeated by the employee receiving such communications.

Phonetic alphabet and numbers shall be used when necessary for clarity.

The Company's communication systems must not be used unnecessarily. Unauthorized use relating to the personal affairs of employees is prohibited.

3.15 Maintaining Workplace

Employees must exercise care and economy in the use of tools, equipment, materials and supplies. They must assist in keeping work areas in a clean, neat and orderly condition.

3.16 Operating Cabs

The only persons allowed to ride in the operating cabs of trains without permits issued by the proper authority are officers of the Operations and Maintenance Divisions, the Manager of Engineering & Safety, and crew members whose duties require their presence in the operating cab.

3.17 Hours of Service

The job duties of every employee in a safety-sensitive position require that he be capable of safely performing his duties. A safety-sensitive employee may not engage in any activity that prevents him/her from having a block of eight (8) continuous hours rest in the sixteen (16) hour period before performing work for SIRTOA.

Employees shall not engage in any other work or activity that will prevent them from obtaining proper rest or that may interfere in any way with the performance of their duties.

3.18 Tampering

Employees are prohibited from breaking seals on any interlocking, wayside or on-board equipment, except when specifically authorized to do so by the proper authority. Employees are prohibited from altering, nullifying or in any manner restricting or interfering with the normal intended function of any device or equipment on control panels, interlocking equipment, switches, engines, cars or any other Company property, except when specifically authorized to do so. In case of failure, or where seals are found to be tampered with, broken, missing, or authorized to be removed, a report must be made immediately to the Dispatcher and the supervisor in charge of the equipment on which the defect is discovered.

3.19 Safety

Accidents or unusual conditions must be promptly reported by the first available means of communication to the Dispatcher.

Employees must not enter upon or cross any tracks or enter any yard or storage area, except when absolutely necessary in the performance of duty.

Employees must exercise care to avoid injury to themselves or others. They must observe the condition of equipment and tools that they use in performing their duties. If defects are noted, they shall, if practicable, put the affected items in a safe condition or discontinue using them. Defects must be reported to the proper authority.

Employees must observe and inform themselves as to the location of structures or obstructions where clearances are close.

Employees must expect the movement of trains, engines, cars and track cars at any time, on any track, and in either direction.

Employees must not stand on the track in front of an approaching engine or car for the purpose of boarding it.

When an employee is injured, the supervisor or Employee-in-Charge must make an immediate inspection and report on the condition of the particular equipment, tools or machinery involved.

When an accident occurs, involving personal injury or damage to property belonging to passengers, employees, the Company or others, an immediate telephone or radio report to the Dispatcher must be made. Every employee having any knowledge or information concerning such accident or cause thereof, shall, before their tour of duty ends, make a complete written report that provides in detail all the information they have that in any way bears upon the accident, regardless of whether such information is favorable or unfavorable to the Company, its employees, or the injured person. Such report shall be signed and immediately forwarded to the employee's department manager.

In the event that a train or track car is involved in an accident, initial medical assistance shall be afforded to all persons injured by the accident. The Conductor must assist in recording pertinent information from any and all witnesses and people involved.

When persons are injured by appliances on engines or cars, or by tools or machinery, such equipment must be immediately inspected. If defective, the equipment must be properly identified as such, protected, and removed from service.

3.20 Reporting for Duty – On Call

Employees must report for their assignments as directed. Absence from duty without proper authority is regarded by SIRTOA as willful neglect of duty and as a serious breach of discipline. All leaves of absence for personal business must be approved in advance, except for such emergencies as death in immediate family and other substantiated unforeseeable occurrences. Sick leave, whether with or without pay, will be granted only upon proper evidence that the employee was actually ill and unable to perform his duties during the period of the absence.

No employee shall absent himself from duty, nor engage a substitute to perform his duties without permission from his immediate supervisor.

Employees subject to call must not absent themselves from their usual calling place without notice to those required to call them.

It is the obligation of each employee to keep his department informed as to his correct name, address and telephone number. Employees shall provide the name, address and telephone number of an individual to contact in the event of an emergency, and shall also provide the name, address and telephone number for his next of kin. Changes in any of this contact information must be reported not later than seven (7) calendar days following the change to the employee's supervisor on forms provided by SIRTOA, for updating the records of the Authority.

Employees will not be allowed to do any work for themselves or for others during working hours, nor on Company property, except with the permission of the head of the department in which they are employed.

3.21 Code of Ethics

This rule sets forth conduct that is prohibited by the New York State Ethics in Government Act, the Public Authorities Law, and SIRTOA policy to protect against employees promoting private, non-governmental interests over their duty to act in the best interests of SIRTOA and the State of New York. These rules do not apply to rights or obligations that employees have under other laws, judicial proceedings, or court orders.

(a) No officer or employee of SIRTOA:

1) Shall have any interest, financial, or otherwise, direct or indirect, or engage in any business or transaction or professional activity or incur any obligation of any nature, which is or may be in conflict with the proper discharge of his duties.

2) Shall have any interest, direct or indirect, in any contract entered into by SIRTOA.

3) Shall, directly or through any organization of which he is a member, or corporation of which he owns or controls ten percent (10%) or more of the stock, sell goods or services valued in excess of $25.00 to any other State or City Agency, unless such goods or services are provided pursuant to an award or contract let after public notice and competitive bidding.

4) Shall disclose confidential information, without proper authorization or use confidential information to further his personal interests.

5) Shall use or attempt to use his position to secure unwarranted privileges or exemptions for himself or others.

6) Shall request, solicit, or receive a gift of more than nominal value, on behalf of himself or on behalf of a charitable, social/fraternal or political organization or cause, from any person or corporation or other enterprise that does business with or seeks to do business with SIRTOA.

7) Shall offer or seek advancement, favoritism or promotion within SIRTOA on his own behalf or on behalf of others in exchange for political, social/fraternal or charitable contributions or activity.

8) Shall give or promise to give any portion of his compensation or any money or valuable thing to any person, nor shall any person accept any money or valuable thing, in connection with appointment, employment, promotion, assignment, or reassignment by SIRTOA; nor shall he directly or indirectly, make (or request that other employees of SIRTOA make) any contribution or pay any assessment in order to secure promotion, compensation or to affect job status, duties or function, or in consideration of being appointed or employed at SIRTOA.

9) Shall make personal investments in enterprises which he has reason to believe may be directly involved in decisions to be made by him/her or which will otherwise create conflict between his duty in the public interest and his private interest.

10) Shall pursue a course of conduct which will raise suspicion among the public that he is likely to be engaged in acts that are in violation of his trust.

11) Shall have a financial interest, direct or indirect, having value of $10,000.00 or more in any activity which is subject to the jurisdiction of a regulatory agency, unless he

files with the New York State Secretary of State a written statement, open to public inspection, that he has such a financial interest in such activity.

(b) No officer or employee of SIRTOA:

1) Shall directly or indirectly, act or appear on behalf of any individual, firm, or corporation, in any business dealing with, or any matter before, SIRTOA, or any State agency; or in any court proceeding against the interests of SIRTOA, or the State, other than as a fact witness.

2) Shall engage in other employment or self-employment that would constitute a conflict of interest or otherwise tend to impair his judgment or effectiveness in the exercise of official duties.

(c) No employee engaged in the award or administration of contracts:

1) Shall participate in the selection, award, or administration of a contract if the employee, any member of his immediate family, his partner, or an organization that employs or is about to employ any of them, has a financial or other interest in the contract.

2) Shall disclose information, whether or not such information is confidential information, if it relates to a pending procurement, unless he is designated to do so by the Division of Materiel and the SIRTOA Purchasing Department. Such designated personnel may not disclose information in such a manner as to undermine the procurement process by giving one vendor a competitive advantage over any other.

(d) No officer or employee of SIRTOA:

1) Shall run for partisan elective office if candidacy would violate federal statutes or regulations governing SIRTOA employees.

2) Shall conduct political activities during work hours, or use SIRTOA property, including, without limitation, equipment, vehicles, and office space, for personal or political activities under any circumstances.

3) Shall use his position or influence for the purpose of interfering with or affecting the result of an election or nomination for office.

(e) No officer or employee of SIRTOA:

1) Shall, within two years after termination of SIRTOA employment, appear before SIRTOA or receive compensation for, or render compensated services on behalf of, any person, firm, corporation, or association in relation to any case, proceeding, or application or any other matter before SIRTOA. In addition, no former employee shall ever appear, practice, communicate, or otherwise render any services or receive compensation for such services rendered before SIRTOA or any State agency for, or on

behalf of, any person, firm, corporation or other entity in relation to any case, proceeding or transaction with respect to which such person was directly concerned and in which he personally participated during the period of service or employment, or which was under his active consideration.

2) Shall solicit, negotiate for or accept any employment or agree to contract to render service with or to any private person, firm or corporation or other entity who or which is involved in any matter in which the employee is directly concerned or personally participating on behalf of SIRTOA.

3) Shall accept employment or engage in any business or professional activity which will impair judgment in the exercise of his current official duties or require disclosure or confidential information obtained during the course of SIRTOA employment.

(f) SIRTOA is subject to the NYCT Policy/Instruction entitled "Ethics", which also sets forth the employee conduct that this Rule 3.22 prohibits, as well as exceptions to and illustrations of prohibited and permitted conduct. In addition, the New York State Ethics Commission issues opinions and regulations governing employee conduct under the State Ethics in Government Act. State Ethics Commission regulations place restrictions on employees who hold policy-making positions in addition to those stated in this Rule 3.22. Employees are advised to refer to the Policy/Instruction, submit questions to NYCT's Ethics Committee, and refer to published opinions and regulations of the New York State Ethics Commission in seeking further guidance to adhering to this Rule 3.22.

END OF SECTION

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4.0 MISCELLANEOUS SIGNALS

4.1 Proper Equipment for Signaling

Employees whose duties may require them to give signals must provide themselves with the proper equipment. They must keep this equipment in good order and ready for immediate use. A train or track car must not be operated without a red flag, white light, at least six (6) fusees and at least six (6) torpedoes.

4.2 Flags and Lights: Periods of Display

Flags of the prescribed color must be used by day and lights of the prescribed color must be used by night.

4.3 Day and Night Signals

Day signals must be displayed from sunrise to sunset, but if day signals cannot be plainly seen, night signals must be used. Night signals must always be used from sunset to sunrise.

The following signals shall be used by employees performing flagging duties:

1. Day Signals: A red flag, fusees and torpedoes.

2. Night Signals: A white light, fusees and torpedoes.

4.4 Hand Signals

Hand signals must be given from a point where they can be plainly seen and in a manner that can be clearly understood. Hand signals must also be given from a point and at a time so that the train or track car will be able to comply.

Movement must be stopped if:

1. There is any doubt concerning the meaning of a signal, or

2. There is any doubt for whom the signal is intended, or

3. The signal disappears from view.

Any object waved violently by anyone on or near the track is a signal to stop.

While handling a crane at a derailment, an engine must not be moved until:

1. The proper hand signal with green flag or green light is received, or

2. Positive instructions in accordance with the radio rules are received and are clearly understood.

If a train has one engine unit, hand signals to the Engineer must be given according to the direction the unit is headed.

If a train is comprised of MUE equipment, and if the Engineer is in the operating cab at one end of the train, the Engineer's position shall be considered to be the front end of the train when giving hand signals.

If a train has more than one engine unit, and they are facing in opposite directions, no movement shall be made based on hand signals until the Conductor has an understanding with his crew.

If a train is comprised of MUE equipment, and if the Engineer is in an operating cab other than at one end of the train, no movement shall be made based on hand signals until the Conductor has an understanding with his crew.

Hand signals, with or without a flag or lamp, must be given as follows:

4.4A Stop

Swung horizontally at right angle to the track.

4.4B Reduce Speed

Held horizontally at arm's length

4.4C Proceed

Raised and lowered vertically.

4.4D Back

Swung vertically in a circle at right angle to the track.

4.4E Apply Air Brakes

Swung horizontally above the head, when train is standing.

4.4F Release Air Brakes

Held at arm's length above the head, when train is standing.

4.5 Acknowledgement of Hand Signal to Stop

When a hand signal is given to stop a train, it must be acknowledged as prescribed by Rule 4.8G.

4.6 Unattended Fusees

If a train or track car encounters an unattended fusee burning on or near the same track, it must stop. It must then proceed at Restricted Speed until the head end of the train or track car has reached a point that is one (1) mile beyond the fusee. The train or track car may then resume operating at normal speed.

A train or track car must not be stopped over a burning fusee if it can be avoided. If so stopped and if the train or track car cannot be moved, the fusee must be extinguished.

Fusees must not be placed on or near stations, bridges or other structures that are liable to be damaged by fire.

Unattended fusees must be reported to the Dispatcher.

4.7 Torpedoes

The explosion of two torpedoes is a signal to reduce to Restricted Speed and be on the alert for an obstruction or Flagman for a distance of one (1) mile. The explosion of one torpedo shall indicate the same as two, but the use of two is required. Torpedoes must not be placed at passenger stations.

Unattended torpedoes must be reported to the Dispatcher.

4.8 Engine Whistle or Horn Signals

The following are engine whistle or horn signals. The signals are illustrated by "o" for short sounds and "—" for long sounds. The sound of the whistle or horn should be distinct, with intensity and duration proportionate to the distance that the signal is to be conveyed. The unnecessary use of the engine whistle or horn is prohibited.

Engine whistle or horn signals must be sounded as follows:

	SOUND	INDICATION
4.8A	Prolonged long sound	Crew members apply brakes to stop train.
4.8B	— —	1. Between 7 AM and 10 PM, approaching a passenger station at which the train will not stop. 2. Between 10 PM and 7 AM, approaching a passenger station at which the train will not stop when a passenger is seen on the station platform. 3. Before entering or starting to move within a shop building.
4.8C	— — o —	1. Approaching vehicle/pedestrian crossings at grade and at a whistle post indicating "W". Horn must be sounded at least twenty (20) seconds before reaching the crossing and must be prolonged or repeated until engine or train is occupying the crossing. 2. Approaching locations where Roadway Workers may be at work on or near the tracks, including on or near associated structures or facilities. 3. Approaching areas where personnel are known or seen to be working. To be prolonged or repeated until work area is reached, and to be repeated as appropriate while within the work area. 4. Approaching and passing standing trains, except at terminals or stations.
4.8D	Succession of short sounds	Alarm for person or animal on or near the track. To be prolonged until track is vacated.

	SOUND	INDICATION
4.8E	— o	When operating in the Reverse Direction of Traffic and approaching stations, curves or other points where the view may be obscured.
4.8F	o o o	When standing: warning or acknowledgment that the train is to back up.
4.8G	o o —	Acknowledgment of a hand signal to stop.
4.8H	o o	Acknowledgment of any other signal not otherwise provided for.
4.8I	o o o o	Call for signals.
4.8J	— — — —	Member of train crew providing protection may return.

If the engine whistle or horn on the leading engine fails en route, the Engineer must take the following actions:

1. Notify the Dispatcher as soon as practical.

2. Ring the bell continuously, if so equipped.

3. Approach all vehicle and pedestrian crossings at grade prepared to stop.

4. Reduce speed to not exceeding fifteen (15) MPH while approaching locations where employees are known to be working.

5. Reduce speed at other locations where warranted by the prevailing conditions.

4.9 Engine Bell

If a train is equipped with an engine bell, it must be sounded:

1. When the engine is about to move.

2. When running through tunnels.

3. While approaching and passing vehicle and pedestrian crossings at grade.

4. When approaching locations where Roadway Workers may be at work on or near the tracks, including on or near associated structures or facilities.

5. When passing a train standing on an adjacent track.

6. In an emergency.

In cases where a momentary stop and start, forward and backward movement is part of a switching operation that does not involve movement over a vehicle or pedestrian crossing at grade, the engine bell need not be sounded, unless Roadway Workers are known to be in the area.

4.10 Communicating Signal Appliance

Each car of a passenger train will be connected with the engine by a Communicating Signal Appliance. The following are communication signals. The signals are illustrated by "o" for short sounds and "—" for long sounds.

	SOUND	INDICATION
4.10A	—	**When running**, stop at once.
4.10B	—	**When standing**, stay stopped and apply or release brakes as appropriate.
4.10C	o o	**When standing,** start.
4.10D	o o o	**When running forward**, stop at next passenger station.
4.10E	o o o o	**When standing**, start air brake test.
4.10F	o o o o	**When running**, reduce speed.

The Communicating Signal Appliance on trains used in passenger service must be tested and determined to be in suitable condition prior to each trip.

When the Communicating Signal Appliance becomes inoperative en route and cannot be repaired without delay, the train may proceed to its final terminal after the Conductor and Engineer have an understanding as to how the train is to be operated.

4.11 Car Stop Markers

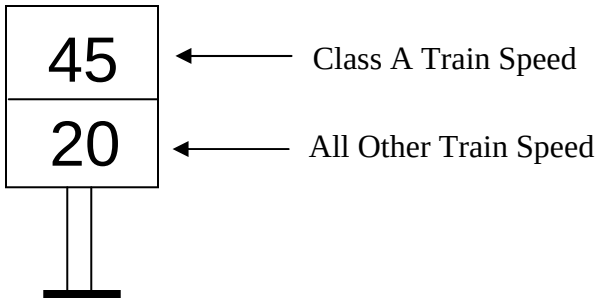
Car Stop Markers are provided at all stations for two (2) through five (5) car MUE trains. Car Stop Markers are also provided at certain interlockings that have frequent turn-back operations. The Engineer must stop at the appropriate Car Stop Marker based on the number of cars in the train's consist. Prior to leaving an initial terminal, the Engineer must know which Car Stop Marker is to be used for that train.

4.12 Permanent Speed Limit Signs

Speed limit signs may be in service on Main Tracks at selected locations. Trains and track cars must obey all other rules and Timetable Special Instructions that prescribe speeds. Speeds shown are in miles per hour (MPH). Where two speeds are shown, the top number shall be the speed for Class A Trains and the bottom number shall be the speed for all other trains. Where the letter "R" is used, it indicates Restricted Speed.

4.12A Approach Speed Limit Sign

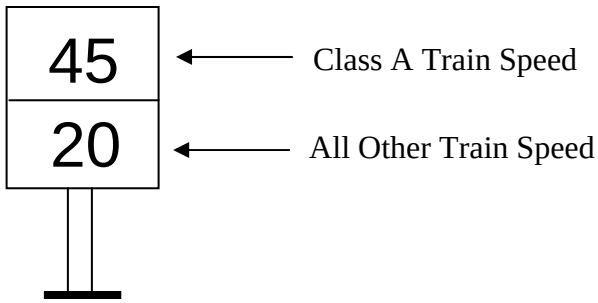
Black letters and numbers on yellow background



Indication: Proceed prepared to pass the beginning of the speed limit at not exceeding the posted speed.

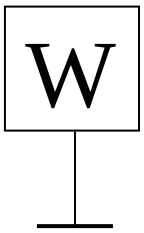
4.12B Begin Speed Limit Sign

Red letters and numbers on white background.



Indication: Proceed at not exceeding the posted speed until the rear of the train or track car has passed another Begin Speed Limit Sign, or in the absence of another Begin Speed Limit Sign, until the rear of the train has cleared the speed restricted area as defined in the Timetable Special Instructions.

4.13 Whistle Post



4.13A Grade Crossing Whistle Post

Indicated by black “W” on white background. Placed approaching grade crossing. Horn must be sounded in accordance with Rule 4.8C Item 1.

4.13B Track Workers Portable Whistle Post

Indicated by black “W” on yellow background. Placed approaching Roadway Workers. Horn must be sounded in accordance with Rule 4.8C Item 2.

4.14 Temporary Reduce Speed, Begin Speed and Resume Speed Signals

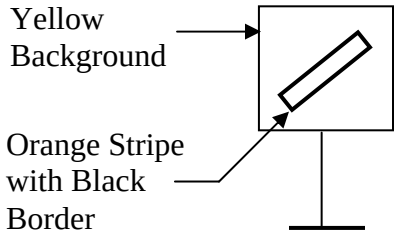
Temporary Reduce Speed, Begin Speed and Resume Speed Signals shall consist of white, yellow and green signs. When the use of these signals is required, they shall be placed on the Engineer's side of the track. Notification of the associated temporary speed restriction shall be made by SB, SBS, Form X Line 1 or Form Z Line 1. Temporary speed limits shall be specified in five (5) MPH increments, except when a speed less than five (5) MPH is required.

Speed of trains and track cars shall be governed by the signals displayed. In the absence of these signals, trains and track cars shall be governed by the speed-restriction instructions in the SB, SBS, Form X or Form Z. Conflicts as to the location of a temporary speed restriction between SB, SBS, Form X or Form Z written instructions and the actual placement of signs in the field must be reported to the Dispatcher. In such cases, the speed restriction must be complied with both for the limits defined by the signs AND for the limits prescribed by the written instructions.

4.15 Temporary Speed Signs on Affected Track

4.15A Temporary Reduce Speed Signal on Affected Track

Temporary Reduce Speed Signal on the affected track shall be a square yellow reflective sign with a diagonal "orange with black border" stripe.



This signal shall be placed far enough in advance of the Temporary Begin Speed Signal to permit reduction in speed.

When the temporary speed restriction is twenty-five (25) MPH or less, the minimum distance shall be in accordance with the following table based on the Class A Train maximum permitted operating speed on the approach track(s). Permanent speed restrictions may be taken into account.

Class A Train Maximum Approach Speed (in MPH)	**Minimum Distance Between Signs**
46 to 60 MPH	3,500 feet
36 to 45 MPH	2,000 feet
21 to 35 MPH	1,300 feet
20 MPH or less	600 feet

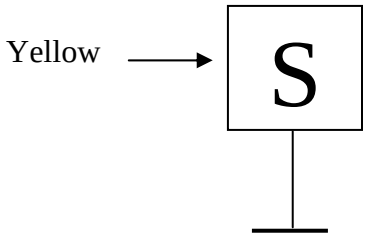
When the temporary speed restriction is thirty (30) MPH or greater, the minimum distance shall be in accordance with the following table based on the Class A Train maximum permitted operating speed on the approach track(s). Permanent speed restrictions may be taken into account.

Class A Train Maximum Approach Speed (in MPH)	Minimum Distance Between Signs
46 to 60 MPH	2,500 feet
36 to 45 MPH	1,300 feet
21 to 35 MPH	600 feet
20 MPH or less	300 feet

Trains or track cars exceeding Limited Speed or the temporary speed, whichever is higher, at Temporary Reduce Speed Signal must immediately take action to reduce to that speed or slower. In addition, if the temporary speed restriction requires Restricted Speed, the train or track car must proceed prepared to stop short of the Temporary Begin Speed Signal.

4.15B Temporary Begin Speed Signal on Affected Track

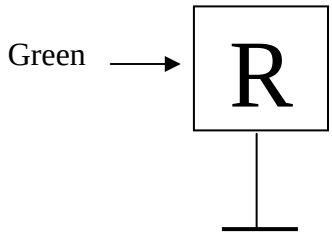
Temporary Begin Speed Signal on the affected track shall be a yellow reflective sign with black letter "S". This signal is used to designate the entering limits of the track section over which the temporary speed restriction applies.



Before any part of a train or track car passes this signal, speed must be reduced to the required speed.

4.15C Temporary Resume Speed Signal on Affected Track

Temporary Resume Speed Signal on the affected track shall be a green reflective sign with black letter "R". This signal is used to designate the departing limits of a temporary speed restriction.



The temporary speed applies until the REAR of the train or track car has passed the Temporary Resume Speed Signal.

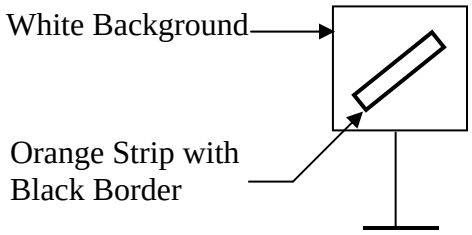
4.16 Temporary Speed Signs on Other Tracks

When the track configuration makes it possible to approach and/or depart a temporary speed restriction on another track by diverging to and/or from the affected track through an interlocked turnout or crossover, additional signs/signals shall be provided on the other track.

These signs shall apply to all trains and track cars encountering them unless and until it is determined with certainty that the train or track car is not routed to the affected track.

4.16A Temporary Reduce Speed Signal on Other Track

Temporary Reduce Speed Signal on Other Track shall be a square white reflective sign with a diagonal "orange with black border" stripe.



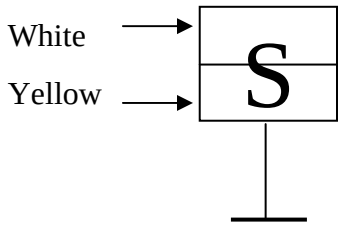
This signal shall be placed far enough in advance of the Temporary Begin Speed Signal to permit reduction in speed, with the minimum distance being in accordance with the tables in Rule 4.15A.

Trains or track cars exceeding Limited Speed or the temporary speed, whichever is higher, at Temporary Reduce Speed Signal on Other Track must immediately take

action to reduce to that speed or slower. In addition, if the temporary speed restriction requires Restricted Speed, the train or track car must proceed prepared to stop short of the Temporary Begin Speed Signal.

4.16B Temporary Begin Speed Signal on Other Track

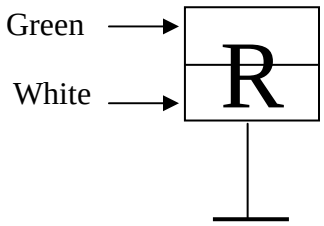
Temporary Begin Speed Signal on the other track shall be a "white over yellow" reflective sign with black letter "S". This signal shall be placed on the other track prior to the turnout or crossover, but only if the temporary speed restriction applies within the Interlocking Limits on the affected track or if the train or track car will not encounter the Temporary Begin Speed Signal on the affected track. This signal when required designates the entering limits of the track section over which the temporary speed restriction applies.



Before any part of a train or track car passes this signal, speed must be reduced to the required speed.

4.16C Temporary Resume Speed Signal on Other Track

Temporary Resume Speed Signal on Other Track shall be a "green over white" reflective sign with black letter "R". This signal is used to designate the departing limits of a temporary speed restriction.



The temporary speed applies until the REAR of the train or track car has passed the Temporary Resume Speed Signal.

4.17 Exception to Rules 4.16, 4.16A and 4.16B

When the maximum authorized speed over the diverging turnout or crossover leading to the affected track is equal to or less than the temporary speed restriction, the display of Temporary Reduce Speed Signal on Other Track and Temporary Begin Speed Signal on Other Track are not necessary, as long as the appropriate sign is displayed (repeated) on the affected track immediately after the turnout/crossover and prior to the point where the train or track car would otherwise be allowed to increase speed.

4.18 Missing Temporary Resume Speed Signal

In instances where the Temporary Resume Speed Signal is missing and the train or track car is still on the affected track, Engineer or Track Car Driver shall proceed at not exceeding the temporary speed to the next station beyond the end of the temporary speed restriction, notify the Dispatcher of the missing signal, and then proceed at Maximum Authorized Speed if conditions permit unless otherwise directed by the Dispatcher.

If the Temporary Resume Speed Signal is missing and the train or track car is no longer on the affected track, Engineer or Track Car Driver shall notify the Dispatcher of the missing signal, and then proceed at Maximum Authorized Speed if conditions permit unless otherwise directed by the Dispatcher.

4.19 Intervening Passenger Station(s)

When there is a passenger station between a Temporary Reduce Speed Signal and a Temporary Begin Speed Signal on an “affected” or “other” track, an additional Temporary Reduce Speed Signal (of the proper type) shall be provided approximately one-hundred (100) feet after the longest train’s berthing position at that station, unless the Temporary Begin Speed Signal is immediately beyond the station.

When there is a passenger station within the temporary speed restriction, an additional Temporary Begin Speed Signal shall be provided approximately one-hundred (100) feet after the longest train’s berthing position at that station, unless the Temporary Resume Speed Signal is immediately beyond the station. This requirement applies in both directions.

4.20 Placement of Temporary Speed Signs

When temporary speed signs/signals are required, they must be placed for trains operating in both directions, and so that they shall be to the right of the associated track when viewed by an approaching train. For a given track and direction, the Resume Speed Signal shall be placed before the Reduce Speed Signal is placed, and the Reduce Speed Signal shall be placed before the Begin Speed Signal is placed. When no longer required, Temporary Speed Signs shall be removed in the reverse sequence.

4.21 Canceling Temporary Speed Restrictions

The temporary speed signs must not be removed or the SB, SBS, Form X or Form Z restriction canceled until an authorized employee notifies the Dispatcher that the track is okay for normal speed. When practical, the employee providing this notification should be the same employee who requested the temporary speed restriction. When this is not practical, the employee making the notification must state the reason why the temporary speed restriction was placed into effect, state his authority to cancel the restriction, and also state that the track is now okay for normal speed.

END OF SECTION

5.0 TRAIN AND ENGINE LIGHTS AND MARKERS

5.1 Train and Engine Headlight(s)

The engine headlight(s) for the direction of movement must be displayed “Bright” on the leading end of every train by day and by night, except when required to be displayed “Dim” by these rules. The headlight(s) must be displayed “Dim” by night, as follows:

1. On two or more tracks when approaching a train operating in the opposite direction;

2. On two or more tracks when standing and an opposing train approaches;

3. Approaching fixed signals when the view is improved thereby; and

4. When closing up behind a train on the same track.

Exception: When approaching or passing over a vehicle/pedestrian crossing at grade, the headlight must not be displayed “Dim”.

If all headlight bulbs on the leading end of a train fail en route, the Engineer must take the following actions:

1. Illuminate all external engine lights on the leading end,

2. Display a white light on the leading end,

3. Operate at not exceeding thirty (30) MPH and reduce speed further as necessary for prevailing conditions,

4. Ring the engine bell (if the engine is so equipped) continuously while moving,

5. Sound the engine horn frequently, and

6. Approach all vehicle/pedestrian crossings at grade prepared to stop. After ascertaining that the crossing is clear, the train may then proceed over such crossing at not exceeding five (5) MPH. This five (5) MPH speed applies only until the train’s head end clears the crossing.

7. Notify the Dispatcher as soon as practical.

When the leading engine has multiple headlights, the Dispatcher shall be notified about any headlight failure.

When an engine other than an MUE car is on the rear of a train, the trailing headlight shall be displayed "Dim" at all times. The headlight on the end of such engine coupled to cars may be extinguished.

Engines operating in switching service shall display the headlight(s) "Bright" to the front of the movement (based on the direction of movement) and "Dim" to the rear of the movement. This applies both by day and night, except that the front headlight(s) must be displayed "Dim" when required by these rules. The headlight(s) on the end coupled to cars may be extinguished.

5.2 White Light on Lead Car by Night

A white light must be displayed on the front of the leading car when cars are pushed by an engine at night, except when making up trains.

5.3 Markers

On a Main Track and within Interlocking Limits, the rear of a train must be identified by a red marker as prescribed below:

5.3A Passenger Trains and Engines

Passenger trains, "lite" engines and engines operating at the rear of a train must:

1. Be equipped with a red illuminated marking device, or

2. Have the rear headlight(s) on low beam at all times.

5.3B Other Trains

Trains other than passenger trains must be equipped with a red illuminated marking device under the following conditions:

1. From one hour before sunset until one hour after sunrise.

2. When the visibility is so restricted that the end silhouette of a car cannot be seen from one-half mile on a straight track.

During other periods, a red reflector, red flag, or extinguished red marking device may be used.

5.3C Illuminated Marking Device

When an illuminated marking device may be required en route, it must be tested before a train leaves its initial terminal.

5.3D Failure of Marker En Route

If the marker fails while en route, the Dispatcher must be notified as soon as practical. As directed by the Dispatcher, the train may continue to a terminal where the marker can be repaired or replaced.

END OF SECTION

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6.0 BLUE SIGNAL (BLUE FLAG) PROTECTION

6.1 Blue Signal Protection of Workers

This rule prescribes the requirements that must be followed for the protection of railroad workmen engaged in the inspection, testing, repair and servicing of rolling equipment whose activities require them to work on, under, or between such equipment subjecting them to the danger of personal injury posed by movement of this equipment.

6.2 Additional Definitions Applying To Blue Signal Protection

Blue Signal - A clearly distinguishable blue flag or blue light by day and a blue light at night. When attached to the operating controls of a locomotive, it need not be lighted if the inside of the cab area of the locomotive is sufficiently lighted so as to make the blue signal clearly distinguishable.

Workmen - Railroad employees assigned to inspect, test, repair, or service railroad rolling equipment, or their components including brake systems. Train and yard crews are excluded except when assigned to perform such work on railroad rolling equipment that is not part of the train or yard movement they have been called to operate.

Note (1): Servicing does not include supplying cabooses, locomotives or passenger cars with items such as tools or flagging equipment.

Note (2): Testing does not include visual observations made by an employee positioned inside or alongside a caboose, locomotive, or passenger car.

Group of Workmen - Two or more workmen of the same or different crafts assigned to work together as a unit under a common authority and who are in communication with each other while the work is being done.

Locomotive Servicing Track Area - One or more tracks within an area in which the testing, servicing, repair, inspection, or rebuilding of locomotives is under the exclusive control of mechanical department personnel.

Car Shop Repair Track Area - One or more tracks within an area in which the testing, servicing, repair, inspection, or rebuilding of railroad rolling equipment is under the exclusive control of mechanical department personnel.

Rolling Equipment - Locomotives, railroad cars, and one or more locomotives coupled to one or more cars.

Switch Providing Access - A switch which if traversed by rolling equipment could permit that rolling equipment to contact with or couple to the equipment being protected.

Effective Locking Device - When used in relation to a manually operated switch or a derail means one which is:

1. Vandal resistant;

2. Tamper resistant; and

3. Capable of being locked and unlocked only by the class, craft or group of employees for whom the protection is being provided.

When used in relation to remotely controlled switch, means a "Blocking Device" as defined in these Operating Rules.

6.3 Blue Signal Display

Blue Signals displayed in accordance with Rules 6.3A, 6.3B and 6.3C signify that workmen are on, under, or between rolling equipment. When so displayed:

1. The equipment must not be contacted or coupled to;

2. The equipment must not be moved, except as provided for in Rule 6.3C;

3. Other rolling equipment must not be placed on the same track so as to reduce or block the view of a blue signal, except as provided for in Rules 6.3C.1 through 6.3C.3; and

4. Rolling equipment must not pass a blue signal.

Blue Signals must be displayed in accordance with Rules 6.3A, 6.3B and 6.3C by each craft or group of workmen prior to their going on, under, or between equipment and must only be removed by the same craft or group that displayed them.

6.3A Workmen on a Main Track or within Interlocking Limits

When workmen are on, under, or between rolling equipment on a Main Track or within Interlocking Limits:

1. A blue signal must be displayed at each end of the rolling equipment;

2. If the rolling equipment to be protected includes one or more locomotives, a blue signal must be attached to the controlling locomotive at a location where it is readily visible to the Engineer or Operator at the controls of that locomotive; and

3. When emergency repair work is to be done on, under, or between a locomotive or one or more cars coupled to a locomotive, and blue signals are not available, the

Engineer or Operator must be notified and effective measures must be taken to protect the railroad employee making the repairs.

Note: A blue-tag secured to the red emergency brake handle inside the Engineer's cab on multiple-unit cars after the emergency brake has been applied by pulling the handle down and leaving it down, signifies that workers are working on, under, or between the equipment.

6.3B Workmen on Other Than Main Track

When workmen are on, under, or between rolling equipment on a track other than a Main Track or a track within Interlocking Limits:

1. A blue signal must be displayed at or near each manually operated switch providing access to that track;

2. Each manually operated switch providing access to the track on which the equipment is located must be lined against movement to that track and locked with an effective locking device;

3. The person in charge of the workmen must have notified the Operator of any remotely controlled switch that work is to be performed and have been informed by the Operator that each remotely controlled switch providing access to the track on which the equipment is located has been lined against movement to that track and locked as prescribed in Rule 6.3D;

4. If rolling equipment requiring blue signal protection as provided for in this rule is on a track equipped with one or more crossovers, both switches of each crossover must be lined against movement through the crossover toward that rolling equipment and the switch of each crossover that provides coupling access to the rolling equipment must be protected in accordance with Items 1, 2 and 3 of this rule; and

5. If the rolling equipment to be protected includes one or more locomotives, a blue signal must also be attached to the controlling locomotive at a location where it is readily visible to the Engineer or Operator at the controls of that locomotive.

Note: A blue tag secured to the red emergency handle inside the Engineer's cab on multiple unit cars after the emergency brake has been applied by pulling the handle down and leaving it down, signifies that workers are working on, under, or between the equipment.

6.3C Alternate Methods of Protection on Other Than Main Track

Instead of providing blue signal protection for workmen in accordance with Rule 6.3B (Workmen on Other Than Main Track), the following methods for blue signal protection may be used:

6.3C.1 Locomotive Servicing Track Areas - When workmen are on, under, or between rolling equipment in a locomotive servicing track area:

1. A blue signal must be displayed at or near each switch providing entrance to or departure from the area;

2. Each switch providing entrance to or departure from the area must be lined against the movement to the area and locked with an effective locking device;

3. A blue signal must be attached to each controlling locomotive where it is readily visible to the Engineer or Operator at the controls of that locomotive;

   Note: A blue tag secured to the red emergency brake handle inside the Engineer's cab on multiple unit cars after the emergency brake has been applied by pulling the handle down and leaving it down, signifies that workers are working on, under, or between the equipment.

4. If the speed within this area is restricted to not more than five (5) miles per hour, a derail capable of restricting access to that portion of a track within the area on which the rolling equipment is located will fulfill the requirements of a manually operated switch in compliance with Item 2 of this rule when positioned at least 50 feet from the end of the equipment to be protected by the blue signal, when locked in the derailing position with an effective locking device, AND when a blue signal is displayed at the derail;

5. A locomotive may be moved onto a locomotive servicing area track after the blue signal has been removed from the entrance switch to the area. However, the locomotive must be stopped short of coupling to another locomotive;

6. A locomotive may be moved off a locomotive servicing area track after the blue signal has been removed from the controlling locomotive to be moved and from the area departure switch;

7. If operated by an authorized employee under the direction of the person in charge of the workmen, a locomotive protected by blue signals may be repositioned within this area only after the blue signal

has been removed from the locomotive to be repositioned and the workmen on the affected track have been notified of the movement; and

8. Blue signal protection removed for the movement of locomotives as provided in Items 1 and 6 of this rule must be restored immediately after the locomotive has cleared the switch.

6.3C.2 Car Shop Repair Track Areas - When workmen are on, under, or between rolling equipment in a car shop repair track area:

1. A blue signal must be displayed at or near each switch providing entrance to or departure from the area;

2. Each switch providing entrance to or departure from the area must be lined against movement to the area and locked with an effective locking device;

3. If the speed within this area is restricted to not more than five (5) miles per hour, a derail capable of restricting access to that portion of a track within the area on which the rolling equipment is located will fulfill the requirements of a manually operated switch in compliance with Item 2 of this rule when positioned at least 50 feet from the end of the equipment to be protected by the blue signal, when locked in the derailing position with an effective locking device AND, when a blue signal is displayed at the derail; and

4. If operated by an authorized employee under the direction of the person in charge of the workmen, a car mover may be used to reposition rolling equipment within this area after workmen on the affected track have been notified of the movement.

6.3C.3 Other Than Main Tracks - Except as provided in Rules 6.3C.1 and 6.3C.2 when workmen are on, under, or between rolling equipment on any track, other than a Main Track or within Interlocking Limits:

1. A derail capable of restricting access to that portion of the track on which such equipment is located will fulfill the requirements of a manually operated switch when positioned no less than 150 feet from the end of such equipment; and

2. Each derail must be locked in the derailing position with an effective locking device and a blue signal must be displayed at each derail.

6.3C.4 Emergency Repair Work - When emergency repair work is to be done on, under, or between a locomotive or one or more cars coupled to a locomotive, and blue signals are not available, the Engineer or Operator at the controls of that locomotive must be notified and effective measures must be taken to protect the workmen making the repairs.

6.3D Remotely Controlled Switches

After the Operator of the remotely controlled switch(es) has received the notification required by Rule 6.3B Item 3, the Operator must line each remotely controlled switch against movement to that track and apply an effective locking device to the lever, button, or other device controlling the switch before he may inform the Employee-in-Charge of the workmen that protection has been provided.

The Operator may not remove the locking/Blocking Device unless he has been informed by the person in charge of the workmen that it is safe to do so.

The Operator must maintain for 30 days a written record of each notification that contains the following information:

1. The date and time the Operator received the notification of the work to be performed;

2. The name and craft of the Employee-in-Charge who provided the notification;

3. The number or other designation of the track involved;

4. The date and time the Operator notified the Employee-in-Charge that protection had been provided in accordance with the first paragraph of this Rule 6.3D; and

5. The date and time the Operator was informed that the work had been completed, and the name and craft of the Employee-in-Charge who provided this information.

END OF SECTION

7.0 REPORTING FOR DUTY

7.1 Required Documents

When reporting for duty, employees must meet the requirements of General Rules 3.1, 3.2, 3.3, 3.4, 3.7, 3.9, 3.13, and 3.17, and meet the requirements of all other applicable rules, before beginning to perform work/service.

7.2 Applicable Time

The prevailing local time shall apply, either Eastern Standard Time or Eastern Daylight Savings Time, as appropriate. The employee assigned to check clocks at a location must set clocks to the correct time, if necessary, once each day that the office is open.

7.3 Clocks and Watches

Employees whose duties are subject to the Operating Rules and/or are affected by the Timetable Schedules must have in their personal possession and use a reliable watch. Before starting each tour of duty, they must set their watch to the correct time using a reliable source. If necessary, they must compare watches with another employee who has determined the correct time.

7.4 Form Z Before Beginning Work

Conductors, Engineers, Track Car Drivers and Pilots must receive a Form Z before beginning to perform service.

7.5 Job Briefings

When reporting for duty, employees whose duties require coordination with other employees and/or with contractor employees must hold a job briefing to review operational and safety conditions. If these conditions change, employees must hold an additional job briefing with the involved employees and/or contractor employees to discuss the new conditions. Job briefings should be conducted face to face. When not possible or practical to do so, radio or telephone communication is acceptable.

For work that requires the placement of temporary signals (signs) in the field, the job briefing must include a review of the work to be performed and the preparation of a formal sketch (in ink) that shows the type, aspect, location, track and direction of each such signal to be installed. This sketch when completed must be signed and dated by the person who prepared and/or approved it.

When the Employee-in-Charge delegates the installation of a temporary signal to another employee, the instructions must include the type, aspect, location, track and direction of each such signal to be installed.

The Dispatcher must be notified about the placement of all temporary signals.

Before a train departs its initial terminal on each trip, the Conductor and Engineer shall jointly confirm the train's identification, leading engine number and train length. They shall also review and compare all applicable Form X's and Form Z's, as well as any other instructions and conditions that will affect the trip.

7.6 Safety Vests

All employees assigned to perform duties on or near station platforms or on or near tracks must wear an authorized safety vest while on duty. This rule does not apply to employees who are only boarding, riding or disembarking a train, if they board and exit the train at passenger stations via the station platforms and via the train's side-doors.

END OF SECTION

8.0 INSPECTION OF EQUIPMENT

8.1 Train Inspection before Departure

Conductors and Engineers must know that the engines and cars in their train have been inspected, tested and found to be ready for service. This inspection and testing includes the braking systems, to the Cab Signal and Automatic Train Control (ATC) Systems (as prescribed by Rule 14.5A), the train's radio(s) (as prescribed by Rule 17.12A), and the train's Communicating Signal Appliance (as prescribed by Rule 4.10). All inspections and tests shall be conducted and performed in accordance with the applicable rules and special instructions.

At points where cars are to be picked up that have not been previously inspected by a Car Inspector, the train crew must determine that they are safe for movement.

Train crew members must inspect cars and engines for the following problems in particular:

1. Car body:

    a. Leaning or listing to side.
    b. Sagging downward.
    c. Positioned improperly on truck.
    d. Object dragging below.
    e. Object extending from side.
    f. Insecure car component or load.
    g. Broken or missing safety appliance.
    h. Lading leaking from a placarded hazardous material car.

2. Insecure coupler or coupling.

3. Overheated wheel or journal.

4. Broken or extensively cracked wheel.

5. Brake that fails to release.

6. Any other apparent safety hazard likely to cause an accident or casualty before the train arrives at its destination.

No attachment or part of a car may be allowed to hang so low as to foul the track structure, a switch or a vehicular or pedestrian crossing at grade.

8.2 Observation of Own Train and Track Car

As frequently as opportunities permit, train and engine crews and Track Car Drivers must observe their own train and track car while moving or standing, especially while rounding curves, to detect any condition that might interfere with the train's or track car's safe movement. Employees on the rear of a train must frequently look back at the track structure to see if there is any evidence of equipment dragging or track damage.

Should any potentially unsafe condition be observed, the train or track car must be immediately stopped, the Dispatcher notified, and the nature of the defect determined. When the possibility exists that adjacent tracks may be fouled, flag protection must be immediately established in both directions unless relieved of this duty by the Dispatcher.

When the track structure may have been damaged under or behind a train or track car, the track must be inspected to determine that it is safe for movement unless relieved of this duty by the Dispatcher.

If unable to correct the condition, the Engineer, Conductor or Track Car Driver (as appropriate) shall immediately make a report to the Dispatcher. When determined safe for movement, the Dispatcher shall order the defective equipment to be set out at the first available siding or terminal, or issue other instructions to the train crew or Track Car Driver as deemed appropriate.

8.3 Observation of Passing Trains and Track Cars

So far as is practicable and as other duties permit, employees along the wayside and crew members on other trains and track cars must observe passing trains and track cars for defects and for any condition that could endanger the train's or track car's safe operation. When two or more employees are available, and if it is safe and practicable to do so, they shall position themselves so that both sides of passing trains and track cars can be observed.

The improper display of headlights or markers must be reported to the train or track car, and to the Dispatcher.

Trains must be notified and given stop signals if any of the following defects are observed:

1. Hot Journal.
2. Sliding wheel.
3. Broken wheel.
4. Sticking brake.
5. Defective truck.
6. Dragging equipment.
7. Any other condition perceived to be potentially dangerous.

If the entire train or track car has been observed and nothing irregular has been noted, the employee shall give the proceed signal in accordance with Rule 4.4C.

Should a potentially dangerous condition be observed, the train crew or Track Car Driver must be contacted if at all possible and a hand signal to stop must be given. The Dispatcher must be promptly notified.

When a train or track car receives a hand signal to stop, the train crew or Track Car Driver must attempt to determine why the hand signal was given. When the reason for the hand signal to stop cannot be determined, the Dispatcher shall be notified. The train or track car shall be inspected and if safe for movement, the train or track car shall proceed at Restricted Speed for one mile before resuming normal operations.

When a train crew or Track Car Driver is notified about a potentially dangerous condition, the train or track car must be immediately stopped and inspected. In addition, the Dispatcher must be immediately notified.

8.4 Lookout for Signals

Employees on moving trains and track cars must be on the lookout for hand signals when passing other trains, track cars or employees along the track.

8.5 Train Brake Inspections and Tests

Supervisors are jointly responsible with Car Inspectors, Conductors and Engineers for the condition of air brake and communicating signal equipment to the extent that it is possible to detect defective equipment by the required tests.

While performing brake tests in accordance with the Special Instructions, the assigned employee(s) is (are) required to observe piston travel for each brake cylinder to determine the application and release of the air brakes.

An Initial Terminal Air Brake Test must have been completed within the twenty-seven (27) hour period immediately before the engine leaves its initial terminal. A written report of an Initial Terminal Air Brake Test must be completed by the qualified person making the test and kept in the locomotive or MUE operating cab that was tested. The employee performing the test must keep his copy for thirty (30) days.

Before leaving a terminal, a train must have the air brakes on all cars in effective operating condition. The horn on the leading end must be operative. In addition, the front of the train must have an operative headlight as prescribed by Rule 5.1, and the rear of the train must have a marker as prescribed by Rule 5.3.

8.6 Knowledge of Equipment

Employees are required to be knowledgeable about the equipment they are to operate before they operate it. For instance, this includes but is not limited to all employees involved with the making-up and/or operation of trains familiarizing themselves with the brake pipe angle cock positions for the different types of equipment operating on the railroad.

END OF SECTION

9.0 MOVEMENT OF TRAINS

9.1 Timetable Schedules and Timetable Special Instructions

Each issue of the Timetable Schedules or Timetable Special Instructions, from the moment it takes effect, supersedes the preceding issue of that document.

Notice of new Timetable Schedules, timetable sticker supplements and Timetable Special Instructions must be issued by a Superintendent's Bulletin or Supplement at least seventy-two (72) hours in advance of its effective date and time.

When new Timetable Schedules or Timetable Special Instructions are to become effective, all employees governed thereby must obtain a copy of the new Timetable Schedules or Timetable Special Instructions and examine them to be certain that their copy is complete and properly paginated BEFORE going on duty.

9.2 Schedule Times

Not more than two times are given for a scheduled train at any station; where one is given, it is, unless otherwise indicated, the leaving time; where two are given, they are the arriving and leaving times.

A train must not leave a station where it is scheduled to receive passengers earlier than its scheduled leaving time unless authorized by the Timetable Schedules or by the Dispatcher.

9.3 Unattended Engines and Trains

An engine (other than MUE equipment) must not be left unattended unless:

1. The air and hand brakes are applied, AND

2. The reverser lever is removed from all control stands on all units of the engine. If the reverser lever is not removable, it must be locked in the neutral position, AND

3. The controls, switches, and circuit breakers are positioned so that traction power cannot be developed.

MUE equipment must not be left unattended unless:

1. The brakes have been applied in emergency, AND

2. The reverser lever is removed from all control stands on all units, AND

3. A sufficient number of hand brakes have been applied to prevent movement, but not less than two when there are two or more cars.

9.4 Hand Brakes on Cars or Drafts of Cars Left Standing

A sufficient number of hand brakes must be applied on cars to prevent them from rolling when left standing on any track, but not less than two when there are two or more cars. If necessary, car wheels must be blocked.

9.5 Use of Hand Brakes

Hand brakes must be released before cars are moved. When necessary to secure cars by hand brakes, it must first be determined that these brakes are working properly.

9.6 Movement of Rotary or Swinging Type Machinery

Some pivoted machinery is equipped with swinging booms, which may swing or extend outward. When such machinery is moved from one service point to another in work trains, the boom anchors and cables must be in place and locking devices fastened.

Whenever such equipment is moved during the progress of work on or about Main Tracks, two precautions must be taken:

1. Stops must be used to prevent fouling adjacent tracks, AND

2. The crane operator must be in the cab.

The boom must be securely anchored with the center pin in place and the crane operator must be in the cab while train movements are being made on any adjacent track.

9.7 Doors, Drop Bottoms, and Top Hatches and Covers

Doors and drop bottoms of freight cars and trailers must be closed and fastened. Top hatches and covers of cars must be secured in place.

9.8 Diesels: Confined Locations and Tunnels

If diesel-propelled trains are stopped while operating in tunnels or confined locations, all diesel engines must be shut down after standing five (5) minutes. The engine may not be started until a signal to proceed is given.

Diesel engines must not be allowed to run for extended periods of time in buildings or shops unless proper ventilation is provided.

9.9 Operating Train from Other Than Leading End

When the Engineer operates a train from other than the leading end of the movement, a Conductor must be stationed on the leading end of the movement to observe conditions ahead and take action to properly control the movement of the train. The Conductor stationed on the leading end must be prepared to operate the engine whistle or horn, if available, and must be prepared to operate the emergency brake valve should conditions require. The emergency brake must be tested and known to be operative on the leading end before the movement is started.

Exception: When switching, the Conductor may be on the ground preceding the movement and the testing of the emergency brake on the leading end is not required.

Continuous hand signal or radio communication must be maintained with the Engineer. If signals from the Conductor cannot be received by the Engineer, the movement must be stopped immediately.

Train movements controlled in this manner must not exceed ten (10) MPH within terminals and Interlocking Limits, and must not exceed fifteen (15) MPH outside of terminals and Interlocking Limits.

If train movement controlled in this manner is to be made over a vehicular or pedestrian crossing at grade not protected by automatic warning devices or by a designated employee, a member of the crew must provide protection against vehicular and pedestrian traffic. When an employee is required to provide on-ground protection at a grade crossing, he must give stop signals to pedestrian and vehicular traffic until the leading end of the train is through the crossing. Stop signals must be given with a red flag or fusees by day, and fusees or a white light at night.

MUE equipment must not be operated from other than the leading end of the leading car without supervisory approval obtained through the Dispatcher. When such a movement is authorized, the Engineer must be stationed at the closest functioning operating cab to the leading end.

9.10 Operating Through Water

Engines and cars must not be operated through water, except in emergency when authorized by the Dispatcher. In such a case, the movement must not exceed two (2) MPH, the water depth as measured from the top of the rail must not exceed two (2) inches, AND the roadbed must be visible through the water.

9.11 Stopping over Open Flames

Trains must not be stopped over open flames if it can be avoided. When so stopped and the train cannot be promptly moved, the fire must be extinguished.

9.12 Hazardous Material and Equipment of Excessive Weight or Dimensions

Such equipment must not be moved without specific authorization from the Dispatcher. The Dispatcher must not authorize movement of such equipment unless movement restrictions/instructions have been provided.

9.13 Use of Sand

Sand must not be used over power-operated switches, or at locations of rail lubricators. Excessive use of sand at any point is prohibited.

Sand and sanding can interfere with the shunting of the signal-system track circuits by light engines and short trains. When stopping, Engineers must only use sand in an emergency and must stop deploying sand when the speed is less than 5 MPH.

Sand must not be used to start a train unless necessary to prevent slipping. When starting a train that has three or less cars, sand must not be used until the train's speed exceeds 5 MPH.

The Engineer is solely responsible for not stopping a light engine or short train on sand within interlocking limits or other signal-system territory. When in doubt, move the train in accordance with the rules off of any rail that may be sanded.

9.14 Failure of Dead Man or Alertor Feature En Route

If the "Dead Man" or "Alertor" feature fails en route, an employee qualified to activate the emergency brake feature must immediately take position in the operating control compartment with the Engineer. This employee must be prepared to stop the train if the Engineer becomes incapacitated.

This rule does not apply to movements outside of Interlocking Limits on Other Than Main Track.

9.15 Starting of Train

Engineers assigned to scheduled trains must be in their operating cab at least two (2) minutes before their scheduled departure time from their initial station. When possible, the required brake tests must be performed at least five (5) minutes before the scheduled departure time.

A train must not start until the Conductor has given or authorized:

1. The proper hand signal, or

2. The proper communicating signal, or

3. Permission by voice communication.

In addition, passenger equipment must not be started until side-door locked indication is received.

Upon agreement between the Conductor and Engineer, passenger trains may depart intermediate stations (other than the train's initial station) solely based on side-door locked indication.

9.15A Departing End of Line Terminals

Prior to closing the side doors on a departing train at the St. George and Tottenville terminals, the Conductor must contact the Dispatcher and request permission to depart St. George or Tottenville as appropriate. The Dispatcher shall confirm with the Operator that a proper interlocking route has been aligned. The Dispatcher shall also confirm that any Form X's or Form Z's that should be delivered to the train or train crew have been delivered. The Dispatcher shall then give permission to the requesting Conductor to depart.

The Conductor shall then ascertain either visually or by communicating with the Engineer that the departing Controlled Signal governing the movement of their train displays a proceed aspect. The side doors of the train shall then be closed and the door key switch placed in the RUN position. The Conductor shall then give the Engineer two (2) short buzzes in accordance with Rule 4.10C and the train may then proceed. If the train begins to move before all the above requirements are met, immediate action must be taken to stop the train.

9.16 Delay of Trains

Employees must not unnecessarily delay trains. Employees must promptly advise the Dispatcher of any known condition that will delay a train or prevent it from operating at normal speed or maintaining scheduled times.

When a train is delayed, the Conductor or Engineer (or other member of crew when instructed by the Conductor) must determine the cause of the delay as soon as the safety of their train will permit. As soon as practical, the Dispatcher must be informed.

9.17 Unscheduled Stops

Trains must not make unscheduled stops to receive or discharge passengers or employees without authorization from the Dispatcher.

9.18 Lowest Speed Applies

When a train movement is subject to multiple speed restrictions due to multiple applicable rules, Special Instructions and/or Form X and Form Z instructions, the lowest speed shall apply.

For SIRTOA engines on which speed indicators (speedometers) have been installed, these safety devices must be known to be functioning upon initial movement, and observed to be functioning throughout the movement.

The Dispatcher must be notified promptly about any speed indicator that is not functioning properly. In the case of an inoperative or malfunctioning speed indicator, the Dispatcher may authorize the train to proceed from an intermediate point on a line to an end-of-line terminal or from any point to a location where the equipment can be repaired. No other movement of such a unit on the leading end at the Engineer's position or at the Conductor's position may be made unless authorized by the Superintendent of Transportation.

Engineers and Conductors are jointly responsible for compliance with all applicable speeds. Conductors are responsible for ensuring that Engineers operate their train at not exceeding the applicable speed.

Failure to operate a train in compliance with the applicable speed, or failure to correct the operation of a train that is not operated in accordance with the applicable speed, as determined by direct observation, extrapolation or radar detection, may result in removal from service and disciplinary action.

9.19 Responsibilities of Employees: Signals and Restrictions

Employees qualified on the Operating Rules and who are located in the operating cab must be on the lookout for signals affecting the movement of their train. They must communicate to each other in an audible and clear manner the name of each signal as it becomes clearly visible. After the name of a signal has been communicated, employees must continue to observe the signal until it is passed. Any change in the aspect of a Controlled Signal must be communicated in the required manner, and the aspect of a Controlled Signal shall be called again just before passing it.

When a train reaches a point that is one (1) mile from a temporary restriction, the Conductor and any employees qualified on the physical characteristics who are located in the operating cab must immediately communicate with the Engineer and confirm the requirements of the restriction.

If a train is not operated in accordance with the requirements of these Operating Rules, the Special Instructions, a signal indication, a temporary restriction or with any other applicable requirement, qualified employees located in the operating cab (and the Conductor if not in the operating cab for conditions that he is aware of) must caution the Engineer immediately. If necessary, they must take action to ensure the safety of the train, including stopping the movement when required.

The Engineer is responsible to see that each employee in the operating cab maintains a vigilant lookout for signals and other conditions that could affect the movement of the train. The Engineer is also responsible to see that qualified employees communicate with him as required by this rule.

9.20 Defective Equipment

When crew members must adjust or repair a defective engine or car in their train or when any equipment is not functioning as intended, the Dispatcher must be notified and given as much information as possible, including engine or car number, nature of the defect and any action taken.

Defects with equipment involving the Signal System, the Automatic Train Control System (ATC) or with the Cab Signal System must be reported to the Dispatcher.

Dispatchers shall record all information related to defects on the appropriate forms and notify the appropriate departments.

An engine or car with a defective hand brake must not be left standing alone unless arrangements are made to prevent movement.

9.21 Flat Spots

If a flat spot on a wheel of a car or engine develops en route, or if an existing flat spot gets noticeably worse, a report must be made to the Dispatcher.

9.22 Coupling or Switching Passenger Equipment

A full stop must be made just prior to coupling to passenger equipment. All couplings must be made at a speed that protects against damage.

Curtains, safety chains, inter-car safety barriers, electric jumpers, etc. must be disconnected before engines, trains or cars are separated.

9.23 Coupling, Shoving, or Switching Cars

When coupling, shoving, or switching cars, precautions must be taken to prevent damage or fouling other tracks. Employees must confirm that there is sufficient room on the track to hold the cars.

Before coupling to cars standing on a grade or near the ends of tracks, buildings, derails or highway crossings, sufficient hand brakes must be applied on standing cars to prevent them from rolling.

9.24 Cars Placed for Loading and Unloading

Cars placed for loading or unloading must not be coupled to any other equipment nor moved until:

1. All persons in or about them have been notified, and

2. All equipment and obstructions under or about the cars have been removed.

9.25 Running and Flying Switches

Running switches, often referred to as a drop of cars or a flying switch, are prohibited.

9.26 Authorized Speeds

Maximum Authorized Speeds and permanent speed restrictions for Main Tracks and for tracks within Interlocking Limits will be designated in the Timetable Special Instructions. All movements on Other Than Main Track must be made at Restricted Speed, and not exceeding the speeds shown in the Timetable Special Instructions.

Temporary speed restrictions may be placed into effect by Form X Line 1, Form Z Line 1, SB or SBS.

9.27 Hand-Operated Switches and Derails

9.27A Crew Members' Responsibilities for Switches and Derails

Crew members are responsible for the position of switches and derails that they use. A hand-operated switch or derail found to be defective or a switch lock found to be defective or missing must be safely secured and reported at once to the Dispatcher.

Conductors and Engineers are responsible to ensure that switches and derails are operated in compliance with the Operating Rules and Special Instructions, and shall supervise the operation of switches and derails by members of their crew.

After a Main Track switch is properly lined for an expected train, employees must locate themselves at least twenty (20) feet from the Main Track switch until after the expected train has cleared the switch and clearance point. This rule applies regardless of whether the switch is in the normal or reverse position.

9.27B Securing Switches and Derails in Normal Position

Hand-operated switches and derails must be locked in the normal position when not in use. Crew members who find switches or derails unlocked or not properly lined must lock them in the normal position and report this fact to the Dispatcher. Switches and derails must be restored promptly to their normal position and secured after having been used.

Hand-operated switches on or connecting to a Main Track (as in a crossover) are in normal position when lined and locked for movement on the Main Track or protecting the Main Track. The normal positions of other hand-operated switches are specified in the Timetable Special Instructions. Hand-operated derails are in the normal position when set to and locked in the derailing position.

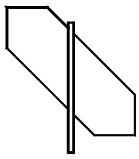
When clearing a track at a hand-operated switch, the switch and any associated derail or switch (as in a crossover) must not be restored to the normal position until the entire movement and all equipment are clear of the track and beyond the fouling point. Where there is an associated switch (as in a crossover) or an associated derail, no switch or derail may be restored until the entire movement and all equipment are beyond the associated switch or derail.

Exception: The Timetable Special Instructions may specify particular switches and derails that may be left unlocked, or that may be left in the position of last use.

9.27C Switch Targets: Banner Indications

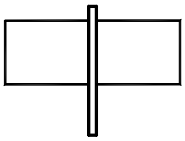
The following switch targets shall be used where conditions require:

Main Track



Color Displayed – Green

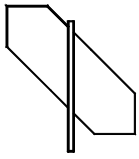
Indication – Switch Lined for Main Track



Color Displayed – Red

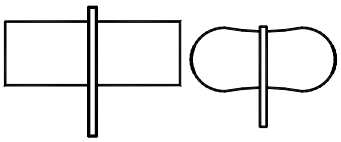
Indication – Switch Lined for Diverging Track

Other Than Main Track



Color Displayed – Green

Indication – Switch Lined for Straight Track



Color Displayed – Yellow

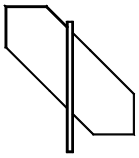
Indication – Switch Lined for Diverging Track

9.27D Derails: Location and Position

Employees must be familiar with the location of all derails. Engines or cars must not pass over derails that are in the derailing position. Derails that protect the fouling point of a Main Track must be kept in the derailing position, except when repositioned to permit immediate movements.

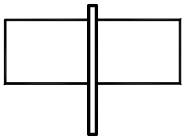
Derails that are used for other purposes (such as for blue signal protection, Roadway Worker protection, etc.) must be applied only when their use is required under the applicable rules. Derails equipped with locks must be locked in the appropriate position.

The following derail targets shall be used where conditions require:



Color Displayed – Yellow

Indication – Non-Derailing Position



Color Displayed – Purple

Indication – Derailing Position

9.27E Fouling Point of Main Track

The fouling point of a Main Track is indicated by the derail or switch (as in a crossover) protecting the Main Track. In the absence of such a derail or switch, the fouling point of a Main Track is indicated by:

1. A yellow stripe painted on the inside and outside of the head, web and base of both rails, or

2. Yellow joint bars, or

3. A sign displaying the letters “FP.”

9.27F Reporting Clear of Track

A train clearing a Main Track at a hand-operated switch must report the fact that the train has cleared the Main Track to the Dispatcher. The report must not be made until:

1. The train is behind/beyond the fouling point, and

2. All involved switches and derails have been locked in the normal position.

9.27G Position of Switch Points and Derails

Crew members operating hand-operated switches must examine the switch points and know that they properly fit the rail. Where a derail is in service, crew members must confirm that it is in the proper position before and after operation. A train must not foul or enter a track until all switches and derails involved with the movement are properly lined.

9.27H Switch Connected with Main Track

A switch on a Main Track including any associated switch (as in a crossover) or derail must not be left open for another train unless the switch is left in the charge of a member of the crew of that other train. While trains are approaching and passing, employees must locate themselves at least twenty (20) feet away from Main Track switches.

9.27I Speed When Diverting through Hand-Operated Switches

Trains must not exceed five (5) MPH when diverting through hand-operated switches, unless otherwise specified in the Timetable Special Instructions.

9.27J Designated Employee at Switch: Authority to Foul

Where a designated employee is in charge of hand-operated switches, a train must not foul such switches until receiving verbal permission or hand signal to proceed from that employee.

9.28 Dual Control Switches and Derails

Dual-control switches and derails must not be changed to hand-operation without permission of the Dispatcher. After obtaining permission, the procedure to hand-operate a switch or derail is as follows:

1. Unlock power-arm and switch-arm locks;

2. Move selector lever from “Motor” or “Power” position to “Hand” position. The selector lever must be left in the “Hand” position until all hand-operations of the switch or derail have been completed;

3. Operate “Hand-Throw” lever to verify that it has engaged and will move the switch points or derail. A dual-control switch or derail must not be considered as being in “hand operation” until this has been done. This procedure must be followed even if the switch is initially in the desired position. The switch or derail may then be operated in the same manner as any hand-operated switch or derail;

4. When a dual-control switch or derail has been hand-operated, the same employee who operated the switch or derail must restore it to “power operation” and lock it, unless other arrangements are made with the Dispatcher;

5. After train movements over the switch or derail have been completed, restore switch or derail by hand to the original position as directed by the Dispatcher, return selector lever to the position marked “Motor” or “Power”, lock both the power-arm and switch-arm locks, and notify the Engineer and Dispatcher that the switch or derail is restored to “power operation”; and

6. After hand operating a dual-control switch or derail, trains must not proceed except upon proper Controlled Signal indication or as provided by Form X.

9.29 Return Movement to a Portion of a Train Left on Main Track

A return movement may be made when a portion of the same train is left on a Main Track and it is known with certainty that there is no other train or obstruction on the intervening route. The return movement must be made at Restricted Speed. A crew member must be stationed on the leading end of the return movement to protect against the detached portion of the train.

A return movement from an interlocking may be made on signal indication or by Form X authorization to “Pass a Stop Aspect.”

9.30 Mirrors at Curved Stations

In the event that a mirror does not perform its intended function, the following procedures must be used. Upon opening the side doors, the Conductor shall verbally advise the Engineer as to the situation and then give the Engineer the Rule 4.10B communicating signal to remain stopped. The Conductor shall then place the Master Door Key Switch in the TERMINAL position, remove the Master Key, exit the door-operation cab, go onto the station platform and stay there until the last passenger has boarded the train. Upon observing that the last passenger has boarded the train, the Conductor shall re-enter the cab, announce “watch the closing doors” on the PA, observe the platform and close the doors. Upon receiving side-door locked indication, the Conductor shall then give the Engineer the Rule 4.10C communicating signal to proceed. The

Engineer shall not proceed until this communicating signal to proceed is received AND until side-door indication is received.

The Conductor shall promptly report to the Dispatcher via radio the use of this procedure, along with the details as to why the use of this procedure was necessary. As the improper functioning of a mirror is considered an unsafe condition, the Conductor must also submit an Incident Report prior to the end of his tour of duty.

The procedures in this rule shall also apply at curved stations where the Conductor from his door-operating position cannot view the entire side of the train, and where a mirror has not been provided for the Conductor's position at that station.

9.31 Doors Open En Route

A train must not be operated with any side doors open.

A "DOE" incident is defined as the improper opening of one or more side-door panels of a train while it is in motion. The Dispatcher must be notified immediately. The train involved must be removed from service immediately and passengers discharged at the next passenger station. The train must then be routed to the Clifton MUE Shop for inspection and repair. No action shall be taken prior to arriving at the Clifton MUE Shop by any personnel to inspect the train or to troubleshoot the problem.

The Dispatcher shall notify the Transportation Manager on duty who will arrange for System Safety notification. All operating personnel involved in the incident must file Incident Reports before completing their tour of duty.

9.32 Use of Train's Public Address (PA) System

The Public Address (PA) System of a train in revenue service is NOT to be used for movement or equipment related messages. Messages relating to the operation of the train are to be exchanged via the train's intercom in the privacy of an operating cab. If the message is intended for a train crew member not assigned to door operation or who is not in an operating cab, a request may be made over the PA for that employee to report to the appropriate cab for communication using the train's intercom.

EXCEPTION: Appropriate PA messages relating to the loss of side-door indication and zone light indications are permitted when necessary to ensure safety.

9.33 Required Safety Stops

All eastbound trains at Tottenville must stop at all STOP markers that are located to the right of the track on which they are operating. After coming to a complete stop, the train shall proceed to the appropriate platform car stop marker, or to the next storage track stop marker, at a speed not exceeding five (5) MPH.

All westbound trains at St. George must make a preliminary stop east of the wooden crosswalks at the east end of the station platforms. After coming to a complete stop, the train shall proceed to the appropriate stop location at a speed not exceeding five (5) MPH.

During inclement weather, all eastbound trains arriving at Tottenville and all westbound trains arriving at St. George must make a second safety stop at the mid point of the station platform.

9.34 Stop Location at St. George

All trains arriving at St. George Terminal on Station Tracks 1 through 7 must make a final stop at least one (1) foot before the stainless steel railing at the bumper end of the platform.

9.35 Crews Boarding and Disembarking Trains at St. George

While in the St. George terminal, all train and engine service employees working in passenger service must utilize the station-platform doors or a station-platform crew door when entering or exiting their train, unless otherwise directed by proper authority.

9.36 Occupancy of Operating Cabs

The number of occupants including the Engineer within the operating cab of a diesel locomotive or MUE train must not exceed three (3) persons except by permission of proper authority.

9.37 Work Trains

9.37A Caboose Cars

All caboose cars when not in use must be stored on Clifton MUE Shop Yard Track 1. Caboose cars shall not be left unattended at any other location without permission of the Superintendent of Transportation or his designee.

Conductors shall ensure that when the caboose is not at the rear of a train, an employee is stationed at a point where the cars trailing the caboose can be observed.

9.37B Use of Idler Cars

To ensure safety, a “flat car” shall be used as an idler car (coupled) between an engine and a car to be loaded or unloaded by a crane. At no time shall the car being used as the “idler flat” be loaded with any material without permission of the Superintendents of Transportation and MOW.

9.37C Work Train Car Location Reports

Conductors assigned to work trains shall accurately prepare the Work Train Car Location Report prior to the end of their tour of duty, and must submit this report to the Dispatcher. Conductors must forward their hand written reports to the Superintendent of Transportation.

Note: Car Location Reports are available from the Dispatcher. The Dispatcher must notify the Transportation Manager on duty if a required report is not submitted.

9.38 Movements Into and Within Clifton MUE Shop

Before a movement may be made into the Clifton MUE Shop, a complete stop must be made five (5) feet from the shop door. After the full stop, the horn must then be sounded in accordance with Rule 4.8B. If the engine is equipped with an engine bell, it must be sounded until the movement is stopped.

Before a movement may be made within or out of the Clifton MUE Shop, it must first be determined with certainty that there are no reasons why the movement cannot be safely made. The horn must then be sounded in accordance with Rule 4.8B. If the engine is equipped with an engine bell, it must be sounded until the movement is stopped or clear of the shop building, unless continued ringing of the engine bell is required by Rule 4.9.

Movements entering or within a shop building must proceed at Restricted Speed but not exceeding three (3) MPH.

For MUE cars, Third Rail contact must be maintained at all times, using “reacher” car(s) if necessary.

9.39 Wheel Cutting Operations

When train crews are assigned to wheel cutting operations, no cars may be moved over switches set for a diverging route while the grinding shoes are applied under pressure. Trains may divert from one track to another in preparation for, completion of, or servicing of the wheel cutting process, but only under the direction of proper authority.

9.40 Brakes Cutout En Route

If a train crew is authorized by the Dispatcher to cutout any part of a train's braking system while en route, it may not be possible for the train to safely stop or slow down within the safe braking distances provided by the Signal System. To ensure safety, such train must be operated subject to Rule 14.8 Movement of Failed Train, except that the Cab Signal and ATC seals shall NOT be broken and the Cab Signal and ATC cut-in/cut-out switches shall NOT be moved to the cut-out positions, unless this is necessary because of a failure of those systems AND done in accordance with Rule 14.8.

If the CSS system is operative, the train need not operate at Restricted Speed to the first/next Controlled Signal.

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10.0 PROTECTION OF TRAINS

10.1 Flag Protection

10.1A General Requirements

When flag protection is required, employees must go out in the proper direction(s) the minimum distance indicated in the following table based on the Class A Train maximum permitted operating speed on the approach track(s). Permanent speed restrictions may be taken into account.

Class A Train Maximum Approach Speed (in MPH)	Minimum Flagging Distance
46 to 60 MPH	3,500 feet
36 to 45 MPH	2,000 feet
21 to 35 MPH	1,300 feet
20 MPH or less	600 feet

Crew members providing flag protection must not permit other duties to interfere with the protection of their train or the condition requiring protection. The Conductor and Engineer are jointly responsible for the protection of their train.

10.1B Flag Protection against Trains

The following steps must be followed to provide flag protection against approaching trains as required by Rule 10.2, “Protecting Work Locations: Qualified Employee’s Duties”; Rule 10.3, “Protection in Unforeseen Conditions”; or Rule 10.6, “Emergency Stops: Immediate Protection if Required.”

Employees must be equipped with the required flagging equipment and must:

1. Go out at least the distance prescribed by the Rule 10.1A table, and

2. Place two torpedoes on the rail approximately eighty (80) feet apart on the Engineer’s side of the track, and

3. Display a lighted fusee if they see or hear a train or track car approaching, and

4. Give a Stop Signal to approaching trains and track cars that may be affected.

After placing torpedoes, the employee providing protection must go out an additional one-hundred (100) feet to stay clear of the torpedoes. The employee providing protection must remain at that location until recalled or relieved.

If the employee sees or hears a train or track car approaching before he has reached the prescribed distance, he must immediately display a lighted fusee and continue toward the approaching train or track car while giving a Stop Signal.

10.1C Crew Action When Flagged

Trains and track cars stopped after having been flagged must not move in either direction until permission of the Flagman is received. (Reverse movements and track-car movements must also comply with all other applicable rules.)

If the person flagging the train or track car absents himself, the Conductor, Engineer or Track Car Driver must contact the Dispatcher. When authorized by the Dispatcher, the train or track car may proceed at Restricted Speed until the head end of the train or track car has reached a point that is one (1) mile beyond the point at which the train or track car was flagged. The train or track car may then resume operating at normal speed.

10.2 Protecting Work Locations: Qualified Employee's Duties

Qualified employees assigned to protect work locations of SIRTOA employees and/or private contractors whose construction, maintenance or other activities may affect the safe movement of trains must take the five (5) actions listed below.

1. **Secure flagging equipment –** Employees must secure the proper flagging equipment according to Rule 4.3, "Day and Night Signals."

2. **Ensure that tracks are not fouled without permission –** Upon reporting for work each day, the employee must determine who is in charge of the workers. The employee must also ensure that all workers have been instructed not to foul any track at any time without his permission.

3. **Get permission to foul track –** When workers request permission to foul a Main Track, a track within Interlocking Limits, or another track under the jurisdiction of the Dispatcher, the employee assigned to protect the work location must communicate with the Dispatcher to secure the necessary permission per the applicable rules.

4. **Report failure to comply by workers –** If workers fail to comply with instructions of the employee, he must make an immediate report to the Dispatcher.

5. **Take action if safe passage is endangered –** If an event occurs that would interfere with the safe passage of trains, the employee must take immediate action to stop trains by radio communication to trains and to the Dispatcher. If protection by the Dispatcher cannot be immediately ensured, or if communications fail, flag protection must be immediately provided as prescribed by Rule 10.1B, "Flag Protection Against Trains."

10.3 Protection When Fouling or Working on a Track and Protection in Unforeseen Conditions

Trains must be fully protected against any known condition that may interfere with their safe passage.

If work on or adjacent to a track may create a condition interfering with the safe passage of trains, that work must not be attempted without permission of the Employee-in-Charge of that track.

For Main Tracks, tracks within Interlocking Limits and other tracks under the jurisdiction of the Dispatcher, the Dispatcher must assure that protection against trains has been provided in both directions as follows:

1. If the work involves on-track equipment or will disturb the track or third-rail structure so that it may not be safe for Normal Speed, Form X or Form Z Line 2 or Form X or Form Z Line 3 must be issued.

2. If the work will not disturb the track or third-rail structure and will not involve on-track equipment, the Dispatcher may verbally authorize Foul Time in accordance with Rule 10.11.

Form X or Form Z Line 2, Form X or Form Z Line 3, and Foul Time may only be issued to employees who are qualified on the Operating Rules and the physical characteristics.

If an event occurs or conditions are found that may interfere with the safe passage of trains and no protection has been provided, employees must immediately attempt to stop approaching trains by radio communication to trains and to the Dispatcher. These conditions include but are not limited to damage or failures to the tracks, bridges, structures, Third Rail or Signal System facilities, or when any other unsafe or hazardous conditions occur such as track obstructions, accidents, fires, etc. If protection by the Dispatcher cannot be immediately ensured, or if communications fail, flag protection must be immediately provided as prescribed by Rule 10.1B "Flag Protection Against Trains." Flag protection must be maintained until the unsafe condition has been corrected, or until the Dispatcher assures employees that other protection has been provided.

When out-of-service limits and/or protection by stop signs are published by Superintendent's Bulletin or Superintendent's Bulletin Supplement, work or activities dependent on such protection must not begin until the Employee-in-Charge has received Form X or Form Z Line 2 or Line 3 authority, as appropriate.

10.4 Removing a Track from Service

Whenever Form X or Form Z Line 2 is issued to remove a track from service, the following procedures shall apply:

10.4A Action Required Prior to Issuance

Before Form X or Form Z Line 2 authority is issued to work trains already within the out-of-service track or to the employee requesting use of the track, the Dispatcher must determine that:

1. The affected track is clear of all train and track-car movements other than work trains intended to be there, and

2. Controlled Signals leading to and within the affected track are in Stop position, and

3. Blocking Devices are applied to the controls of Controlled Signals, switches and interlocking exits within and leading to the affected track.

Controlled Signals must not be cleared for movements leading to or within the out-of-service track**.**

10.4B Addressees

Form X or Form Z Line 2 authority must be issued in the following sequence to:

1. The Operator controlling entrance to the track,

2. All trains and track cars and/or train crews and Track Car Drivers that may or will be approaching and/or operating in the area of the out-of-service track,

3. Work trains already within the out-of-service track, and

4. The employee requesting use of the track.

EXCEPTION: When the out-of-service limits are published by Superintendent's Bulletin or Superintendent's Bulletin Supplement, the delivery of Form X or Form Z Line 2 authority to trains and track cars that may or will be approaching and/or operating in the area of the out-of-service track is not required.

10.4C Establishing Out-of-Service Limits

Each end of the out-of-service limits must be defined by one of the following physical features:

1. A mile post or half-mile post that is known to physically exist in the field,

2. A station or other major physical-characteristic location, or

3. A Track Barricade or Flagman at a designated location.

The effective time at which the track is taken out-of-service must be shown. If the track is taken out-of-service immediately, the box for the effective time must be marked with an "X".

10.4D Operation Within Out-of-Service Limits

All movements of trains and equipment must be made at Restricted Speed. The employee named in Form X or Form Z Line 2 authority is in charge of the out-of-service limits and all activities therein. When it is necessary for a train or equipment to pass a Stop Signal that is within the out-of-service limits, verbal permission of BOTH the Employee-in-Charge AND the Dispatcher is required.

10.4E Admitting Additional Equipment from Locations Controlled by Dispatcher or Operator

The Dispatcher may admit additional track cars or trains to the out-of-service limits after:

1. He has obtained permission of the employee named in Form X or Form Z Line 2 authority, and

2. He has delivered a copy of the Form X or Form Z Line 2 authority to the person in charge of the additional equipment.

If movement to the out-of-service limits shall require passing a Controlled Signal, the Dispatcher after complying with the previous requirements of this rule may then authorize the movement by Form X in accordance with Rule 11.2, "Passing a Stop Aspect."

EXCEPTION: When the out-of-service limits are published by Superintendent's Bulletin or Superintendent's Bulletin Supplement, the delivery of Form X or Form Z Line 2 authority to additional equipment is not required. Verbal reminder of the applicable SB or SBS shall be sufficient.

10.4F Admitting Additional Equipment from Locations Not Controlled by Dispatcher or Operator

The employee named in Form X or Form Z Line 2 may after notifying the Dispatcher admit additional track cars or trains to the out-of-service limits by showing or reading his copy of the Form X or Form Z Line 2 authority to the Employee-in-Charge of the additional track car or train.

10.4G Returning the Track to Service

When the track is to be returned to service, the Employee-in-Charge of the out-of-service track must take three actions:

1. He must notify the Dispatcher of any restrictions necessary for the safe passage of trains,

2. He must ascertain that all trains, track cars and equipment are clear of the track, that no employees are depending on the "track-out-of-service" protection, and that all hand-operated switches and derails are secured in the normal position, and

3. He must notify the Dispatcher that all trains, track cars and equipment are clear of the track, that no employees are depending on the "track-out-of-service" protection, that all hand-operated switches and derails are secured in the normal position, and that the track is returned to revenue service subject to the restrictions conveyed pursuant to this rule.

10.5 Movement Within In-Service Portion of Track

When a portion of track between interlockings is removed from service, movements within the in-service portion of track must be made as follows:

10.5A Movements in the Direction of the Out-of-Service Track

When the out-of-service limits are published by Superintendent's Bulletin or Superintendent's Bulletin Supplement, the delivery of Form X or Form Z Line 2 authority to movements toward but not into the out-of-service track is not required. Verbal reminder of the applicable SB or SBS shall be sufficient.

In all other cases, movements in the direction of the out-of-service track must be authorized by Form X or Form Z Line 2 authority specifying the limits of the out-of-service track.

If movement toward the out-of-service limits shall require passing a Stop aspect, the Dispatcher may then authorize the movement by Form X in accordance with Rule 11.2, "Passing a Stop Aspect."

10.5B Movements Entering In-Service Track

Movements operating within the out-of-service portion of the track must not enter the in-service portion of the track without permission of the Dispatcher.

10.6 Emergency Stops: Immediate Protection if Required

10.6A Radio Transmission

An emergency brake application may occur because of a derailment. Also, an emergency brake application may result in a derailment. Because of these serious possibilities, when a train is moving and an emergency brake application occurs, the train crew must immediately determine whether any part of the train is fouling another track.

If another track is fouled, the Engineer or Conductor must immediately provide protection for train movements on adjacent tracks by initiating an emergency radio transmission, in the manner of the following example: *"Emergency, Emergency, Emergency. (Train identity) is (eastbound or westbound) on track (number) and fouling adjacent tracks at (location)."* Following this emergency radio transmission, the train crew must ascertain that the Dispatcher has received the message. The Dispatcher shall verify that all affected trains have also heard the emergency radio transmission and are complying with this rule.

10.6B Train Inspection and Flag Protection

The Dispatcher must immediately set the Controlled Signals governing entrance to all affected track sections to "Stop" and apply Blocking Devices in both directions.

Crew members of a train that is fouling an adjacent Main Track or a track within Interlocking Limits must immediately provide flag protection in both directions on such track(s) unless the Dispatcher notifies them that he is providing full protection. This flag protection must follow the guidelines of Rule 10.1B, "Flag Protection against Trains," and shall be maintained until it is known that the adjacent Main Tracks and/or adjacent tracks within Interlocking Limits are not obstructed, or until advised by the Dispatcher that he is providing full protection.

10.6C Other Train Movements

All trains hearing the emergency radio transmission or receiving information that a train is fouling another track shall be governed as follows:

1. A train that is operating in the same direction as the train reported to be fouling another track must operate at Restricted Speed from one (1) mile before the reported location of that train until reaching the head end of that train.

2. A train that is operating in the opposite direction of the train reported to be fouling another track must operate at Restricted Speed from the head end of the train in emergency to a point one (1) mile beyond the rear end of that train.

3. All unusual conditions observed must be reported to the Dispatcher unless it is known that the Dispatcher is aware of the condition(s).

10.7 Protection by Stop Signs When an In-Service Track is Obstructed for Maintenance

Whenever Form X or Form Z Line 3 is issued in accordance with Item 1 of Rule 10.3, "Protection When Fouling or Working on a Track," the following procedures shall apply.

The term "Working Limits" refers to the area designated by Form X or Form Z Line 3 or by Superintendent's Bulletin (or Supplement), which must be identified by a track number. In addition, each end of the Working Limits must be identified by a station, or by a mile post or a half-mile post that is known to physically exist in the field, or by mileages based thereon.

The effective time after which the track may be obstructed must be shown. If the track may be obstructed immediately, the box for the effective time must be marked with an "X".

10.7A Addressees

Form X or Form Z Line 3 must be issued in the following sequence to:

1. All trains and track cars and/or train crews and Track Car Drivers that may or will be approaching the obstructed track.

2. Work trains already within the track to be obstructed, and

3. The employee requesting permission to obstruct the track.

EXCEPTION: When the Working Limits are published by Superintendent's Bulletin (or Supplement), issuance of Form X or Form Z Line 3 to approaching trains and track cars is not required.

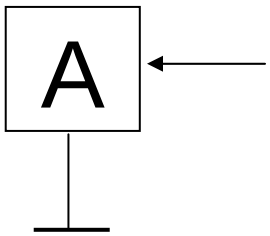
10.7B Required Use of Signs

The approach to the Working Limits must be indicated by an Approach Stop Sign. The Approach Stop Sign indication shall not apply when permission is received to proceed past the Stop Sign.

The Working Limits must be indicated by a Stop Sign and a Working Limits Resume Speed Sign. The Stop Sign must be located at least three-hundred (300) feet prior to the first point at which the track is obstructed. A Working Limits Speed Limit Sign may be substituted for the Stop Sign when the track is not obstructed.

10.7B.1 Approach Stop Sign

The Approach Stop Sign is a square yellow reflective sign with a black letter "A".



Black Letter "A"
on Yellow Background

Indication – Proceed prepared to stop at the Stop Sign. Trains and track cars exceeding Limited Speed must immediately begin reduction to Limited Speed.

This signal shall be placed far enough in advance of the Stop Sign to permit compliance therewith. The minimum distance shall be in accordance with the following table based on the Class A Train maximum permitted operating speed on the approach track(s). Permanent speed restrictions may be taken into account.

Class A Train Maximum Approach Speed (in MPH)	**Minimum Distance Between Signs**
46 to 60 MPH	3,500 feet
36 to 45 MPH	2,000 feet
21 to 35 MPH	1,300 feet
20 MPH or less	600 feet

10.7B.2 Diverging Approach Stop Sign

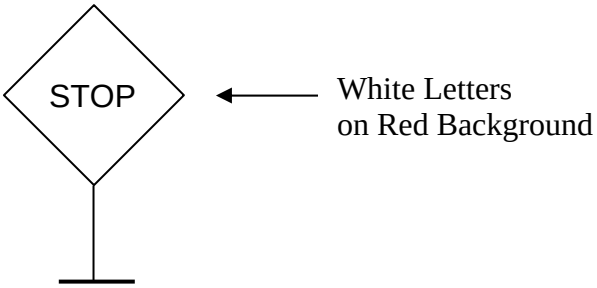
When the track configuration makes it possible to approach a Stop Sign on another track (without passing an Approach Stop Sign) by diverging to the affected track through an interlocked turnout or crossover, a Diverging Approach Stop Sign shall be provided on the other track. The Diverging Approach Stop Sign is a square white reflective sign with a black letter "A".

Indication – Proceed prepared to stop at the Stop Sign unless and until it is determined with certainty that the train or track car is not routed to the affected track. Trains and track cars exceeding Limited Speed must immediately begin reduction to Limited Speed unless and until it is determined with certainty that the train or track car is not routed to the affected track.

This signal shall be placed far enough in advance of the Stop Sign to permit compliance therewith. The minimum distance shall be in accordance with the table in Rule 10.7B.1. Permanent speed restrictions may be taken into account.

10.7B.3 Stop Sign

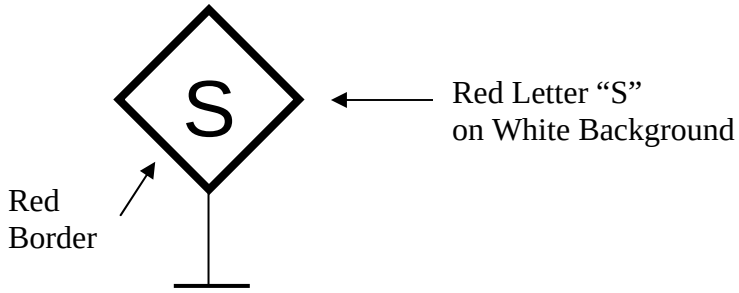
The Stop Sign is a square but "rotated" red reflective sign with white letters reading "STOP".



Indication – Stop, unless permission is received as prescribed by Rule 10.7D.

10.7B.4 Working Limits Speed Limit Sign

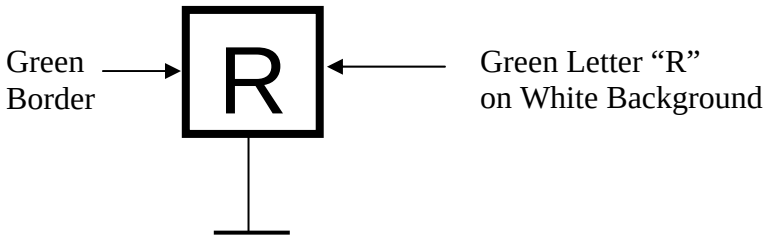
The Working Limits Speed Limit Sign is a square but "rotated" white reflective sign having a red border with a red letter "S".



Indication – Proceed at not exceeding Restricted Speed until passing a Working Limits Resume Speed Sign, unless otherwise instructed by the Employee-in-Charge.

10.7B.5 Working Limits Resume Speed Sign

The Working Limits Resume Speed Sign is a square white reflective sign having a green border with a green letter "R". The Working Limits Resume Speed Sign must be located at least 100 feet beyond the last point at which the track is obstructed.



Indication – Resume speed after the entire train or track car has passed the Working Limits Resume Speed Sign.

10.7B.6 Intervening Passenger Station(s)

When there is a passenger station between the Approach Stop Sign or the Diverging Approach Stop Sign and the Stop Sign, an additional Approach Stop Sign or Diverging Approach Stop Sign shall be provided approximately one-hundred (100) feet after the longest train's berthing position at that station.

10.7B.7 Placement of Signs

When signs are required by Rule 10.7 and subsections thereof, they must be placed for trains operating in both directions, and so that they shall be to the right of the associated track when viewed by an approaching train. For a given track and direction, the Working Limits Resume Speed Sign shall be placed before the Approach Stop Sign (and any required Diverging Approach Stop Sign) is placed, and the Approach Stop Sign (and any required Diverging Approach Stop Sign) shall be placed before the Stop Sign or Working Limits Speed Limit Sign is placed. When no longer required, these signs shall be removed in the reverse sequence.

10.7C Action Required Prior to Issuance

The Dispatcher must not issue Form X or Form Z Line 3 authority to the Employee-in-Charge until he has been notified by the Employee-in-Charge that all of the required signs have been properly placed.

10.7D Movements within Working Limits

A train must not enter the Working Limits until permission has been received from the Employee-in-Charge, unless a Working Limits Speed Limit Sign is displayed instead of the Stop Sign. The Employee-in-Charge must not authorize a train to enter the Working Limits or display a Working Limits Speed Limit Sign until he has been assured that the track through the Working Limits is not obstructed, and that all Roadway Workers have been notified. Trains must not exceed Restricted Speed through the Working Limits, unless directed by the Employee-in-Charge to operate at a higher or lower speed. The maximum speed that may be authorized through the working limits is Limited Speed.

The Employee-in-Charge shall give the instructions to trains and track cars similar to the following example:

"(Identification of Employee-in-Charge per the SB, SBS, Form X or Form Z) (such as Deputy Superintendent Benson or Foreman McEvoy) to (eastbound or westbound) (train identity) on track (number) at (location). You may pass the Stop Sign at (location) and operate through the Working Limits at not exceeding 20 MPH."

EXCEPTION: Work trains and track cars that will be performing maintenance within the Working Limits may be admitted by the Employee-in-Charge while the Working Limits are still obstructed. All work trains and track cars performing maintenance functions within the Working Limits must operate at Restricted Speed (unless directed by the Employee-in-Charge to operate at a lower speed) and must not leave the Working Limits without authority from the Dispatcher.

10.7E Interlocking Switches within Working Limits

Dispatchers or Operators controlling interlocking switches within the Working Limits must line such switches for movements within the Working Limits and must apply Blocking Devices to the controls of those switches. These Blocking Devices must not be removed without permission of the Employee-in-Charge of the Working Limits. Trains or track cars may not be routed to the affected track through these switches without permission of the Employee-in-Charge, nor may they be routed before any and all necessary instructions have been given to the train or track car.

This rule does not relieve employees operating within the Working Limits from complying with the indications of all Controlled Signals.

10.7F Canceling Protection by Stop Signs

The Approach Stop Signs, Diverging Approach Stop Signs, Stop Signs (or Working Limits Speed Limit Signs), and Working Limits Resume Speed Signs must not be removed nor the SB, SBS, Form X or Form Z notification canceled until the Employee-in-Charge of the Stop Signs takes three actions:

1. He must notify the Dispatcher of any restrictions necessary for the safe passage of trains,

2. He must ascertain that all trains, track cars and equipment are clear of the track, that no employees are depending on the protection, that all hand-operated switches and derails are secured in the normal position, and

3. He must notify the Dispatcher that all trains, track cars and equipment are clear of the track, that no employees are depending on the protection, that all hand-operated switches and derails are secured in the normal position, and that the track is returned to revenue service subject to the restrictions conveyed pursuant to this rule.

10.8 Assisting an Attended Disabled Train

10.8A Opposing Movements in Rule 11.5 Territory

To assist a disabled train, the Dispatcher may permit an opposing movement in Rule 11.5 territory. Before giving this authorization, the Dispatcher must issue Form X Line 5 “remain where standing until head-end assistance arrives” instructions to the disabled train. A crew member of the disabled train must provide flag protection against the opposing movement as prescribed in Rule 10.8B. The Dispatcher may then issue Form X Line 6 “proceed to location of disabled train” instructions to the assisting train.

10.8B Flag Protection Against Assisting Train

To provide flag protection against an assisting train as required by Rule 10.8A, a qualified employee equipped with flagging equipment must proceed in the proper direction six-hundred (600) feet, and display a lighted fusee when the assisting train is seen or heard approaching. The employee must remain at that location until the assisting train arrives, or until the employee is recalled.

10.8C Assisting Train in Close Proximity or Operated by Engineer of Disabled Train

The provisions of Rules 10.8A and 10.8B shall not apply when:

1. The disabled train is stopped within one-quarter (1/4) mile and within sight of the interlocking where the assisting train will begin its opposing movement, and if communication between the crews is maintained, or

2. The assisting train is operated by the Engineer of the disabled train and it is known with certainty that the track is unoccupied to the location of the disabled train.

10.8D Maximum Speed of Assisting Train

The assisting train shall operate at Restricted Speed to the location of the disabled train. When necessary, the assisting train shall be given Form X permission to pass a Stop aspect at the entrance to the track on which the disabled train is located.

10.9 Vehicle and Pedestrian Grade Crossings

Vehicle and Pedestrian grade crossings must not be blocked for prolonged periods unless necessary for safety reasons.

10.10 Train or Car(s) Left Standing Without Crew on Main Track Outside of Terminal Areas

10.10A Authorization and Protection

Trains or cars must not be left standing on Main Tracks or within Interlocking Limits without an assigned crew unless specifically authorized by the Dispatcher. When authorization is received, the departing crew must ensure that the equipment to be left unattended is properly secured. Doors must be closed and locked, and hand brakes must be applied in accordance with applicable rules.

The departing crew must inform the Dispatcher of any Form X's and/or Form Z's still in effect, and shall be governed by the instructions of the Dispatcher regarding the Form X's and/or Form Z's.

The Dispatcher must advise any Operator controlling the track of the location where such equipment has been left unattended. This information must be recorded on the Dispatcher's Record of Train Movements and, where applicable, on the Operator's Station Record of Train Movements.

For the interlockings governing entrance to the affected track, the Operator controlling the track must ensure that Controlled Signals governing entrance to the affected track are in Stop position and apply appropriate Blocking Devices to prevent unintended movements to the affected track.

10.10B Opposing Movement in Rule 11.5 Territory

The Dispatcher may permit an opposing movement in Rule 11.5 territory to couple to unattended equipment left standing without a crew. The Dispatcher may issue Form X Line 6 to the opposing train to proceed at Restricted Speed to the location where the unattended equipment is left standing without flag protection.

When necessary, the assisting train shall be given Form X permission to pass a Stop aspect at the entrance to the track on which the unattended train is standing.

10.10C Re-assignment of Crew

Crew members, upon taking charge of equipment that has been left unattended, must immediately communicate with the Dispatcher and are governed by his instructions.

The Dispatcher must ensure that crew members have in their possession all applicable Form X's and Form Z's affecting the movement of the equipment.

10.11 Foul Time

Foul Time may be issued by the Dispatcher, but only if the work will not disturb the track or third-rail structure, and will not involve on-track equipment occupying the track to be fouled.

10.11A Action Required Prior to Issuance

Before issuing Foul Time, the Dispatcher must determine that no trains or track cars have been authorized to occupy the track segment to be fouled. In signaled territory, the Dispatcher must ensure that Stop aspects have been displayed and Blocking Devices applied to controls of Controlled Signals, switches and interlocking exits leading to the affected track.

10.11B Permission to Foul

Verbal permission to foul the track must be given by radio or telephone and include the following information:

1. Track designation

2. Track limits (between/at)

3. Time limits

4. Identification of employee

The receiving employee must repeat this permission and the Dispatcher must then confirm it before the Foul Time becomes effective.

10.11C Reporting Clear

Once Foul Time protection has been provided, it must be maintained until the employee who was granted the Foul Time has reported clear of the track.

10.12 Protection on Other Than Main Track

Roadway Workers may establish working limits on Other Than Main Track by making the track inaccessible at each possible point of entry through one of the following means:

1. A switch or derail aligned to prevent access to the working limits and secured with an effective securing device, and properly tagged. The effective securing device and tag may be removed only by direction of the Employee-in-Charge of the working limits. An effective securing device must be vandal and tamper resistant, and designed to be applied, secured, uniquely tagged and removed only by the class, group or craft of employees for whom the protection is provided.

2. A remotely controlled switch aligned to prevent access to the working limits and secured with a Blocking Device by the employee who controls the switch. Blocking Device protection must not be considered in effect until it has been confirmed by the employee controlling the switch. Protection must be maintained until the employee who requested the protection has reported clear.

3. A disconnected rail.

4. A Flagman assigned to hold trains and equipment clear of the working limits.

5. A Track Barricade.

Movements within working limits may be made only with permission of the Employee-in-Charge.

10.13 Ice Conditions

All employees must immediately report to the Dispatcher any observed ice condition that may interfere with the safe movement of trains. Particular attention must be given to ice buildup along the running rails and Third Rail, on overhead bridges, retaining walls and in tunnels, and where run off and water main leaks may create unsafe conditions.

Also, Engineers must proceed with caution over vehicle crossings and walkways at grade, and at track car access points. Ice buildup between the running rail and road surface may cause a derailment.

10.14 Other Potentially Hazardous Conditions

When conditions such as fires that are not affecting safe train operations or SIRTOA property are observed in close proximity to the right-of-way, and when it appears possible that the condition could expand and possibly affect safe train operations or SIRTOA property as time goes on, the Dispatcher must be immediately notified.

10.15 Storage of Material Along Right-of-Way

All materials stored adjacent to Main Tracks or to tracks within Interlocking Limits must be properly secured not less than seven (7) feet from the closest rail of any such track.

10.16 Work Affecting Train Operations

When work activities will require removing a track from service, temporary speed restrictions, protection by Stop Signs or Working Limits Speed Limit Signs, Foul Time, or de-energizing the Third Rail, or when the utility of a track, a switch, an interlocking, a station platform, or the Signal System will be impacted, the Dispatcher must be given as much advance notification as is practical.

10.17 Electrified Third Rail

If the work to be performed requires that the Third Rail be de-energized to ensure safety, or if an emergency condition occurs for which the Third Rail should be de-energized, the Dispatcher must be notified and advised as to the precise track(s) and geographical limits for which the Third Rail is to be de-energized. The Dispatcher must immediately apply blocking devices to prevent the inadvertent routing of trains with third-rail shoes into the de-energized section(s).

The Third Rail must be assumed to be energized until notified by the Dispatcher that the Third Rail has been and is de-energized.

Before the Third Rail is again energized, all involved Roadway Workers must be notified and it must be verified that conditions permit reenergizing the Third Rail. Only then may the Dispatcher be requested to reenergize the Third Rail. The blocking devices must not be removed until they are no longer required.

END OF SECTION

11.0 GENERAL SIGNAL SYSTEM RULES

11.1 General Requirements; Qualifying Features

The signal aspects and indications illustrated in Section 12 of these Operating Rules govern the movement of trains. Aspects are displayed by the color and position of lights. Other non-conforming aspects must not be used unless shown in the Timetable Special Instructions specifying location, aspect, name and indication.

All Controlled Signals are capable of displaying Stop. When number plates are used to identify Controlled Signals, the nomenclature shall be AA-NN, where AA represents the alpha abbreviation for the interlocking (as defined in the Timetable Special Instructions) and NN represents the unique signal number (including an "E" or "W" for direction) for that signal at that interlocking.

Warning - A number plate attached to a signal mast DOES NOT signify that the signal's most restrictive indication is more favorable than Stop. All CPL signals are either Controlled Signals or Fixed Stop Signals, all of which are absolute signals capable of displaying Stop. Number plates (where they are installed) are provided for identification purposes only.

11.2 Passing a Stop Aspect

Form X Line 11 authority is required to pass a Controlled Signal displaying Stop. The only exception to this is when the signal displaying Stop is within out-of-service limits, in which case the requirements of Rule 10.4D applies.

The Form X Line 11 authority must not be issued or accepted unless the train or track car is stopped. When encountering a Controlled Signal displaying Stop, the Conductor, Engineer or Track Car Driver must contact the Dispatcher and follow his instructions.

11.2A Giving Permission to Pass

Before issuing a Form X Line 11 authority to pass a Stop aspect, the Dispatcher must determine that:

1. All affected appliances within the interlocking route are properly positioned for the route to be used and Blocking Devices applied.

2. No opposing or conflicting movements have been authorized within the interlocking or on the interlocking exit track.

3. Blocking Devices have been applied to protect against opposing movements whenever the Stop aspect and route involved governs entrance to a Main Track or track within Interlocking Limits on which an opposing movement is possible.

These Blocking Devices must remain applied until an opposing movement is no longer possible.

11.2B Movement After Form X Has Been Received

After a Time Effective has been given for the Form X conveying the Line 11 authority, and after stopping at the Controlled Signal, a train may operate at Restricted Speed until the entire train has passed a Controlled Signal displaying a more favorable aspect.

In CSS territory, trains with operative Cab Signals may increase their speed in accordance with CSS indication after they have run the train's length past the location where a more favorable CSS aspect was received, and once it is observed that the train's route is unoccupied for at least five-hundred (500) feet beyond that "downstream" location.

After a Time Effective has been given for the Form X conveying the Line 11 authority, and after stopping at the Controlled Signal, a track car may operate at Restricted Speed until clear of the interlocking.

A train or track car operating through an interlocking on Form X Line 11 authority must not proceed on an interlocking route other than the interlocking route prescribed by the Form X Line 11 authority.

11.3 Absent or Imperfectly Displayed Signals

11.3A Absent Signals

If a fixed signal is absent from the place where it is usually shown, movement must be governed by the most restrictive indication that can be given by that signal. Such absences must be reported to the Dispatcher immediately. This rule applies to all types of fixed signals.

11.3B Imperfectly Displayed Signals

Imperfectly displayed signals must be reported to the Dispatcher as soon as practical, without delay to the train. Imperfectly displayed signals must be regarded as the most restrictive indication that can be given by that signal. The following exceptions apply to CPL signals, although these conditions must be reported to the Dispatcher:

1. If only a marker light is illuminated, the train may proceed as if a Rule 12.12 Stop and Proceed aspect were displayed.

2. If only one light in the main cluster is illuminated, the train may proceed as if the second light of that same color is also illuminated.

11.4 Next Governing Signal

Trains may operate according to the indication of the next Controlled Signal governing the movement when the following conditions have been met:

1. The next Controlled Signal can be plainly seen, and

2. The train is not required by rule or the previous signal indication to operate at Restricted Speed.

If governed by a signal displaying Medium Clear, Slow Clear, Medium Approach, Slow Approach or Diverging Cab-Signal Proceed, speed must not be increased above the diverging speed until the entire train is clear of all interlocking switches.

If governed by a speed restriction, speed must not be increased above the speed of the restriction until the entire train is clear of the speed restriction.

11.5 Tracks Signaled in Both Directions

On Main Tracks designated in the Timetable Special Instructions to be subject to this rule, signal indication shall be the authority for a train to operate in either direction on the same track. Extra trains also require permission of the Dispatcher to operate on tracks that are subject to this rule.

Note: The purpose of the signaling is to regulate the movement of trains by a Controlled Signal at the entrance to each block and by the Cab Signal. The Controlled Signals and the Cab Signal independently and collectively convey to trains the occupancy status of the route/track ahead and the safe speed at which the train may proceed.

If a train is to enter a track subject to this rule at an interlocking without passing a Controlled Signal displaying an aspect more favorable than Stop for the route to be used, Form X Line 4 authority is required.

Before issuing such Form X Line 4 authority to enter a track subject to this rule without passing a Controlled Signal displaying an aspect more favorable than Stop for the route to be used, the Dispatcher must apply Blocking Devices to prevent opposing movements AND must determine that there are no opposing movements or other unsafe conditions for the direction that the train is to be moved.

A train receiving Form X Line 4 authority for such a movement must operate at Restricted Speed to the point authorized or to the next interlocking, whichever is first.

In CSS territory, trains with operative Cab Signals may increase their speed in accordance with CSS indication after they have run the train's length past the location where a more favorable CSS aspect was received, and once it is observed that the train's route is unoccupied for at least five-hundred (500) feet beyond that "downstream" location.

A train receiving Form X Line 4 authority for such a movement must not reverse direction without further Form X instructions.

11.5A Reverse Movements

Reverse movements on a track subject to Rule 11.5 may only be made when specifically authorized by the Dispatcher as follows:

1. When the first Controlled Signal behind the train is seen to be displaying an aspect more favorable than Stop AND when the track is seen to be unoccupied between the train and that signal, the train may operate back to that signal governed by the Cab Signal (when so equipped) or at Restricted Speed, and then be governed by the aspect displayed.

   Exception - At scheduled "turn" locations and at end-of-line terminals, permission of the Dispatcher is not required under this rule when the above conditions are met.

2. When a station stop is overrun or when the rear window of the train has passed the wayside pushbuttons at a "turn" location, AND when the Dispatcher advises the train that there are no following trains, a reverse movement may be made at Restricted Speed for a maximum distance of three-hundred (300) feet. The verbal instruction from the Dispatcher must be given per the following example:

   "(Train identity) operating (eastbound or westbound) on track (number) at (location) has no following trains. (Train identity) may make a reverse movement at Restricted Speed for a maximum distance of 300 feet."

   Before issuing this instruction, the Dispatcher must apply Blocking Devices to prevent opposing movements AND must ensure that there are no opposing movements for the direction that the train is to be moved.

3. On stub-ended tracks, a reverse movement towards the "leaving" Controlled Signal displaying Stop may be made at Restricted Speed when the Dispatcher advises the train that there are no inbound/opposing movements.

   Before issuing this instruction, the Dispatcher must apply Blocking Devices to prevent opposing movements AND must ensure that there are no opposing movements for the direction that the train is to be moved.

4. In all other situations, Form X Line 4 authority is required. Before issuing such Form X Line 4 authority for a reverse movement, the Dispatcher must apply Blocking Devices to prevent opposing movements AND must ensure that there are no opposing movements or other unsafe conditions for the direction that the train is to be moved.

A train receiving Form X Line 4 authority for a reverse movement must operate at Restricted Speed back to the point authorized or the next interlocking, whichever is closer.

In CSS territory, trains with operative Cab Signals may increase their speed in accordance with CSS indication after they have run the train's length past the location where a more favorable CSS aspect was received, and once it is observed that the train's route is unoccupied for at least five-hundred (500) feet beyond that "downstream" location.

A train receiving Form X Line 4 authority for such a reverse movement must not reverse direction again without the Form X Line 4 instructions first being cancelled AND verbal permission of the Dispatcher.

5. Reverse movements must comply with all other applicable rules.

11.5B Crew Responsibility at Hand-Operated Switch

All hand-operated switches and associated derails providing entrance to Main Track are equipped with electric locks.

11.5B.1 Train Working a Siding

When picking up and/or setting off cars at a hand-operated switch, permission of the Dispatcher is not required to operate the switch and derail (or other turnout providing alternate "fouling" protection). When the switching operations are completed, the switch and derail must be returned to the normal position and locked. This must be reported to the Dispatcher. Unless otherwise authorized, the train must continue in its original direction.

If an electric lock does not release and must be overridden by an authorized employee, verbal permission of the Dispatcher must be obtained before overriding the electric lock. The train must be stopped and clear of the switch and derail before the electric lock may be overridden.

11.5B.2 Clearing the Main Track

When a train is to clear the Main Track at a hand-operated switch, permission of the Dispatcher is not required to operate the switch and derail (or other turnout providing alternate "fouling" protection). When the entire train is clear of the Main Track, the switch and derail must be returned to the normal position and locked. The train crew must report to the Dispatcher that the train is clear of the Main Track, and that the switch and derail have been locked in the normal position. Once the hand-operated switch and derail have been restored to the normal position, even though the train has

not yet been reported clear of the block, the switch or derail must not be realigned for the train to again enter the Main Track without first complying with Rule 11.5B.3.

If an electric lock does not release and must be overridden by an authorized employee, verbal permission of the Dispatcher must be obtained before overriding the electric lock. The train must be stopped and clear of the switch and derail before the electric lock may be overridden.

11.5B.3 Entering the Main Track

Before a train enters a Main Track at a hand-operated switch, verbal permission of the Dispatcher is required. This permission must include the authorized direction of movement once the train is fully on the Main Track.

Before granting this permission, the Dispatcher must know that the block is clear of approaching and conflicting movements and that Blocking Devices have been applied to protect against such movements.

After receiving the required permission, the train crew may operate the switch and derail (or other turnout providing alternate "fouling" protection). When the entire train is on the Main Track, the switch and derail must be returned to the normal position and locked. The train crew must report to the Dispatcher that the train is occupying the Main Track, that the switch and derail have been locked in the normal position, and that the train is ready to proceed in the authorized direction.

If an electric lock does not release and must be overridden by an authorized employee, the Dispatcher must issue Form X Line 7 authority to the involved employees before the electric lock may be overridden. The train must be stopped and clear of the switch and derail before the electric lock may be overridden. The Form X conveying the Line 7 authority must also include Line 12 instructions as to which way the train is to operate once it is fully on the Main Track.

Before issuing the Form X Line 7 authority with the supplemental Line 12 instructions, the Dispatcher must ensure that no train is moving or has been authorized to move in the direction of the switch from the last interlocking in each direction from the switch, and ensure that Blocking Devices have been applied to protect against such movements.

The Dispatcher must not authorize the movement of a same-direction train from the last interlocking until he is informed that the entire train is on the Main Track. Blocking Devices to protect against opposing movements must remain applied until opposing movements are no longer possible.

11.5B.4 Operating Main Track Switch or Derail for Other Purposes

Before a hand-operated switch or associated derail may be operated for maintenance and/or testing purposes, verbal permission of the Dispatcher is required.

Before granting this permission, the Dispatcher must know that the block is clear of approaching and conflicting movements and that Blocking Devices have been applied to protect against such movements.

After receiving the required permission, the authorized employee may then operate the switch and derail (or other turnout providing alternate "fouling" protection). When these activities are completed, the switch and derail must be returned to the normal position and locked. The authorized employee must report to the Dispatcher that the switch and derail have been locked in the normal position.

If an electric lock does not release and must be overridden by an authorized employee, the Dispatcher must issue Form X Line 7 authority to the involved employee before the electric lock may be overridden.

Before issuing the Form X Line 7 authority, the Dispatcher must ensure that no train is moving or has been authorized to move in the direction of the switch from the last interlocking in each direction from the switch, and ensure that Blocking Devices have been applied to protect against such movements.

The Dispatcher must not authorize the movement of a train from the last interlocking in either direction from the switch until he is informed that the switch and derail have been restored to the normal position and locked.

11.5B.5 Possibility of Getting Locked In or Out of Siding

Electrically-locked switches and derails of sidings must not be locked in the normal position while the engine of a train is in the siding and cars of the same train are on the Main Track. Such a condition would most likely prevent the involved electric lock(s) from releasing and "trap" the engine in the siding. In such a case, the electric lock(s) may be overridden in accordance with Rule 11.5B.3.

Employees must be aware that in the case of a track out-of-service per Rule 10.4 and in the case of Working Limits per Rule 10.7, electrically-locked switches and derails of sidings within such limits may not release to let equipment out of the siding if the Main Track is occupied or shunted between the adjacent interlockings. Also, electrically-locked switches and derails of sidings within such limits may not release to let non-shunting

equipment enter the siding if the Main Track is occupied or shunted between the adjacent interlockings. In such situations, the electric locks of such switches and derails within the Rule 10.4 out-of-service limits or within the Rule 10.7 Working Limits may be overridden by authority and permission of the Employee-in-Charge identified in the Form X or Form Z.

11.5C Speed Entering Rule 11.5 Territory Between Signals

A train entering a block between Controlled Signals must proceed at Restricted Speed until the entire train has passed the next Controlled Signal.

In CSS territory, trains with operative Cab Signals may increase their speed in accordance with CSS indication after they have run the train's length past the location where a more favorable CSS aspect was received, and once it is observed that the train's route is unoccupied for at least five-hundred (500) feet beyond that "downstream" location.

11.6 Delay in a Block or Interlocking

If a train that has passed a Controlled Signal is delayed for more than one minute or stops for any reason, it must proceed approaching the next Controlled Signal prepared to stop. This restriction shall no longer apply when:

1. The next signal is seen to display a proceed indication, AND

2. The track is seen to be clear to the next signal.

Exception: This rule does not apply to trains that have Cab Signals in service for the direction of movement. This rule also does not apply to trains that are within Rule 11.5 territory, or that have passed the last Controlled Signal entering such territory.

11.7 Trains that Might Not Shunt

A train that might not shunt track circuits must not be operated in Signal System territory without authority of the Superintendent of Transportation and must be treated as a track car. This includes trains with cars that have rusted wheels. This rule applies to all Main Tracks, all tracks within Interlocking or Extended Interlocking Limits, all tracks subject to Rule 11.5, and to all tracks for which an entering signal is capable of displaying an aspect more favorable than Restricting.

11.8 Track Conditions that May Cause Non-Shunting of Track Circuits

If the condition of a track is such that track circuits may fail to shunt properly, not more than one train at a time shall be permitted between Controlled Signals, unless the following train is directed by Form X Line 10 to operate at Restricted Speed.

Blocking Devices must be applied to the controls of switches, signals and interlocking exits to prevent the clearing of Controlled Signals into the affected track from either direction, and to prevent a route from being realigned in front of an approaching train or under a train.

The Controlled Signal governing entrance to the affected track must not be displayed for movements into the affected track. Form X Line 11 authority must be issued to pass the Controlled Signal displaying Stop.

END OF SECTION

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12.0 SIGNAL NAMES, ASPECTS AND INDICATIONS

On the illustrations of the signal aspects that follow, the colors of the lights are indicated by the following letters:

W = White

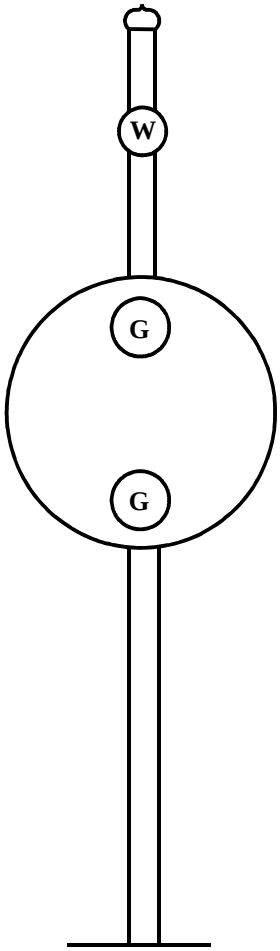
G = Green

Y = Yellow

L = Lunar

R = Red

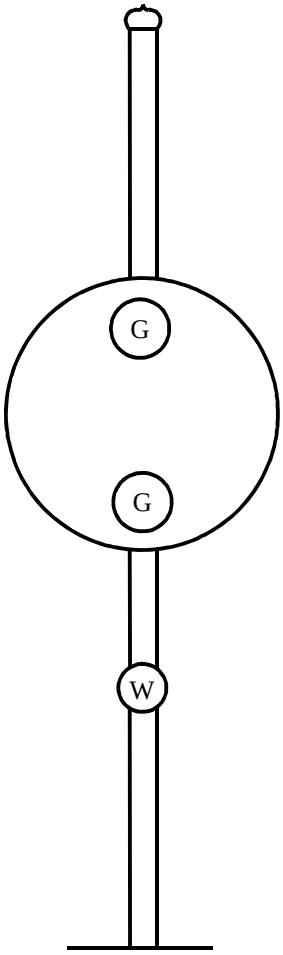
12.1 Clear



Name – Clear

Indication – Proceed.

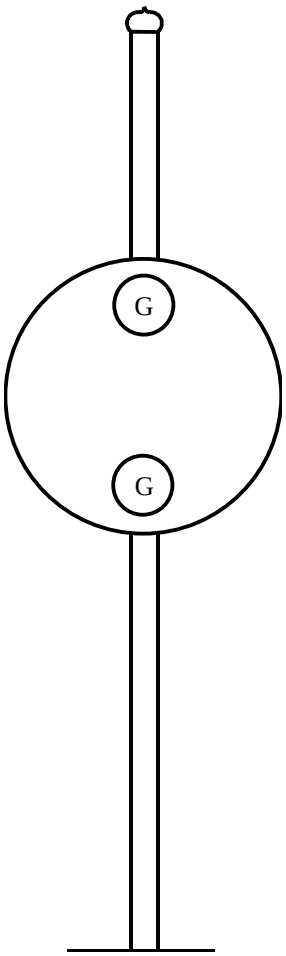
12.2 Medium Clear



Name – Medium Clear

Indication – Proceed; Medium Speed within interlocking limits.

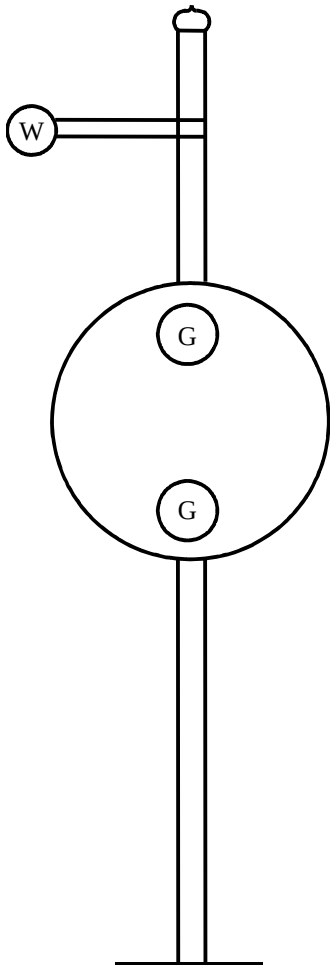
12.3 Slow Clear



Name – Slow Clear

Indication – Proceed; Slow Speed within interlocking limits.

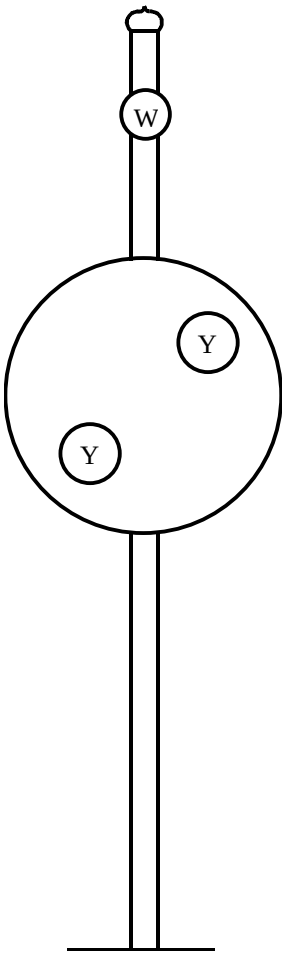
12.4 Approach Medium



Name – Approach Medium

Indication – Proceed approaching next signal at Medium Speed. Train exceeding Limited Speed must at once reduce to that speed.

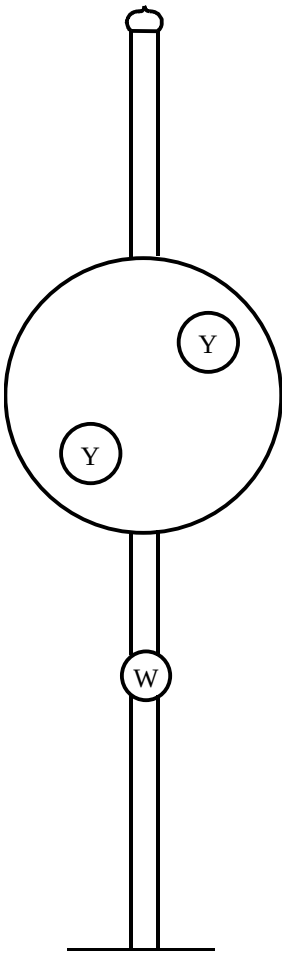
12.5 Approach



Name – Approach

Indication – Proceed approaching next signal prepared to stop.
Train exceeding Medium Speed must at once reduce to that speed.

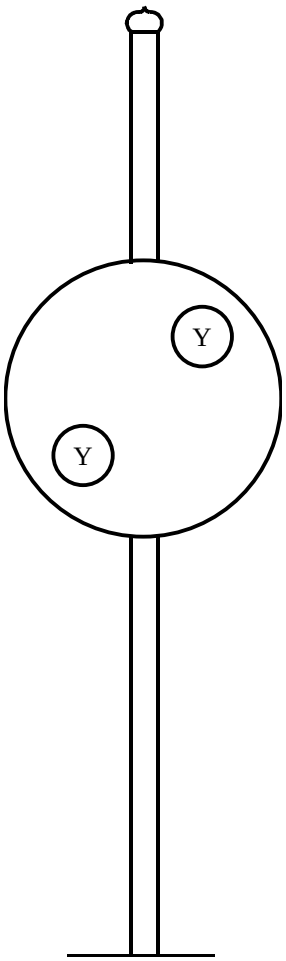
12.6 Medium Approach



Name – Medium Approach

Indication – Proceed at Medium Speed approaching next signal prepared to stop.

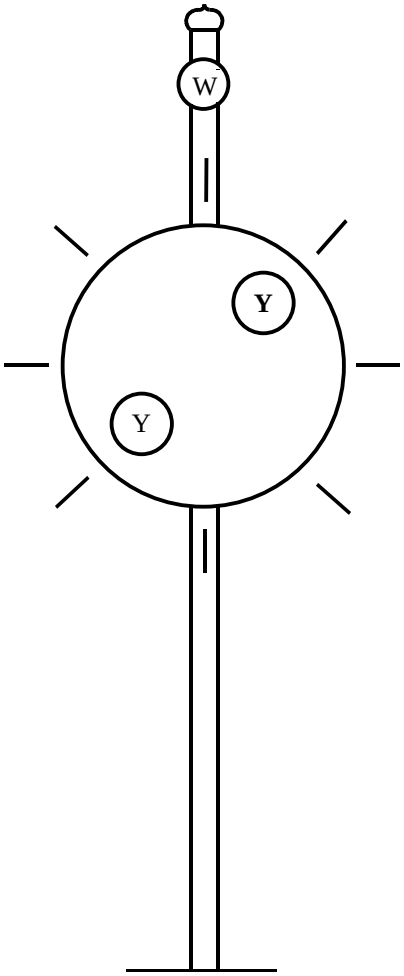
12.7 Slow Approach



Name – Slow Approach

Indication – Proceed at Slow Speed within interlocking limits and Medium Speed outside of interlocking limits approaching next signal prepared to stop.

12.8 Approach Cab-Signal Proceed



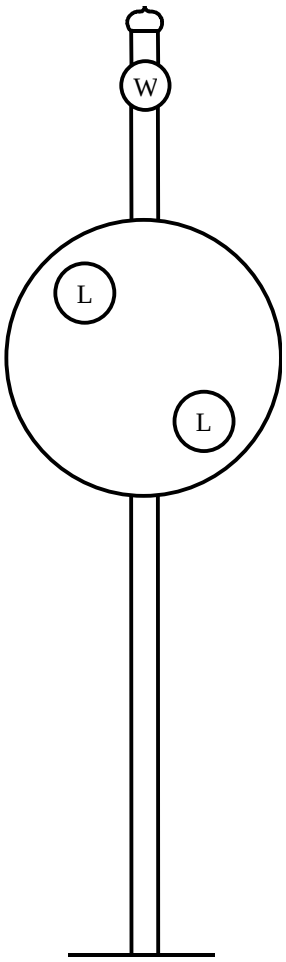
Main
Head
Flashing

Name – Approach Cab-Signal Proceed

Indication – Fully Equipped Trains and Partially Equipped Trains: Proceed approaching next signal governed by cab-signal indications.

All Other Trains: Proceed approaching next signal prepared to stop. Train exceeding Medium Speed must at once reduce to that speed.

12.9 Permissive Cab-Signal Proceed

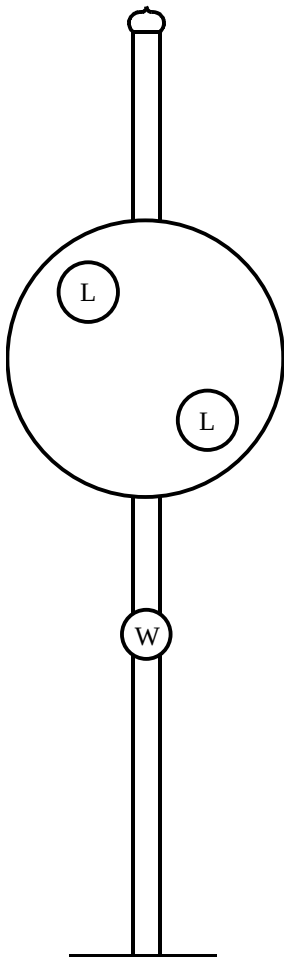


Name – Permissive Cab-Signal Proceed

Indication – Fully Equipped Trains and Partially Equipped Trains: Proceed into occupied block governed by cab-signal indications.

All Other Trains: Stop and call Dispatcher for instructions.

12.10 Diverging Permissive Cab-Signal Proceed

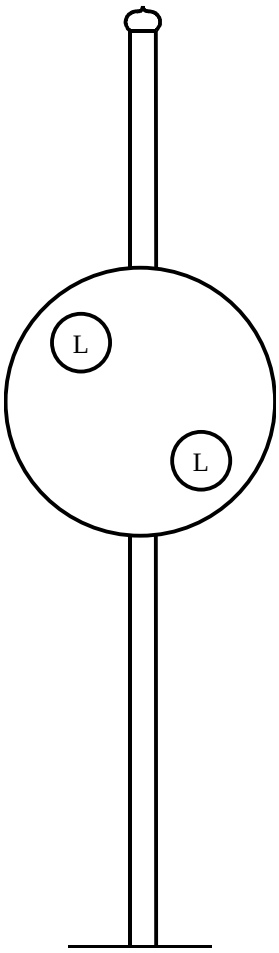


Name – Diverging Permissive Cab-Signal Proceed

Indication – Fully Equipped Trains and Partially Equipped Trains: Proceed via diverging route into occupied block governed by cab-signal indications.

All Other Trains: Stop and call Dispatcher for instructions.

12.11 Restricting

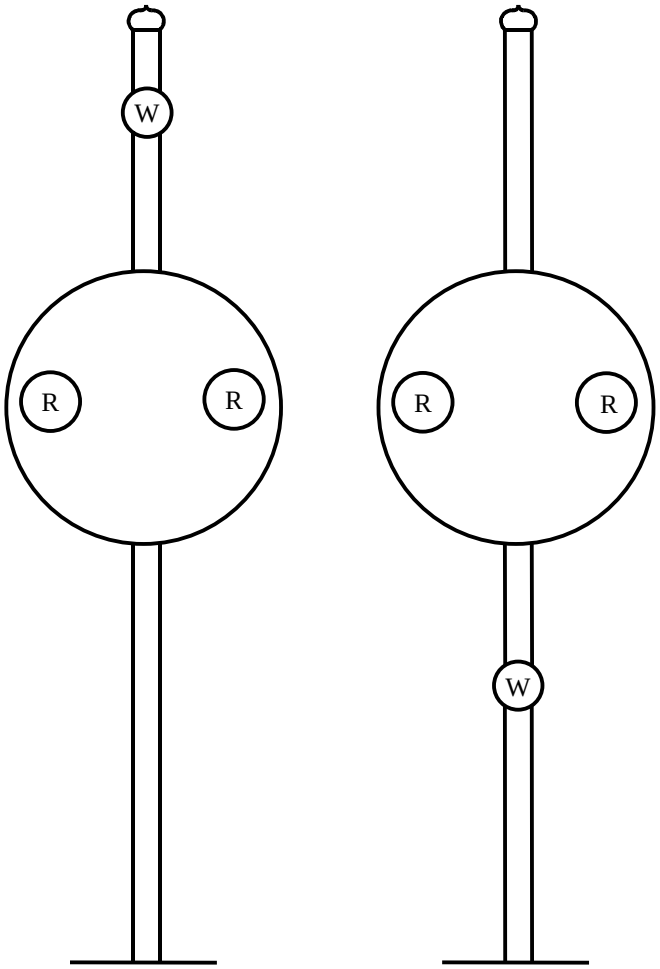


Name – Restricting

Indication – Fully Equipped Trains and Partially Equipped Trains: Proceed at Restricted Speed.

All Other Trains: Stop and call Dispatcher for instructions.

12.12 Stop and Proceed

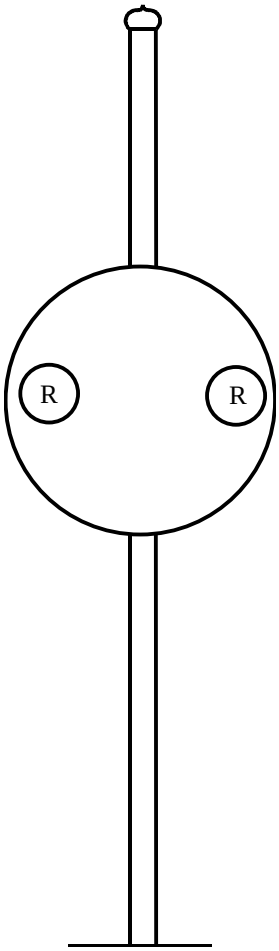


Name – Stop and Proceed

Indication – Fully Equipped Trains and Partially Equipped Trains: Stop and Proceed at Restricted Speed.

All Other Trains: Stop and call Dispatcher for instructions.

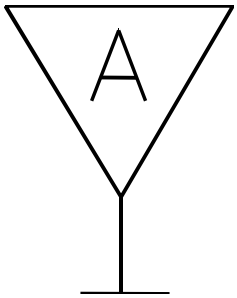
12.13 Stop



Name – Stop

Indication – Stop.

12.14 Approach-Signal Sign



Black Letter
On Yellow
Background

Name – Approach-Signal Sign

Indication – Fully Equipped Trains and Partially Equipped Trains: Proceed governed by cab-signal indications.

All Other Trains: Proceed approaching next signal prepared to stop. Train exceeding Medium Speed must at once reduce to that speed.

END OF SECTION

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13.0 INTERLOCKING RULES

13.1 Interlockings Designated in Timetable Special Instructions

Interlocking rules apply to any movement within Interlocking Limits or Extended Interlocking Limits. These rules cover the use of Controlled Signals and appliances, movement within and through interlockings, and dangerous conditions. Interlockings and Extended Interlocking Limits are designated in the Timetable Special Instructions.

13.2 Clearing of Controlled Signals

Signal indication shall be the authority for a train to operate in either direction on the same track or route within Interlocking Limits. Extra trains also require permission of the Dispatcher to operate on tracks within Interlocking Limits. The indications of Controlled Signals govern the use of routes through interlockings, and must be cleared sufficiently in advance of approaching trains to avoid unnecessary delay.

13.3 Controlled Signals and Interlocking Appliances: Operation, Repair, Malfunction

Controlled Signals and interlocking appliances must be carefully operated and only by authorized personnel. When these devices are undergoing repair, or when any irregularity affecting their operation is detected, two actions must be taken:

1. Stop aspects must be displayed and Blocking Devices applied to all affected signals, interlocking exits and interlocking appliances, AND

2. The defects must be reported promptly to the Dispatcher.

This rule does not require displaying Stop aspects or applying redundant Blocking Devices when it is not necessary for safety. For example, if a crossover must not be moved to or used in the reverse position, it is sufficient to block the crossover in the normal position.

Signals must remain in Stop position and Blocking Devices remain applied to affected signals, interlocking exits and appliances until the Signal Maintainer has reported that repairs have been completed and that normal operations may be resumed.

13.4 Warning to Operators and Dispatchers about Failover to Field Automatic Switching

When Blocking Devices are required to protect any situation or are required under any rule, they must be applied immediately. Office indication must be received confirming that the blocking is effective at the interlocking in the field BEFORE assuming that the blocking is in effect. Many interlockings are equipped to failover (from being controlled by the Dispatcher or Operator) to field automatic switching in the case of a communication failure between Central Control and the field. Such failovers can occur at any time, and can result in the unexpected movement of interlocking appliances that are not blocked, and in the clearing of Controlled Signals to interlocking exits that are not blocked.

13.5 Controlled Signals: Changing Routes

When a Controlled Signal has been cleared for an approaching train, the signal must not be changed to Stop position until:

1. The train has been stopped, or

2. The Engineer has been informed of the situation and has advised the Dispatcher or Operator that he can stop before reaching the signal.

EXCEPTION: In an emergency, the signal may be immediately changed to the Stop position.

Before changing the route for an approaching train or aligning a conflicting route for another movement, the Dispatcher or Operator must determine that the approaching train has stopped, and must attempt to contact the Engineer to inform him that the route is being cancelled or changed.

EXCEPTION: This rule does not apply when “approach locking” releases the route because the approaching train is not closely approaching the Controlled Signal.

13.6 Interlocking Appliances: Control Mechanisms

Control mechanisms that operate an interlocking appliance must not be used when any portion of a train or track car is standing on or closely approaching the appliance, or while the control machine “indicates” an occupancy in the involved track circuit, or while a Controlled Signal is cleared for a movement over the appliance.

13.7 Interlocking Appliances: Locking

If it is impossible to lock an interlocking appliance, two actions must be taken:

1. All control mechanisms must be placed in the required position and Blocking Devices applied, AND

2. All affected appliances must be properly lined, and spiked or clamped.

EXCEPTION: If the interlocking appliance is dual controlled, it must be properly lined and locked manually.

The Dispatcher must not give a train or track car authority per Rule 11.2 to pass a Stop aspect for a route involving the interlocking appliance until the above requirements are met.

13.8 Movements That Might Not Shunt

Track Car movements (including trains being treated as a track car) must NOT be made on signal indication.

Before permitting track car movements, the Dispatcher must comply with Section 16 of these Operating Rules and with all other applicable rules. The Dispatcher must ensure that all interlocking appliances are properly lined and secured with Blocking Devices. The blocking must include every interlocking appliance in the route AND the interlocking exit track. When the interlocking exit track is a Main Track extending between two interlockings, the interlocking exit blocking must be placed into effect for BOTH interlockings to protect against both opposing and following movements.

The Dispatcher may then grant authority to pass the Stop aspect in accordance with Rule 11.2.

The Dispatcher or Operator must not remove the Blocking Devices protecting any portion of the affected route until the Employee-in-Charge of the equipment has reported clear of the opposing signal governing that portion of the route.

The Employee-in-Charge of the equipment must notify the Dispatcher when the movement is clear of Interlocking Limits.

13.9 Rust on Rails

If rails are rusted, crew members must confer with the Dispatcher. Interlocking control mechanisms controlling rusty interlocking appliances must be blocked with Blocking Devices. Such interlocking appliances must not be operated until the movement has been completed. Rule 11.8 applies.

Signal Maintainers must notify the Dispatcher about rusty rail conditions that require protection.

13.10 Controlled Signal Changes to Stop

If a Controlled Signal aspect permitting a train to proceed changes to the Stop aspect before it is reached, the stop must be made as soon as safe train handling will permit. Such signal changes must be reported to the Dispatcher.

13.11 Stopped in an Interlocking by Dispatcher or Operator

If the Dispatcher or Operator stops a train while it is moving through an interlocking or Extended Interlocking Limits, the train must not move in either direction until it has received the proper signal or permission from the Dispatcher or Operator.

13.12 Stopped Less than Fifty (50) Feet beyond Controlled Signal

If a train stops less than fifty (50) feet after passing a Controlled Signal, it must not proceed without verbal permission of the Dispatcher or Operator.

13.13 Reversing Direction within an Interlocking

Before reversing direction while within the limits of an interlocking or within Extended Interlocking Limits, trains must have either:

1. A proper Controlled Signal aspect, or

2. Verbal permission of the Dispatcher.

Before authorizing any reverse movement, the Dispatcher must apply Blocking Devices to the interlocking appliances in the route. The Dispatcher must also apply Blocking Devices to prevent opposing movements AND must ensure that there are no opposing movements for the direction that the train is to be moved.

When verbal permission is given, the route must not be changed until it is known that the movement has been completed. Movements made based on verbal permission must be made at Restricted Speed until the entire train has passed a more favorable Controlled Signal. In CSS territory, trains with operative Cab Signals may increase their speed in accordance with CSS indication after they have run the train's length past the location where a more favorable CSS aspect was received, and once it is observed that the train's route is unoccupied for at least five-hundred (500) feet beyond that "downstream" location.

If the reverse movement will cause the train to enter, reenter or make a reverse movement on a track subject to Rule 11.5, Rule 11.5 must also be complied with.

13.14 Derailment or Damage

If there is a derailment or if any damage occurs to the track or interlocking, two immediate actions must be taken:

1. Stop aspects must be displayed and Blocking Devices applied to the controls of all interlocking signals and appliances that may be affected, including interlocking exit blocking when appropriate, AND

2. The Dispatcher must be notified.

No movement may be permitted until all parts of the interlocking and track that may be damaged have been inspected and are confirmed safe for the movement.

13.15 Dangerous Conditions or Obstructions

If the Operator or Dispatcher becomes aware of any condition potentially dangerous to people, property or train movements, including a train or track car passing a Stop aspect without proper permission, two actions must be taken:

1. An attempt must be made immediately to stop any train or track car involved or at risk, AND

2. The Operator or Dispatcher controlling the next interlocking in each direction must be notified.

Each Operator and Dispatcher must display Stop aspects to all trains that may be endangered. A train may be authorized by the Dispatcher to proceed after the crew has been informed of the situation, and after any Form X or Form Z instructions deemed appropriate by the Dispatcher have been delivered.

13.16 Route Request Pushbuttons

Route Request Pushbuttons (RRPBs) are provided for certain Controlled Signals as defined in the Timetable Special Instructions. RRPBs permit Engineers to make route requests when the interlocking is in the field automatic switching (FAS) mode. The device consists of a box containing designated pushbuttons. For each route that may be requested, there are two (2) pushbuttons; a green button is provided to request a route and a red button is provided to cancel a previously-requested route. For each green button, there is a white light that illuminates when that route has been requested. The designation of the routes/tracks (such as “Siding”, “Track 1”, “Track 2”, etc.) that may be requested are labeled adjacent to the various pushbuttons.

These interlockings may be manually controlled by the Dispatcher or Operator or may be controlled by FAS circuitry. When in the FAS mode, the RRPBs directly request and cancel routes. When the interlocking is being manually controlled, the RRPBs do not function.

If a train arrives at a Controlled Signal displaying a Stop aspect or an incorrect route, the Engineer must contact the Dispatcher. If unable to contact the Dispatcher, or when directed by the Dispatcher, the Engineer must press the “cancel” button for any wrong route and then press the appropriate button for the route or destination of the train.

END OF SECTION

14.0 CAB SIGNAL SYSTEM AND RELATED RULES

14.1 Tracks Designated in Timetable Special Instructions

These CSS, ATC and PSS rules shall be in effect on tracks designated in the Timetable Special Instructions.

The CSS is interconnected with Controlled Signals to provide the Engineer with continuous information on the occupancy and/or condition of the track and route ahead.

This section presents rules governing the use of the CSS, including:

1. Movement without ATC speed enforcement;

2. Movement without PSS speed enforcement;

3. Movement without Cab Signals;

4. Testing the Cab Signal apparatus;

5. Conformity of Cab Signal aspects with Controlled Signal aspects;

6. Failures, flips and nonconformity of the Cab Signals; and

7. Movement governed by Cab Signals without intermediate wayside signals.

14.2 Train Not Equipped with CSS, ATC or PSS Apparatus

The movement of a train not equipped with CSS, ATC or PSS apparatus is prohibited, except when authorized by the Superintendent of Transportation.

Movements authorized by the Superintendent of Transportation and the Dispatcher that qualify as a Fully Equipped Train or as a Partially Equipped Train may be made in accordance with the applicable rules.

All other movements authorized by the Superintendent of Transportation and the Dispatcher shall be governed by the indications of the Controlled Signals, and must be made at Restricted Speed, unless the Dispatcher authorizes the train to proceed subject to the rules applying to a Failed Train.

14.3 Cab Signal Aspects

14.3A Class A Trains

The Cab Signal equipment on Class A Trains is capable of displaying the following speed-command aspects:

ADU Aspect	Maximum Permitted Speed
60	60 MPH
45	45 MPH
35	35 MPH
20	20 MPH
15R	Restricted Speed not exceeding 15 MPH.

14.3B All Other Trains

The Cab Signal equipment on non-Class A Trains is capable of displaying the following speed-command aspects:

ADU Aspect	Maximum Permitted Speed
30	30 MPH
20	20 MPH
15	15 MPH
10R	Restricted Speed not exceeding 10 MPH.

14.4 Conformity Between Cab Signal Aspects and Controlled Signal Aspects

Valid combinations of Cab Signal speed commands that may be received and displayed on the ADU immediately after passing Controlled Signal aspects are shown in the following chart:

	Class A Trains* Cab-Signal Aspects						**All Other Trains Cab-Signal Aspects**				
Wayside Signal Aspect	**60**	**45**	**35**	**20**	**15 R**	**0**	**30**	**20**	**15**	**10 R**	**0**
Clear	X	X					X	X			
Medium Clear				X						X	
Slow Clear					X					X	
Approach Medium		X	X	X				X	X	X	
Approach			X	X	X	X			X	X	X
Medium Approach				X	X	X				X	X
Slow Approach					X	X				X	X
Approach Cab-Signal Proceed	X	X	X	X	X		X	X	X	X	
Cab-Signal Proceed	X	X	X	X	X	X	X	X	X	X	X
Diverging Cab-Signal Proceed				X	X	X				X	X
Restricting					X	X				X	X
Stop and Proceed					X	X				X	X
Stop						X					X

10R and 15R – Restricted Speed not exceeding numeric speed.

* Class A Train – A train meeting the "Class A Train" definition in the Timetable Special Instructions.

14.4A Cab Signal Does Not Conform to Controlled Signal – More Restrictive Aspect Governs

The Cab Signal should conform to the aspect displayed by each Controlled Signal within three (3) seconds after passing it. If the Cab Signal and Controlled Signal do not conform, the more restrictive signal indication shall govern movement through the block or to the entrance to Rule 11.5 territory. The Engineer must notify the Dispatcher about the conflict as soon as possible without delaying the train, giving location, direction and track on which the nonconformity occurred.

14.4B Cab Signal Conforms to Controlled Signal – Cab Signal Governs

If the Cab Signal conforms to the Controlled Signal upon entering the block, the Cab Signal shall govern throughout the block.

14.4C Cab Signal Changes Between Controlled Signals

If the Cab Signal changes between Controlled Signals, the Cab Signal shall govern, subject to the following restrictions:

14.4C.1 Cab Signal Changes to More Favorable Aspect after Clearing a Diverging Route

If the Cab Signal upgrades after clearing a diverging route from an aspect more favorable than Restricting, the speed must not be increased above the authorized speed of the diverging route until the entire train has cleared all switches that are set for the diverging position.

14.4C.2 Cab Signal Changes from Restricting to More Favorable Aspect

In CSS territory, trains with operative Cab Signals may increase their speed in accordance with CSS indication after they have run the train's length past the location where a more favorable CSS aspect was received, and once it is observed that the train's route is unoccupied for at least five-hundred (500) feet beyond that "downstream" location.

14.4C.3 Never Exceed Applicable Speed

When the Cab Signal upgrades at a location where the MAS increases or at the end of a permanent speed restriction, the train must not increase speed above the applicable speed until the rear of the train has cleared the restriction.

14.4D Circumstances in Which Cab Signal Gives No Indication

The Cab Signal will not indicate conditions ahead when the engine is:

1. Pushing cars, or

2. Running backward but is not equipped with Cab Signal apparatus for backward movement.

14.5 Testing the CSS, ATC and PSS Apparatus

14.5A Daily Departure Test

Each SIRTOA engine has self-test equipment. The CSS, ATC and PSS apparatus on the leading end of the first engine of each train must be tested and found to be operational within the twenty-seven (27) hour period immediately before the engine leaves its initial terminal. This shall include a visual observation that the "pick-up coils" are in the proper and normal position relative to the running rails and do not appear to be damaged. This shall also include verification that the Cab Signal cut-in/cut-out, the ATC cut-in/cut-out, and the PSS cut-in/cut-out switches are all sealed in the cut-in position.

The employee performing the test must post a signed copy of the test results in the cab of the locomotive and must leave a signed copy of the test results at the test location. He must also keep a copy of the signed document available for inspection for thirty (30) days.

14.5B Engineer's and Conductor's Responsibilities

After taking charge of an engine, the Engineer and Conductor must assure themselves that:

1. The daily test of the CSS, ATC and PSS apparatus has been performed, and that

2. The Cab Signal, ATC and PSS cut-in/cut-out switches are all sealed in the cut-in position.

In addition, the Engineer must assure himself that the Cab Signal, ATC and PSS apparatus is energized.

Operating a train with a "broken" seal without proper authorization is PROHIBITED.

14.5C Operating from Equipped Unit Without Daily Test

If necessary while en route to operate from an equipped unit or end that had not been given a daily test, the daily test must be performed by the train's Engineer prior to continued movement.

14.5D Failure of Daily Test or Subsequent Failure of Equipment

If the leading end of the leading engine does not pass the daily test or if a condition occurs so that it is known or suspected that a new daily test for the leading end of the leading engine would not be passed, that leading end of that engine may not be used as the leading end of a train until a new daily test has been satisfactorily completed.

Exception: A train may be operated as a Fully Equipped Train, Partially Equipped Train or as a Failed Train (whichever is appropriate under the definitions) subject to the applicable rules from an intermediate point on a line to an end-of-line terminal or from any point to a location where the equipment can be repaired and the cut-in/cut-out switches can be resealed. No other movements of such a unit may be made on the leading end of a train unless authorized by the Superintendent of Transportation.

If the daily test cannot be performed for any reason, it must be assumed that the Cab Signal, ATC and PSS systems are all inoperative and that the daily test was failed.

14.6 Movement With Inoperative ATC

14.6A ATC Malfunctions and Reporting Thereof

Malfunctions of the ATC System include any one or more of the following conditions:

1. Being unable to obtain a brake release,

2. Incurring inappropriate brake applications,

3. Being unable to operate at the speed displayed by the Cab Signal, and

4. Not being enforced to reduce train speed to the speed displayed by the Cab Signal.

Any such malfunction must be reported immediately to the Dispatcher. The type of malfunction and location of the failure must be included in this report.

14.6B Movement of Partially Equipped Train

In the event of an ATC speed-control malfunction, the Dispatcher may authorize the train to proceed as a Partially Equipped Train. Upon receiving this authorization, the ATC seal may be broken and the ATC cut-in/cut-out switch moved to the cut-out position.

The Engineer must verify that the train meets the definition of a Partially Equipped Train. The Engineer must notify the Conductor that the train has been authorized by the Dispatcher to proceed as a Partially Equipped Train.

If the train meets the definition of a Partially Equipped Train, the train may then proceed at not exceeding Limited Speed governed by Controlled Signals and the Cab Signal from an intermediate point on a line to an end-of-line terminal or from any point to a location where the equipment can be repaired and the ATC cut-in/cut-out switch resealed in the cut-in position. No other movements of such a unit may be made on the leading end of a train unless authorized by the Superintendent of Transportation.

If the train crew is unable to communicate with the Dispatcher, the train may follow the procedures in this rule and then proceed at not exceeding Restricted Speed to the first point of communication, at which location a report must be made to the Dispatcher. When authorized by the Dispatcher, the train may then proceed in accordance with this rule at not exceeding Limited Speed.

The Engineer must consider the failed apparatus as being inoperative until the equipment has been repaired, tested, sealed and found to be functioning properly.

14.7 Criteria for Determining On-Board CSS Failure and Reporting Thereof

The on-board Cab Signal apparatus shall be considered as having failed if any of the following conditions occur:

1. The audible indicator fails to sound when the Cab Signal changes to a more restrictive aspect.

2. The audible indicator continues to sound even though the Cab Signal change was acknowledged and the speed of the train was reduced to the speed required by the Cab Signal indication.

3. The Cab Signal fails to conform at two (2) Controlled Signal locations in succession, or at three (3) Controlled Signal locations during a trip.

4. Damage or fault occurs to any part of the Cab Signal apparatus.

5. When approaching a Controlled Signal displaying Clear, the Cab Signal displays Restricting and fails to conform after passing the Controlled Signal.

6. When a Class A Train approaches a Controlled Signal displaying Medium Clear, the Cab Signal displays Restricting and fails to conform after passing the Controlled Signal.

7. When the CSS displays a speed that is obviously higher than the safe speed. This includes the display of inappropriate “faster” Cab Signal aspects while within permanent speed restrictions, while approaching and traversing diverging routes, while approaching Stop aspects (not including imperfectly displayed signals), and while closing in on preceding trains.

If any of the above listed conditions occur, a report must be immediately made to the Dispatcher. The type of malfunction and location of the failure must be included in this report.

14.8 Movement of Failed Train

In the case of an inoperative CSS or CSS malfunction, the Dispatcher may authorize the train to proceed as a Failed Train. Upon receiving this authorization, the Cab Signal and ATC seals may be broken and the Cab Signal and ATC cut-in/cut-out switches moved to the cut-out positions.

The train may then proceed as a Failed Train from an intermediate point on a line to an end-of-line terminal or from any point to a location where the equipment can be repaired and the Cab Signal and ATC cut-in/cut-out switches resealed in the cut-in position. No other movements of such a unit may be made on the leading end of a train unless authorized by the Superintendent of Transportation.

14.8A Engineer's Responsibility

The Engineer of a Failed Train must take the following actions:

1. Notify the Conductor that the train has been authorized by the Dispatcher to proceed as a Failed Train.

2. Operate at Restricted Speed to the first/next Controlled Signal.

3. Then operate in accordance with Controlled Signal indications at not exceeding Limited Speed.

4. Pass no Controlled Signal displaying a Cab-Signal Proceed, Diverging Cab-Signal Proceed, Restricting, or Stop and Proceed aspect unless authorized by Form X Line 10 and Line 11 authority. In such cases, the train must operate through the block of such Controlled Signal at Restricted Speed.

5. Engineers of Failed Trains must communicate with the Conductor in an audible and clear manner, regardless of the Conductor's location on the train, the name of every Controlled Signal aspect, and also communicate the name of any other signal aspect requiring a reduction in speed below Limited Speed, as soon as the signal aspect is clearly visible. The aspect of a Controlled Signal shall be observed and called again just before passing it. If the Conductor fails to acknowledge the communication, the Engineer must ascertain the reason for the failure at the next scheduled station stop.

If the train crew is unable to communicate with the Dispatcher, the train may follow the procedures in this rule and then proceed at not exceeding Restricted Speed to the first point of communication, at which location a report must be made to the Dispatcher. When authorized by the Dispatcher, the train may then proceed in accordance with this rule.

The Engineer must consider the failed apparatus as being inoperative until the equipment has been repaired, tested, sealed and found to be functioning properly.

14.8B Conductor's Responsibility

The Conductor shall immediately acknowledge the communication of a signal name and confirm the information to the Engineer. If necessary, due to an intercom or other system failure, alternative means of communication shall be established by the crew to accomplish this procedure.

Should the Engineer fail to operate or control the train in accordance with a signal indication or any other condition requiring the speed of the train to be reduced, the Conductor must caution the Engineer and, if necessary, take action to ensure the safety of the train including stopping the movement.

14.8C Operator's and Dispatcher's Responsibility

When the Dispatcher authorizes the movement of a Failed Train, the Operator and Dispatcher must not clear a Controlled Signal for the Failed Train unless the block of such Controlled Signal is unoccupied. Blocking Devices must be applied to the "next" Controlled Signal to ensure compliance herewith.

The Dispatcher must not grant Form X Line 10 and Line 11 authority for a Failed Train to pass a Controlled Signal displaying a Cab-Signal Proceed, Diverging Cab-Signal Proceed, Restricting, or Stop and Proceed aspect unless and until he has determined that the block to be entered is not occupied. In such cases, the Dispatcher may issue Form X Line 11 authority to Pass a Stop Aspect per Rule 11.2 in concert with Form X Line 10 instructions to proceed at Restricted Speed to the next Controlled Signal.

In an emergency and when operationally necessary, the Dispatcher may authorize the movement of a Failed Train into and through an occupied block at Restricted Speed by Form X Line 11 authority to pass a Stop aspect per Rule 11.2 in concert with Form X Line 10 instructions to proceed at Restricted Speed to the next Controlled Signal.

14.8D Exception to Rules 14.8A, 14.8B and 14.8C

The Dispatcher may verbally authorize a Failed Train to pass a Restricting or Stop and Proceed aspect without having to issue Form X authority when the route and the block of such signal are wholly within Interlocking Limits, Extended Interlocking Limits, or end-of-line terminals. This includes instances where the route and block end at the entrance to Other Than Main Track, and where the route ends at an end-of track bumper. This exception does not include situations where the route enters and the block includes a Rule 11.5 Main Track extending between two interlockings.

When verbal permission is given by the Dispatcher to a train without Form X authority, the Dispatcher shall state the basis of the exception, such as in the following examples:

Train 123 may pass Restricting or Stop and Proceed aspect on St. George Interlocking Controlled Signal SG-70 and enter Station Track 4 at Restricted Speed.

Train 125 may pass Restricting or Stop and Proceed aspect on Fern Interlocking Controlled Signal FR-6W and enter Extended Interlocking Limits on NUM 1 Track at Restricted Speed.

Train 127 may pass Restricting or Stop and Proceed aspect on Holly Interlocking Controlled Signal HL-2W and enter Holly Siding Other Than Main Track at Restricted Speed.

14.9 Positive Stop System

The movement of a train with inoperative PSS equipment is prohibited, except when authorized by the Dispatcher.

14.9A Movement With Inoperative PSS

Malfunctions of the PSS include any one or more of the following conditions:

1. Being unable to obtain a brake release,

2. Being unable to operate at Restricted Speed,

3. Being unable to operate at the speed displayed by the Cab Signal, and

4. Not being enforced to stop prior to a Stop aspect or preceding train.

Any such malfunction shall be reported immediately to the Dispatcher. The type of malfunction and location of the failure must be included in this report.

Employees must be aware that when within and leaving yards, terminals, and Other Than Main Track, the PSS feature will not become effective until after a favorable Cab Signal speed command has first been received. Also, certain wayside Signal System failures can cause the PSS to enforce a train to stop and remain stopped when there is no fault with the PSS on-board equipment.

In the event of a PSS malfunction and when so authorized by the Dispatcher, the PSS seal may be broken and the PSS cut-in/cut-out switch moved to the cut-out position.

The train may then proceed from an intermediate point on a line to an end-of-line terminal or from any point to a location where the equipment can be repaired if necessary, and where the PSS cut-in/cut-out switch can again be sealed in the cut-in position.

No other movements of a unit with the PSS seal broken may be made on the leading end of a train unless authorized by the Superintendent of Transportation.

The Engineer must consider the failed apparatus as being inoperative until the equipment has been repaired, tested, sealed and found to be functioning properly.

If the train crew is unable to communicate with the Dispatcher, the train may follow the procedures in this rule and then proceed at not exceeding Restricted Speed to the first point of communication, at which location a report must be made to the Dispatcher. When authorized by the Dispatcher, the Restricted Speed requirement shall no longer apply.

14.9B PSS and Berthing Call-On

The Berthing Call-On is a feature of the Signal System controlled by the Operator that is provided at certain locations. The Berthing Call-On feature overrides the PSS to allow a train to enter a station and/or pull up to a Stop aspect at Restricted Speed.

The Berthing Call-On feature may only be used by the Operator after the Dispatcher has instructed the Engineer as to the desired movement.

14.9C PSS and the Terminal Mode Key Switch

If a train is being enforced to remain stopped, the Dispatcher may verbally authorize operation of the on-board Terminal Mode Key Switch, which will override the PSS and permit train operation at Restricted Speed until a more favorable Cab Signal speed command is received.

When a Reverse Movement is authorized to be made per the applicable rule(s), operation of the Terminal Mode Key Switch may be required to allow the train to reach the point where a proceed Cab Signal can be received.

On Main Tracks, within interlockings, and within Extended Interlocking Limits, the Terminal Mode Key Switch may be used only when the Dispatcher believes that the enforced stop may be caused by a wayside condition and not by a failure of the on-board PSS equipment. In such cases, the Terminal Mode Key Switch must not be operated until after the Dispatcher has instructed the Engineer as to the desired movement and has verbally authorized the use of the Terminal Mode Key Switch.

The Terminal Mode Key Switch may be used on Other Than Main Track without permission.

14.10 Cab Signal Aspect Flips

When the Cab Signal aspect "flips," momentarily changing aspect and then returning to the original aspect, the Engineer must notify the Dispatcher as soon as possible without delaying the train. The Engineer must give the following information:

"Cab Signal flipped from (aspect – such as 45 MPH) to (aspect – such as Restricting) on track (number) at (location) or between (designated points if multiple occurrences)."

When the "flip" holds for a duration of time that requires the Cab Signal to be acknowledged, the Engineer must so state when reporting the occurrence.

14.11 Dispatcher's Responsibility for Recording Movements

The Dispatcher must record on the Record of Train Movements all train movements operating under any of the following conditions:

1. Non-Equipped Train.

2. Partially Equipped Train.

3. Failed Train.

4. Train with PSS failure.

5. Engineer Not on Leading End.

For each such train, the Dispatcher must record the time and location of all authorizations and instructions given per Rules 14.2, 14.6B, 14.8, 14.9A, 14.9B, 14.9C and 14.13.

The Dispatcher must also record "non-conformities" reported per Rule 14.4A, malfunctions reported per Rules 14.6A, 14.7 and 14.9A, and Cab Signal "flips" reported per Rule 14.10.

14.12 Engineer's Responsibility to Report on Forms

In addition to verbally reporting flips, failures, nonconformities, and other unusual occurrences of the CSS, ATC and PSS apparatus as required by these rules, the Engineer shall report them on the prescribed form.

14.13 Engineer Not on Leading End

A train must not be operated with the Engineer on other than the leading end of the movement unless authorized by the Dispatcher. Such movements shall be handled in the same manner as for a Failed Train, except that the CSS and ATC shall remain cut-in with switches sealed if feasible.

Train movements controlled in this manner must not exceed ten (10) MPH within terminal and Interlocking Limits, and must not exceed fifteen (15) MPH outside of terminals and Interlocking Limits.

END OF SECTION

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15.0 FORM X AND FORM Z AUTHORITIES

15.1 Purpose and Application of Form X's and Form Z's

Form X's and Form Z's may be issued by the Dispatcher to restrict or authorize movements, or to convey instructions in situations not covered by the Operating Rules or Timetable Special Instructions.

A Form X when issued to a train or track car applies only to that specific trip of that specific train or track car.

A Form Z when issued to a train crew or Track Car Driver applies to the movement of all trains and track cars operated by that train crew or Track Car Driver for their entire tour of duty.

15.2 Issuing a Form X or Form Z

For movements or other purposes requiring their use, Form X's and Form Z's must be issued by the Dispatcher. Form X's and Form Z's must be numbered consecutively each day beginning at Midnight.

15.3 Completing Form X and Form Z Properly

All information shown on these forms must be legible and without erasure or alteration. Only authorized abbreviations may be used, and commas must be used to separate numbers or locations listed in a series.

Applicable Form X and Form Z line numbers must be circled. Employees must review the entire form for additional information. When a time is shown anywhere on a Form X or Form Z, the time must be shown in four digits plus AM or PM. Thus 7:01 AM must be shown as 0701AM and 2:01 PM must be shown as 0201PM.

The Dispatcher must record each Form X or Form Z in the appropriate booklet before it is issued.

Operators must keep an office copy of each Form X and Form Z received.

15.4 Addressees

Form X's and Form Z's must be addressed to those who are to execute them, indicating the date and naming the location at which each is to receive his copy.

15.4A Form X Addressed to a Train

A Form X for a train must be addressed to the Conductor and Engineer, and to anyone who acts as its Pilot. The Form X must include the identity of the specific train. Scheduled trains shall be identified by the abbreviation "NUM" plus the schedule number and engine number, for example: "NUM 101 ENG 903."

Extra trains shall be identified by the word "EXTRA" plus the engine number, for example: "EXTRA 933."

Blanket addresses may also be used, such as "All Eastward Trains." However, a Form X with a blanket address only applies to that specific trip of those trains receiving the Form X and must not be used by train crews for any other train or movement.

The Dispatcher must record the time that a Form X is delivered to or received by a train. In the case of a blanket address, the Dispatcher must also record the identity of the specific trains that received the Form X.

15.4B Form X Addressed to a Track Car

A Form X for a track car must be addressed to the Track Car Driver and to anyone who acts as its Pilot. Track cars must be identified by the abbreviation "TC" plus the alphanumeric designation of the equipment, for example: "TC M8876."

If more than one track car is to operate on the same Form X authority, the number of additional pieces must be specified, for example: "TC M7922 plus 3."

15.4C Form Z Addressed to a Train Crew or Track Car Driver

A Form Z must be addressed to specific Conductors, Engineers, Track Car Drivers and/or Pilots. Examples include "CNDR A. Buchan", "ENGR H. Bongaardt", "TCD S. McEvoy" and "C&E J. Kimbrig & K. Benson & Pilot J. Russell."

Blanket addresses may also be used, such as "All Reporting C&E" and "All Reporting TCD".

The Dispatcher must record the time that a Form Z is delivered to or received by an employee. In the case of a blanket address, the Dispatcher must also record the identity of the specific employees that received the Form Z.

If an employee changes from train service to track car service or vice versa during a tour of duty, a new Form Z must first be obtained.

15.5 Photocopies; Additional Written Copies

A photocopying machine may be used to make additional copies of a Form X or Form Z. When a photocopying machine is used, the employee making the copies must examine each copy for completeness and legibility before delivering.

When additional copies are written, Operators must repeat them to the Dispatcher and initial them below the Dispatcher's name before delivering. The Dispatcher must ensure that the Form X or Form Z is repeated correctly. For each additional writing, the Operator must keep an office copy showing the time and date of the repetition.

15.6 Examination Before Delivery

Copies of Form X's and Form Z's made with pressure sensitive or carbon paper must be examined for legibility before delivery.

15.7 Form X and Form Z Delivery

The Dispatcher may personally deliver Form X's and Form Z's to addressed employees, or he may transmit the forms to an Operator, who shall then be responsible for delivering them as addressed. Form X's and Form Z's may be physically delivered to the addressed employees; they may be dictated to them by radio, telephone, or in person; or they may be delivered to them by electronic transmission.

15.7A Physical Delivery of Form X or Form Z

When a Dispatcher or Operator physically delivers one or more Form X's and/or Form Z's to an employee, the Dispatcher or Operator must complete the delivery portion of the top Form X or Form Z in the set delivered, indicating the numbers of all Form X's and Form Z's delivered. Form Z's must be placed on top of Form X's.

Receiving employees must see that the information shown in the delivery portion corresponds to the Form X's and Form Z's received, and must deliver a copy of the Form X's and Form Z's to the other crew members addressed.

15.7B Dictation of Form X or Form Z by Radio, Telephone or in Person

Form X's and Form Z's may be dictated only to employees who are qualified on the Operating Rules. Form X's and Form Z's must not be dictated to or copied by an employee operating the controls of a moving train or track car. Form X's and Form Z's may not be transmitted to the crew of a moving train or track car when, in the judgment of either the Conductor, Engineer, Track Car Driver or Dispatcher, the transmission may interfere with the safe operation of the train or track car.

When dictating and repeating Form X's and Form Z's, employees must read aloud and plainly pronounce all applicable preprinted and written portions. Numerals in Lines 1 through 12 of Form X's and Form Z's must be pronounced digit by digit. For example, "105" shall be pronounced "one-zero-five."

Before dictating a Form X or Form Z, the Dispatcher must specify the type of Form (X or Z) and the number of copies to be made if more than one copy is required. The Dispatcher must not give the "Time Effective" until the Form X or Form Z has been repeated correctly. Once the Dispatcher has given his name, receiving employees must immediately repeat from their copy in the same order they were addressed, unless otherwise directed. Employees must listen while other addressees repeat Form X's and Form Z's and call attention to any discrepancies. Once all addressees have repeated the Form X or Form Z correctly, the Dispatcher shall give "Time Effective," which must then be repeated by each of the receiving employees.

When a Form X or Form Z is dictated to an employee on a train, the receiving employee must ensure that the other employees on the train who are addressed in the Form X or Form Z receive a copy of it before reaching the first location where employees must act upon the instructions in the form. If physical delivery of the Form X or Form Z is not practical, the receiving employee must dictate the Form X or Form Z information to the other employees addressed, who must copy and repeat the Form X or Form Z information.

When a Form X or Form Z is relayed by employees, the dictating employee must follow the procedures outlined above for Dispatchers. "Time Effective" must not be transmitted until the receiving employee correctly repeats the Form X or Form Z.

15.7C Electronic Transmission of Form X or Form Z

Employees receiving a Form X or Form Z by electronic transmission must examine each copy for completeness and legibility. They must then communicate with the Dispatcher to repeat the number, date, address and content of each Form X and Form Z received by electronic transmission.

15.8 Reading and Complying with Form X's and Form Z's

Employees addressed must immediately read Form X's and Form Z's and are responsible for compliance with their requirements. When practical, Form X's and Form Z's must be shown to other employees on the train or track car. These employees must read the forms received and, if necessary, remind employees addressed of their requirements.

Crew members located in the operating cab of a train must communicate to each other in an audible and clear manner the content of each Form X and Form Z received governing the movement of their train sufficiently in advance to permit compliance.

15.9 Communication Failure

If communication fails before a Form X or Form Z has been given a "Time Effective," trains and track cars addressed must not proceed nor be given permission to proceed until communication has been reestablished and the "Time Effective" given.

15.10 Errors Discovered

If an error is discovered in a Form X or Form Z before the "Time Effective" has been given, the Dispatcher must direct all receiving employees to destroy their copies. The Dispatcher must mark "Void" on his copy of the Form X or Form Z in the appropriate booklet, then reissue the Form X or Form Z under another number.

If an error is discovered in a Form X or Form Z after "Time Effective" has been given, the Form X or Form Z must be canceled.

15.11 Additions to Form X or Form Z

Once a Form X or Form Z has been given a "Time Effective," only the following information may be added to the form:

1. Form X or Form Z cancellation information. See Rule 15.17, "Canceling Form X's and Form Z's."

2. Form X block is clear information. See Rule 16.9A**,** "Track Car Following Trains and Other Track Cars." This is applicable only to track cars.

3. Form X additional Line 8 and/or Line 11 authorities. See Rule 16.8, "Additions to Form X Lines 8 and 11." This is applicable only to track cars.

15.12 Delivery at an Interlocking

When a Form X or Form Z is to be delivered to a train at an interlocking, the Dispatcher before issuing the Form X or Form Z must ensure that Blocking Devices are applied as necessary to prevent addressed trains from passing or leaving the interlocking without receiving the Form X or Form Z. These Blocking Devices must not be removed until all Form X's and Form Z's have been delivered. When there are no other reasons for the Blocking Devices to be applied, one or more of these Blocking Devices may be removed to route a train that has received the Form X or Form Z; the Blocking Device(s) must be immediately reapplied after the train passes the involved Controlled Signal if delivery of a Form X or Form Z must still be made to other trains.

Blocking Devices are not required at locations where train crews are required to inquire about Form X's and Form Z's prior to departure.

15.13 Delivery to a Train or Track Car That Will Have Movement Restricted in Immediate Vicinity

When a Form X or Form Z restricting the movement of a train or track car covers a portion of track that is prior to the next Controlled Signal that can be held at Stop to ensure delivery, the train or track car must be stopped to receive the form.

15.14 Delivery to Relieving Conductor, Engineer or Track Car Driver

When a Conductor, Engineer or Track Car Driver is relieved while a train or track car is still en route, all Form X's and non-Form Z instructions that have not been fulfilled or canceled must be delivered to the relieving Conductor, Engineer or Track Car Driver. Conductors and Engineers must compare all Form X's, Form Z's and other instructions with each other to confirm that both employees have the same information.

The relieving crew or Track Car Driver must contact the Dispatcher if they are unable to communicate with the crew or Track Car Driver that they are to relieve. The Dispatcher must ensure that they have received all instructions affecting the movement of their train or track car before proceeding.

15.15 Speed Restrictions

Temporary speed restrictions must be listed on Form X or Form Z Line 1 in sequential order from west to east. The limits of the restriction must be designated by stations and/or by Controlled Signals, and/or by mile posts or half-mile posts that are known to physically exist in the field, and/or by mileages based on physically-existing mile posts or half-mile posts. The time at which the temporary speed restriction becomes effective must be shown. If the temporary speed restriction is effective immediately, the box for the effective time must be marked with an "X".

Temporary Speed Signs should be placed in the field as soon as is practical. When Temporary Speed Signs cannot be displayed immediately, the Dispatcher must not use portions of a mile (other than whole or half miles for which field markers are installed) on the Form X or Form Z. Until the Temporary Speed Signs are installed, the SB, SBS, Form X or Form Z notification must include the notification that the speed signs are not in service.

15.16 Effective Period of a Form X or Form Z.

Form X's and Form Z's are in effect until fulfilled or until canceled. A Form Z becomes void to a Conductor, Engineer or Track Car Driver after finishing his tour of duty (including extensions authorized by the Dispatcher), and new service must not be performed until first complying with the Section 7.0 "Reporting for Duty" rules.

Form X's and Form Z's that have been fulfilled or canceled must be marked with an "X" and then retained and held available for inspection for a period of thirty (30) days. This includes Form Z's that became void to employees as prescribed by this rule.

15.17 Canceling Form X's and Form Z's

Form X's and Form Z's that need to be canceled shall be canceled on the same form, as follows:

1. The Dispatcher must contact the addressee(s) and state his intent to cancel the Form X or Form Z.

2. The Dispatcher must state the Form X or Form Z number and date, the cancellation time and date, and his initials.

3. The Dispatcher and the addressee(s) must record all cancellation information on the appropriate section of their copy of the Form X or Form Z.

4. The addressee must repeat the Form X or Form Z number and date, and all cancellation information to the Dispatcher.

5. The Dispatcher must ensure that all cancellation information is repeated correctly.

When cancellation information is transmitted to an employee on a train, the receiving employee must ensure that all addressed employees on the train receive the cancellation information and mark their Form X or Form Z accordingly.

Operators who have received a copy of the original Form X or Form Z may be directed by the Dispatcher to relay cancellation information to other employees. The Dispatcher must not mark an "X" on his copy of a Form X or Form Z until he has canceled the Form to all affected addressees, and until every such employee has acknowledged the cancellation either personally or by relay.

If only part of the instructions on a Form X or Form Z is to be canceled, a new Form X or Form Z must first be issued with the information/instructions that are not being canceled. After this is done, the original Form X or Form Z can be canceled on the original form.

15.18 Carry Sufficient Blank Form X's and Form Z's

When on duty, Operators, Engineers, Conductors, Track Car Drivers, Foremen and other Employees-in-Charge must have in their possession and available for immediate use, a copy of the prescribed Form X/Form Z booklet with at least ten (10) two-part or three-part blank forms. (Three-part blank forms are required for Operators.) All Form X's and Form Z's must be retained and held available for inspection for a period of thirty (30) days.

15.19 Form X and Form Z Repeat Times

When a Form X or Form Z is relayed via several employees such as from the Dispatcher to an Operator to a Conductor to an Engineer, or when a later copy of the Form X or Form Z is made, the repeat time to be recorded on each copy is the time that that copy was repeated.

15.20 Illustration of Blank Form for Form X and Form Z

An illustration of the blank form for Form X's and Form Z's is at the rear of these Operating Rules.

END OF SECTION

16.0 MOVEMENT OF TRACK CARS

Warning: Track cars may not shunt (activate) or reliably shunt track circuits. Because of this and other reasons, special additional rules are required to provide for the safe operation and protection of track car movements.

16.1 Use of Track Cars

Track cars shall only be used for Company business. Except for SIRTOA employees engaged in Company business for which the use of a track car is required, no other persons are permitted to ride on track cars unless provided with permission of the Superintendent – Maintenance of Way. Personnel so authorized to ride on a track car must comply with all safety-related Operating Rules applying to employees.

While on SIRTOA property, track cars owned and/or operated by contractors shall be subject to all SIRTOA Operating Rules and track car rules contained herein.

A designated number is assigned by the General Superintendent – Maintenance to each individual track car, which designation contains the prefix letter M. This "M plus number" identification is displayed on each track car. In all communications and documents, a track car is to be referred to by this designation.

16.2 Supervisor's Responsibilities

Supervisors are responsible for knowing that employees under their jurisdiction who operate track cars or secure work authorities (such as to foul a track) are qualified and periodically re-examined on the Operating Rules and Special Instructions applicable to their duties in accordance with Rule 16.3B.

Note: The Superintendent – Maintenance of Way shall supply employees under his jurisdiction with the Operating Rules (rulebook), Timetable Special Instructions, Superintendent's Bulletin and Superintendent's Bulletin Supplements.

16.3 Track Car Drivers, Foremen and Employees-in-Charge

16.3A Responsibilities and Governing Rules

Track Car Drivers, Foremen and other Employees-in-Charge are in charge of the track cars under their jurisdiction and are governed by the Operating Rules that apply to trains and track cars, except as modified by these "Movement of Track Cars" rules. Except for operations within an out-of-service track conducted under Rule 10.4 and for operations within Working Limits conducted under Rule 10.7, a qualified Track Car Driver must accompany each track car. Except when the Track Car Driver is the actual

operator of the equipment, the Track Car Driver must be in position to observe and give instructions to the operator of the track car or equipment and be responsible for securing all verbal and written authorities and instructions, and for complying with all Operating Rules and Special Instructions. One Track Car Driver may be in charge of multiple pieces of equipment that are operated as a single track car. One Foreman or Employee-in-Charge may be in charge of multiple pieces of equipment that are operated under the same work authorities. The Track Car Driver, Foreman or other Employee-in-Charge is responsible for properly instructing each equipment operator under his jurisdiction.

16.3B Qualifications

Track Car Drivers, Foremen and Employees-in-Charge must be qualified on the Operating Rules and Special Instructions applicable to their duties, and on the physical characteristics of the territory on which they are to operate.

1. Before employees are authorized to operate track cars or secure work authorities, they must pass a written examination.

   Exception: Equipment operators who are not qualified as defined herein may operate track cars when under the direct supervision of a qualified Foreman, Track Car Driver or other Employee-in-Charge.

2. Employees who operate track cars or who are responsible for their operation shall be re-examined once every two years, or more often when required, on the Operating Rules and Special Instructions applicable to their duties.

16.4 Inspection of Track Cars

16.4A Performing Visual Inspection

The Foreman, Track Car Driver or other Employee-in-Charge must perform a visual inspection to see that the track car is in safe operating condition before operating it. Track cars must not be operated if found to be in an unsafe condition.

16.4B Proper Signaling Equipment

Track cars must be equipped with the proper equipment for signaling as specified in Rule 4.1. Such equipment must be in good working order and ready for immediate use.

16.4C Loading of Tools and Materials

Tools and materials shall be loaded aboard track cars in such a way that they will not fall off or otherwise endanger any person, property, train or track car.

16.4D Brakes

When track cars are first moved, the brakes must be immediately tested and any defects remedied before proceeding. The brakes must be applied gradually except in an emergency.

16.4E Audible Warning Devices

A self-propelled track car must be equipped with an audible warning device. The warning device and its control must not be obstructed in any way, such as by tools or materials.

16.4F Lights

A check must be made to ensure that all headlights and rear lights are in working order before occupying any track other than an approved/designated storage track for such equipment.

16.4G Approved Devices

All devices applied to track cars must be approved by proper authority.

16.4H Equipment in Need of Repair

A report must be made to the Superintendent – Maintenance of Way when track cars are in need of repairs. Employees to whom track cars are assigned are responsible for their use and condition.

16.4I Red Tagged Equipment

A red tag must be placed on the ignition switch or other control device to clearly indicate that the equipment is being repaired and must not be moved unless under the supervision or instructions of the person making the repairs.

16.5 General Track Car Safety

16.5A Refueling Track Cars

Smoking is prohibited on SIRTOA property. Engines must not be run and open flames must be kept away when fuel tanks are being filled, when gasoline or flammables are handled, and when inspecting track cars. Track cars must not be stopped over open flames if it can be avoided. When so stopped and the track car cannot be promptly moved, the fire must be extinguished.

16.5B Operation in Enclosed Areas

Engines must not be run in enclosed structures unless windows and doors are open.

16.5C Safety Appliances

Employees must not ride on track cars being towed unless such cars are equipped with appropriate safety appliances, including hand brakes, handholds, sill steps and approved couplings.

16.5D Employee Safety

Employees must not get on or off moving track cars. They must not climb over trailer cars that are carrying tools and material to board track cars. Employees must not sit with their feet between track cars coupled together, nor use their feet against rails or ties in stopping track cars.

Track cars must not be crowded. Employees-in-Charge must see that the occupants are properly seated and that a "lookout" is maintained for each direction.

16.5E Transporting of Heavy Materials

Track cars must not be overloaded. Except in emergencies, heavy materials must not be carried on track cars on which personnel are riding. Trailer cars may be used for transporting heavy materials and must, when practicable, be coupled behind track cars with approved couplings.

16.5F Removing Track Cars from Track

When track cars are removed from a track, they must be placed not less than seven (7) feet from the nearest rail and secured to prevent them from moving or fouling the track.

Track cars set off at vehicular crossings must be immediately removed from the roadway. When a vehicular crossing is occupied in an emergency, the track car must be protected against vehicular traffic by an employee and removed from the roadway as soon as possible.

16.6 Placing or Operating Track Cars on Main Track or Within Interlocking Limits

16.6A Requesting Permission to Occupy or Operate on Main Track or Within Interlocking Limits

The Track Car Driver making a request for an authorization to make a track car movement must provide the Dispatcher with the following information:

1. Name,

2. Location,

3. Track car identifying number and number (quantity) of any additional pieces of equipment to be operated under the same authority (such as "TC M7922 plus 3"),

4. Track to be first occupied,

5. Specific points and tracks between and on which the track car movement is to be made, and

6. The amount of time requested to complete the movement.

16.6B Authority to Occupy or Operate on Main Track or Within Interlocking Limits

Form X Line 8 in conjunction with Line 9 is the authority for the movement of a track car on Main Track or within Interlocking Limits, and must be obtained before track cars are placed upon or operated on such tracks. To authorize movement in both directions, Line 8 shall read "BETWEEN A AND B" where A and B represent station names or signal numbers. To authorize movement in only one direction, Line 8 shall read "EWD (or WWD) FROM A TO B".

The entry on Form X Line 9 for "block condition" shall be either the word "OCCUPIED" or the word "CLEAR".

The only situations where this Form X authority is not required are when the track car is operated within a track section that is out-of-service track per SB, SBS, Form X Line 2 or Form Z Line 2, or when the track car is operated within Working Limits protected by Stop Signs per SB, SBS, Form X Line 3 or Form Z Line 3.

Controlled Signals must not be cleared for track car movements. Except when Rule 10.4D applies, Form X Line 11 authority must be received for each Controlled Signal to be passed while displaying Stop, after first complying with the requirements of Rule 11.2.

The Form X shall include the Line 8 authority, the Line 9 information, and any required Line 11 authorities. The Form X may also include other pertinent instructions.

When a track car is to be routed past a Controlled Signal directly to Other Than Main Track, only Form X Line 11 authority will be required for such movement.

Track Car Drivers operating hand-operated switches must examine the switch points and know that they properly fit the rail. Where a derail is in service, the Track Car Driver must confirm that it is in the proper position before and after operation. A track car must not foul or enter a track until all switches and derails involved with the movement are properly lined.

16.6C Separate Authorities for Each Track Car

A separate authority shall be issued for each track car movement. When the Form X authority includes a specific number of additional pieces of equipment, the Track Car Driver may permit the track car and the additional pieces of equipment to operate together as one contiguous movement under the conditions imposed and within the limits designated on the Form X. The Track Car Driver must know that the track car and ALL additional pieces of equipment are clear of a particular point/location, an interlocking, or Main Track, BEFORE any such report is made to the Dispatcher.

16.6D Dispatcher Responsibilities

Before issuing a Form X authorizing the placement of a track car on a Main Track or within Interlocking Limits, and before issuing a Form X authorizing any subsequent movement of the track car, the Dispatcher must ensure that:

1. No trains have been authorized to move in the direction of the point to be occupied past the last Controlled Signal(s) protecting the track to be occupied, AND

2. Signals governing opposing and following movements are in Stop position, AND

3. Involved switches and derails are in the proper position, AND

4. Blocking Devices are applied to interlocking exits, signals and/or switches as required to protect against opposing and following movements, AND

5. Blocking Devices are applied to the involved switches and derails in the route, AND

6. The Dispatcher must first issue a copy of the Form X to all involved Operators.

Note: This protection must be maintained until the Track Car Driver reports clear.

16.6E Dispatcher Not Available or Cannot Provide Protection

If the Dispatcher cannot provide protection, or if communication is not available, track car movements may DURING EMERGENCY CONDITIONS be made outside of Interlocking Limits under flag protection when authorized by the Superintendent of Transportation or his designee.

16.6F Operation Within Out-of-Service Track or Within Working Limits

Track car movements in conjunction with operations being performed within an Out-of-Service Track or within Working Limits may be made on verbal permission of the Employee-in-Charge as prescribed by Rule 10.4 and subsections thereof, or Rule 10.7 and subsections thereof.

16.6G Listing Temporary Speed Restrictions

Any temporary speed restrictions applying to track cars within the area of the movement (that have not been previously conveyed by a Form X or Form Z) shall be shown on Line 1 of the Form X. The Dispatcher may impose a "blanket" temporary speed restriction on the track car in the Form X instead of listing multiple temporary restrictions.

16.7 Placing or Operating Track Cars on Other Than Main Track

Track car movements on Other Than Main Track may be made with verbal permission of the Employee-in-Charge of the track, if any such employee has been designated in the Timetable Special Instructions. Where no designated employee is in charge of an Other Than Main Track, track cars may occupy the track with verbal permission of the Dispatcher.

If communication is not available, track cars may occupy Other Than Main Track without permission and communicate with the designated employee or Dispatcher as soon as is practical.

16.8 Additions to Form X Lines 8 and 11

The Dispatcher may direct addressee(s) to add additional Line 8 and/or additional Line 11 authorities for the same direction to a specified-direction Form X that is still in effect provided that the occupancy condition ahead does not change from CLEAR to OCCUPIED.

Before issuing additional Line 8 authorities, protection as prescribed by Rule 16.6D must be afforded.

Before issuing additional Line 11 authorities, Rule 11.2 must be complied with.

Additional Form X Line 8 track car movement authorities and/or additional Form X Line 11 authorities to pass Controlled Signals shall be added as follows:

1. The Dispatcher must contact the addressee(s), state his intent to give them an additional Line 8 and/or additional Line 11 authority, and state the number and date of the Form X to which the new Line 8 and/or Line 11 authorities will be added.

2. The Dispatcher shall then transmit the additional Line 8 authorities and/or additional Line 11 authorities, and his initials. The addressee(s) after copying the additions shall repeat the new authorities. The Dispatcher must not transmit the "time" of the addition(s) to the addressee(s) until after they have correctly repeated the new authorities. The addressee(s) must not act upon the additional authorities until they receive and record the "time" of the addition.

3. The Dispatcher and the addressee(s) must record all additional information on Lines 8 and 11 of their Form X. Once all the Line 8 and/or Line 11 blank lines are used, a new Form X must be issued.

16.9 Track Car Following Trains and Other Track Cars

16.9A Authority to Follow

A track car with a specified direction operating under Form X Line 8 authority may be permitted to follow a train or another track car when Form X Line 9 specifies that the block is OCCUPIED, but only when the preceding movement does not have authorization to reverse direction. Opposing track car movements must not be authorized unless they are restricted to separate non-overlapping portions of the block.

When no trains or track cars are ahead, the word CLEAR must be written on Line 9 of the Form X. When Line 9 indicates that a train or track car is ahead by the word OCCUPIED, the track car must operate at Restricted Speed.

When all trains and track cars ahead clear the limits of the following track car's Line 8 authority, the Dispatcher may authorize the following track car to operate at Normal Speed. To make this authorization, the Dispatcher must instruct the Track Car Driver to "strike out" the Line 9 word OCCUPIED and to add the word CLEAR plus the time and Dispatcher's initials to Line 9 of the original Form X.

16.9B Spacing Behind Train Ahead

Track cars must not be attached to trains. On Main Track and within Interlocking Limits, track cars must not be run closer than six hundred (600) feet behind a moving train nor stopped within two hundred (200) feet of a standing train.

16.9C Spacing Between Following Track Cars

The space between moving and/or standing track cars must be sufficient to avoid the risk of an accident. Track Car Drivers and equipment operators shall signal when slowing or stopping.

16.10 Train Following Track Car

Except in an emergency, a train must not be permitted to follow a track car. In an emergency, the Dispatcher may permit a train to follow a same-direction track car by issuing Form X Lines 9 and 10 instructions. Line 9 of the Form X must include the identification of the track car in the format OCCUPIED BY TC M1234 PLUS 3. In addition, Line 10 of the Form X must instruct the train to operate at Restricted Speed for the entire Line 8 limits of the track car.

16.11 Interlockings and Controlled Signals

16.11A Approach Prepared to Stop at Controlled Signals

Unless a track car has Form X authority to pass a Controlled Signal as prescribed by Rules 16.6B or 16.8, or has verbal authority to pass a Controlled Signal in accordance with Rule 10.4D, the track car must approach all Controlled Signals prepared to stop.

16.11B Dispatcher's Responsibility for Aligning Routes

The Dispatcher must properly line the route for the movement of track cars at an interlocking in accordance with Rule 11.2 and its subparts. Controlled Signals must not be cleared/displayed for track car movements.

16.11C Reporting Past and Clear of Interlocking

Unless otherwise instructed, the Track Car Driver must report past and clear at all interlockings. Once a Track Car Driver reports past and clear of an interlocking or other location, the Form X authority is fulfilled to that point, and the track car may not reenter the vacated trackage without a new Form X granting the necessary authority. This rule applies to both unidirectional and bidirectional Form X authorities.

16.12 Physically Clearing the Track Specified on Form X Line 8

When a track car physically clears the track specified on Form X Line 8 at any location, the Track Car Driver must promptly report physically clear to the Dispatcher to avoid delays to operations. Track cars shall not be considered clear, nor the Form X considered fulfilled, until the Track Car Driver reports to the Dispatcher that the track car is physically clear.

When a track car physically clears the track specified on Form X Line 8 at any location, that Form X is fulfilled. A new Form X must be issued in accordance with Rule 16.6B before the track car may again occupy a Main Track or Interlocking Limits.

A track car physically clearing a Main Track at a hand-operated switch must also report the fact that the track car is behind/beyond the fouling point, and that all involved switches and derails have been locked in the normal position.

16.13 Specified Directions and Specified Limits

A track car authorized by Form X Line 8 to operate in a specified direction must not operate in the opposite direction without a new Form X being issued authorizing such movement and canceling the original Form X.

A track car with Form X authority to operate in both directions may operate in either direction within the specified limits. When authority for movement in both directions is issued, the Dispatcher must not authorize additional movements within the specified limits.

16.14 Opposing Movements of Track Cars

The Dispatcher may permit opposing movements of track cars between two interlockings only if the movements are restricted to separate portions of the block.

16.15 Grade Crossings

Track Car Drivers must approach vehicular and pedestrian grade crossings prepared to stop and determine that it is safe to pass over the crossing before proceeding. Vehicular and pedestrian traffic at a grade crossing has the right-of-way over track cars. Track car warning devices shall be sounded only when necessary.

16.16 Operating Over Switches and Movable Point Frogs

Track cars must not pass over switches or movable point frogs until it is determined that such appliances are properly lined.

16.17 Movement of Multiple Track Cars

Multiple track cars and pieces of equipment operating on the same Form X Line 8 and/or Line 11 authority must regulate their speed to permit stopping short of equipment ahead. The Track Car Driver addressed in the Form X must inform other employees operating equipment under his jurisdiction about the contents of the Form X before acting upon it. If necessary, operators of the additional track cars and equipment must remind the Track Car Driver addressed in the Form X about the contents and requirements of the Form X.

16.18 Displaying Lights

Track cars, when so equipped, must display a white light to the front and a red light to the rear at all times. A check must be made to ensure that these lights are in working order before occupying any track other than an approved storage track for such equipment.

Lights must be obscured from the view of trains when track cars are removed from and clear of all tracks.

Track cars equipped with high-beam headlights must have the “high beam” “switched on” when moving on any track.

16.19 Track Car Maximum Speeds

Track cars (including Rail Detector and Geometry Cars) must operate prepared to stop within one-half the range of vision, but not exceeding the authorized speed shown in the Timetable Special Instructions for “All Other Trains” for the same track segment, but not exceeding twenty (20) MPH, whichever speed is lower. When a track car movement is subject to multiple speed restrictions due to multiple applicable rules, Special Instructions and/or Form X and Form Z instructions, the lowest speed shall apply.

Failure to operate a track car in compliance with the applicable speed, or failure to correct the operation of a track car that is not operated in accordance with the applicable speed, as determined by direct observation, extrapolation or radar detection, may result in removal from service and disciplinary action.

Unless modified by the Timetable Special Instructions for specified types of equipment, the following additional speed restrictions apply to the movement of all track cars:

When operating through self-guarded frogs or switch point guards	1 MPH
When passing over switches and frogs	5 MPH
When passing over vehicular and pedestrian grade crossings	5 MPH
When passing personnel working on or near the tracks	5 MPH
When passing standing trains on adjacent tracks	10 MPH
When pulling/towing equipment	15 MPH
When pushing equipment	10 MPH
When being passed by a train on an adjacent track, the track car speed must be reduced to and not exceed ten (10) MPH and a careful lookout must be maintained for unsafe conditions.	10 MPH

16.20 Unattended On-Track Equipment

When any type of on-track equipment is not continuously attended by the Employee-in-Charge of the equipment, the equipment must be secured to prevent movement. Unless authorized by the Dispatcher, such equipment must be stored only on an approved/designated storage track for such equipment.

16.21 High Noise Level Machines

When work is being performed using high noise level machines, the Employee-in-Charge will be responsible for obtaining and/or providing appropriate protection on the adjacent tracks to ensure the safety of the work personnel.

For Main Tracks and tracks within Interlocking Limits, this protection may include temporary speed restrictions and signals, protection by Stop Signs or Working Limits Speed Limit Signs, Foul Time, and/or flag protection.

For Other Than Main Tracks, this may include protection per Rule 10.12. The Employee-in-Charge will be responsible for posting lookouts for approaching trains.

Employees working on or about the tracks must, upon the approach of a train or track car, move to a place of safety.

16.22 Communications

16.22A In Contact With Proper Persons

Employees using radios or other means of communication in connection with track car movements or work authorities must satisfy themselves that they are in contact with the proper persons. They must repeat all information received in connection with track car and train movements, and they must not consider the conversation finished until all persons taking part in the communication are assured that all the conversation has been heard and understood by all involved parties.

16.22B Repeating Authorities

The qualified employee copying a Form X or Form Z must repeat it to the person from whom it is received in accordance with Rule 15.7B and associated rules. When Form X's and Form Z's are physically delivered, Rule 15.7A and associated rules must be complied with. In addition, these Form X's and Form Z's must be read aloud to the employee from whom received, and before proceeding, must be read aloud to those accompanying the track car.

16.22C Radio Volume

Employees operating track cars equipped with a Company radio must adjust the volume so that calls can be received at ALL times.

16.23 Fusees

A Track Car Driver finding a fusee burning on or near the same track must stop. It may then proceed at Restricted Speed for one (1) mile beyond the fusee. Unattended fusees must be reported to the Dispatcher.

16.24 Torpedoes

When torpedoes are encountered, struck or exploded by a track car, the track car must be stopped and the torpedoes replaced at the same location just behind the track car. The track car may then proceed at Restricted Speed while looking for an obstruction or Flagman for a distance of one (1) mile. Unattended torpedoes must be reported to the Dispatcher.

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17.0 RADIOS AND TELEPHONES

SIRTOA's radio communication system uses portable, mobile and fixed-location radio stations and equipment for the transmission of SIRTOA-related voice communications between SIRTOA employees. Radio communications are under the jurisdiction of the Federal Communications Commission (FCC).

17.1 Purpose

These rules are issued to ensure uniform compliance by SIRTOA employees with the rules and regulations governing the use of radios and radio communications issued by the FCC, and to promote and ensure the safety of SIRTOA's employees and the Company's operations when conducted and/or directed, wholly or in part, by radio and/or telephone communications.

17.2 Application

All employees using the SIRTOA radio or telephone communication systems shall be governed by these rules.

17.3 Additional Definitions Applying to Radios and Telephones

Base Station – A radio station at a fixed location that transmits and receives radio signals by means of an externally mounted antenna. A base station can be either remotely or locally controlled. This means that the employee transmitting and receiving calls via the base station may be at another location.

Communications - All messages transmitted from a radio station or between radio stations, or via a telephone, from the time when contact is initiated until it is terminated.

Employee - Any person who is authorized by SIRTOA to use its radio or telephone facilities in connection with Company operations.

Message – Any transmission required to communicate a directive, instruction, or any other complete unit of information (For example: a Form X or Form Z, a report of an accident, a report from a train crew to a Dispatcher reporting an observed track condition – These are all messages).

Mobile Station - A transmitting and receiving radio station, other than a portable station, that is capable of movement. Included in this category are radios installed in/on automobiles, engines, cabooses and other on-track and off-track equipment.

Portable Station – A hand-held transmitting and receiving radio station that is personally carried.

Radio Test - An exchange of voice transmissions between two or more radio stations for the purpose of determining the ability to communicate between radio stations and determining the quality or "read-ability" of transmissions.

17.4 Phonetic Alphabet

When necessary for clarity, the following phonetic alphabet should be used to pronounce any letter:

A	=	Alpha	N	=	November
B	=	Bravo	O	=	Oscar
C	=	Charlie	P	=	Papa
D	=	Delta	Q	=	Quebec
E	=	Echo	R	=	Romeo
F	=	Foxtrot	S	=	Sierra
G	=	Golf	T	=	Tango
H	=	Hotel	U	=	Uniform
I	=	India	V	=	Victor
J	=	Juliet	W	=	Whiskey
K	=	Kilo	X	=	X-Ray
L	=	Lima	Y	=	Yankee
M	=	Mike	Z	=	Zulu

17.5 Words and Phrases

When used in radio communications, the following words and phrases have the meaning indicated:

"Emergency" transmitted three times in succession shall be used to obtain the use of a radio channel for initial reports of conditions endangering human life, property and/or train movements.

"Over" means that "my transmission is ended and I expect a response from you".

"Out" means that "my transmission is ended and no response is expected".

"Say Again" means "repeat your last transmission".

17.6 Requirements for Trains

Each train crew must have a working radio on the leading end of the controlling engine when it is dispatched from its initial terminal. Each train crew must also be equipped with a working redundant means for communicating with the Dispatcher. The redundant means shall be a radio on another engine in the train's consist, a portable radio, a cellular phone, or other means of wireless two-way communication.

All Transportation Department employees who have not been issued radios will pick up and drop off radios as instructed by the Dispatcher. Employees in passenger service must keep radio volume at a level that is audible, but at the same time not intrusive to passengers.

17.7 Requirements for Track Cars and Roadway Workers

Track cars must have a working radio. When more than one track car is moving under the same authority, only one working radio is required.

Employees requesting the removal of a track from service, requesting protection by Stop Signs, or requesting Foul Time must have a working radio. Track cars and other on-track equipment operating within the limits of the Rule 10.4 or 10.7 work area with authorization of the Employee-in-Charge need not have their own working radio.

Each employee assigned to provide on-track safety for Roadway Workers and each lone Roadway Worker must have immediate access to a working radio. These requirements do not apply when the work location is entirely clear of tracks, or when the work area is physically inaccessible to trains on the track(s) involved and on the next adjacent tracks during the period when Roadway Workers are present.

17.8 General Radio and Telephone Rules

1. Employees using a radio or telephone must understand and comply with these rules.

2. Employees receiving inquiries, notices, summonses, orders or directives concerning radio violations or radio matters shall promptly notify their supervising officer.

3. Employees are responsible for radio and/or telephone equipment that is assigned to them, in their possession, or temporarily being used by them. Each employee shall be held responsible for careless or willfully negligent acts that result in loss, damage or destruction of radio or telephone equipment. Damaged, destroyed or missing radio or telephone equipment must be promptly reported by the employee to their immediate supervisor. No technical adjustments may be made to a radio or telephone set, except by those employees specifically authorized to do so.

4. Company radios and telephones must be used exclusively for SIRTOA operations. Only radio and telephone equipment authorized and issued by SIRTOA shall be used in the Company's operations. Citizen Band (CB) radios and private cell phones shall not be used for railroad operations.

5. Employees shall permit inspection of the radio equipment in their charge and of all FCC documents pertaining thereto by a duly accredited representative of the FCC at any reasonable time.

6. Any radio or telephone communication that is not fully understood or completed in accordance with the requirements of these rules must not be acted upon and shall be treated as though not sent. Emergency communications and warnings about unsafe and restricted conditions are exceptions. In the case of any doubt or uncertainty, the safe course must be taken.

7. SIRTOA employees intercepting an international distress call ("MAYDAY") or an emergency broadcast from an outside source shall avoid transmitting over the signal. They shall report the particulars to their immediate supervisor as soon as practicable by any available means of communications, and render whatever aid is possible. Do NOT allow such unusual events to impair safety.

17.9 Identification and Initiation of Transmissions

1. When initiating communications, the initiating employee must **FIRST** listen to ensure that the channel on which he intends to transmit is not already in use.

2. When initiating communications from a base station, identification shall be as follows: the name of our Company (SIRTOA); the title and name of the person initiating communication; and the designation of the train, track car, unit, person or radio station being called. Example: *SIRTOA Dispatcher McEvoy, calling Train 123 Conductor Buchan.*

3. When initiating communications from portable and mobile stations, identification shall be performed in the following manner: the name of our Company (SIRTOA); identification of the employee, train, engine, track car or other mobile or portable designation of the person initiating the call; the location (including direction and track number when appropriate) from which the call is being initiated; followed by the identification of the employee, train, engine, track car or other mobile or portable designation of the person being called. Example: *SIRTOA Train 600 Conductor Bongaardt operating eastward on Track 2 at Grant City calling Superintendent Kimbrig.*

4. Persons initiating transmissions must verify that they have made radio or telephone contact with the person or radio station with whom they intend to communicate by listening for an acknowledgement. An employee receiving a radio or telephone call must acknowledge the call immediately unless doing so would interfere with safety. If the radio station or answering telephone acknowledging the transmission fails to identify itself properly, the

initiating employee shall require proper identification. Employees must ensure that radio or telephone contact has been made with the proper person and must not take action until certain that all conversation with them has been heard, understood and acknowledged.

5. Whenever known, the employee's last/family name shall be used and must be preceded by the employee's title. First names shall only be used in conjunction with the employee's last/family name when it is known that there is another employee having the same last/family name. The use of nicknames, first names or code names for identification is prohibited.

17.10 Receiving Communications

1. Employees shall promptly acknowledge all transmissions directed to them or their radio station by using proper identification procedures as outlined above. EXCEPTION: Acknowledging receipt of transmissions may be delayed when necessary to attend to other duties that are vital to safe train operations.

2. Employees receiving a transmission MUST repeat it to the transmitting party unless the communication is general in nature and does not contain any information, instructions or advice that could affect the safety of the Company's operations. This requirement to repeat communications does not apply to switching movements.

17.11 Ending a Transmission

1. At the close of each transmission for which a response is expected, the transmitting employee shall say "*OVER*" to indicate to the receiving employee that the transmission is ended.

2. At the close of each transmission for which no response is expected, the transmitting employee shall state his identification, followed by the word "*OUT*" to indicate to the receiving employee that the exchange of transmission is complete. Note: It is NOT proper procedure to say "*OVER AND OUT*."

17.12 Communications Testing, Failure, Monitoring and Interference

17.12A Radio Testing

Radios and other required communication devices must be tested to ensure that the equipment functions as intended PRIOR to commencement of the work assignment. The testing of a radio shall consist of an exchange of voice transmissions with another radio.

The employee receiving the "test" transmission shall advise the employee conducting the test about the clarity of the transmission. Radios and other required communication devices that do not operate properly must be removed from service and the Dispatcher notified promptly.

Radio tests shall be performed by the employee using the radio at the beginning of each tour of duty. Only the radios and communicating equipment required by Rules 17.6 and 17.7 are required to be tested. If the use and/or availability of another radio or communication device become required under these rules at a later point in time, that device shall (if not previously tested in accordance with this rule) then be tested immediately.

17.12B Radio Failure

If the radio fails on a train while en route so that no working radio is available on the leading end of the controlling engine, the Dispatcher must be notified as soon as is practical. The train may continue at not exceeding Limited Speed from an intermediate point on a line to an end-of-line terminal or from any point to a location where a working radio may be obtained. No other movements of such a unit may be made without a working radio being on the leading end of a train unless authorized by the Superintendent of Transportation.

If a radio required by Rule 17.7 fails, the Dispatcher must be notified as soon as is practical. A substitute radio must be provided or obtained as soon as is feasible.

17.12C Monitoring

When the duties of an employee involve the use of a radio, the employee must have the radio turned on and tuned to the proper channel at all times. The volume must be adjusted so that all transmissions can be heard.

17.12D Radio Interference

Radio interference from another radio station must be reported to the Dispatcher promptly with information as to location, time, and, if possible, the identity of the interfering radio station.

17.13 Emergencies

1. An emergency radio transmission shall be preceded by the word EMERGENCY repeated three (3) times. The person making the emergency transmission must then properly identify their radio station and the location and nature of the emergency.

2. Emergency messages must contain only essential information, describing as completely as possible, LOCATION, NATURE and DEGREE of the emergency condition or hazard.

3. Emergency communications shall be used to report derailments, collisions, storms, washouts, fires and any hazardous conditions that could result in death, injury, serious damage to property, or disruption of the Company's operations.

4. All employees shall give absolute priority to emergency communications. Once emergency radio communications are in process, the channel shall be kept clear of all non-emergency communications. Except for answering or aiding a radio station in distress, employees shall refrain from sending any communication until it is certain that no interference will result to the radio station in distress. Any employees hearing an emergency transmission are required to monitor the channel and answer or relay emergency transmissions as may be required by the Dispatcher.

5. The radio station transmitting the emergency message must broadcast the words EMERGENCY MESSAGE TERMINATED to advise other radio stations when normal radio communications may be resumed.

6. It is the responsibility of ALL employees to report directly and immediately to the Dispatcher any emergencies as defined in this rule including requests for removal and restoration of Third Rail power.

17.14 Restrictions on Transmissions

Employees shall not knowingly transmit:

1. Any false distress communication.

2. Any unnecessary, irrelevant, or unidentified communication.

3. Any obscene, indecent, or profane remark.

17.15 Transmitting Signal Indications

Dispatchers and Operators must NEVER advise the aspect, name, or indication of any fixed signal, and crew members must NEVER request this type of information. Crew members may use the radio to communicate a fixed signal to other members of the same crew.

Except as provided in Rule 11.2**,** radio communications may not be used to convey instructions that would have the effect of overriding the aspect/indication of a Controlled Signal. Radio communications may not be used to permit a less restrictive action than the indication of any fixed signal.

17.16 Radio Communication Instead of Hand Signals

Employees must take the following actions when radio communications are used instead of hand signals to control a shoving, backing or pushing movement:

1. The employee directing the movement must specify a distance to be traveled. The distance specified must not exceed the distance known to be clear.

2. The movement must stop in one-half of the specified distance, unless additional instructions are received.

3. The names of fixed-signal aspects affecting the movement must be communicated to the Engineer.

If the instructions are not understood or if radio contact is not maintained, the movement must be stopped immediately. If the means of communication is changed, no movement may be made until all crew members have been notified. When within 5 feet of an intended coupling, and after a full stop has been made, the employee directing the movement may state the distance to be traveled to the coupling and authorize the movement to proceed at coupling speed until coupled. In such cases, the movement need not stop in one-half of the specified distance, but must not travel a distance greater than the stated distance.

17.17 Form X's and Form Z's

Form X's and Form Z's shall be issued in accordance with the rules in Section 15.0 of these Operating Rules. When the transmission of a Form X or Form Z is by radio or telephone, communications shall be initiated, conducted and terminated as prescribed by these Section 17.0 rules.

17.18 Radio Communications Concerning Passing Trains

The Dispatcher may accept information regarding the movement of a train from:

1. The Conductor or Engineer of another train, OR

2. A Track Car Driver, OR

3. Another qualified employee.

When necessary to report the passage of a train prior to fouling or occupying a track, employees must identify the passing train by engine number and proper marker display. Dispatchers must not give permission to foul or occupy a track until this information is received.

17.19 Telephone Use

Telephones shall be operated in accordance with any instructions posted at the location. The telephone box shall be closed and locked when not in use. Where a manual cut-out switch is provided, it shall be operated to disconnect the telephone before closing the box. Telephone lines must be yielded promptly for calls pertaining to emergencies and train movements.

17.20 Recording of Communications

Radio and telephone communications may be recorded when they involve:

1. Train radio communications.

2. Dispatcher and Operator telephones.

3. Dispatcher open line.

In addition to the communications specified above, other telephone conversations may be recorded.

17.21 Use of Channels

The normal use of SIRTOA's radio channels is as follows:

Channel 1 – This is the main channel for system-wide communications. Transmissions on this channel are relayed/repeated by Base Stations. Local, train-switching and unnecessary communications are to be avoided on this channel to the maximum extent practical.

Channel 2 – This channel shall be used by field personnel for local communications. Transmissions are limited to line-of-sight and are not relayed/repeated by Base Stations.

Channel 3 – This channel is for yard and terminal communications involving train-switching operations. Transmissions are limited to line-of-sight and are not relayed/repeated by Base Stations.

Channel 1 must be used for/by all train and track car movements on Main Track or within Interlocking Limits (including Extended Interlocking Limits), except for work train and track car movements wholly within an out-of-service track or within Rule 10.7 Working Limits, and also except for communications between crew members of the same train.

When a radio is required under the Operating Rules or Special Instructions, it must be capable of receiving and transmitting on Channel 1. The radio must also be capable of receiving and transmitting on Channels 2 and/or 3 when the need to communicate on these channels is reasonably expected.

END OF SECTION

18.0 ADDITIONAL DUTIES AND RESPONSIBILITIES OF EMPLOYEES

18.1 Applying to Both Train Dispatchers and Tower Operators

18.1A Additional Definition

The term "running time" when used herein in the context of Blocking Devices refers to the period of time and condition after a Controlled Signal is set to Stop until the route locking of that signal releases.

18.1B Blocking Devices

When Blocking Devices are required to protect against a condition, a sufficient number of Blocking Devices must be applied to ensure safety. Additional/redundant Blocking Devices are not required. For example, if trains must be held clear of a track segment between two interlockings, it shall be sufficient to apply Blocking Devices to the one or two interlocking exits leading to that track segment in lieu of blocking the controls of individual signals and switches.

When a condition that must be protected by Blocking Devices exists within Interlocking Limits or elsewhere, and for which "interlocking exit blocking" is inappropriate, insufficient or not available, a sufficient number of Controlled Signals and/or switches/derails must have Blocking Devices applied to ensure safety. Additional/redundant Blocking Devices are not required.

Blocking Devices must not be removed until it is known that protection is no longer required. When it is necessary to remove a Blocking Device to permit a movement that is not restricted, alternative blocking protection must be provided BEFORE removing the original Blocking Device so that continuous protection is provided.

It is common that one Blocking Device must be used to protect multiple conditions. Therefore, before removing a Blocking Device, it must be determined with certainty that there are no other/remaining reasons for keeping the blocking protection in place.

Blocking Devices must not be considered to be applied to a signal until Signal System "indication" is received confirming that the involved signal is displaying Stop and not "running time".

Blocking Devices must not be considered to be applied to an interlocking appliance until Signal System "indication" is received confirming that the involved interlocking appliance is in the correct position AND that the blocking is effective at the interlocking in the field.

Blocking Devices must not be considered to be applied to an interlocking exit until Signal System "indication" is received confirming that no signal is cleared into the track

to be protected (or “running time”) AND that the blocking is effective at the interlocking in the field.

When Blocking Devices must be temporarily removed in accordance with Rule 15.12 or Rule 18.1D, the employee removing the blocking must take special care to not become distracted and to immediately reapply the blocking protection.

Dispatchers and Operators must record the reason(s) for all Blocking Devices that are applied, as required by Rule 18.1F.

Dispatchers are responsible for ensuring that Operators under their jurisdiction comply with the blocking requirements in these Operating Rules and that the Blocking Devices applied afford the necessary protection.

When the rules require the application of Blocking Devices at interlockings and it is not possible to do so because of signal-system or central-control failures, the Dispatcher has authority to provide alternative protection such as applying blocking at other interlockings, and/or issuing Form X or Form Z instructions to involved trains and track cars.

18.1C Providing Protection and Protection of Unsafe Conditions

When the Operating Rules require ensuring that a track is clear of approaching, opposing, following or all movements before granting track occupancy or fouling authority, Dispatchers and Operators must first apply appropriate Blocking Devices and continue to provide that protection until it is no longer necessary.

Model board indications must not be accepted as assurance that a track section is clear of trains, except when the movement has been continuously observed AND when it is known that all trains are accounted for at other locations.

When damage or failures occur to the tracks, bridges, structures, Third Rail or Signal System facilities, or when any other unsafe or hazardous conditions occur such as track obstructions, accidents, fires, etc.; interlocking exits, Controlled Signals and/or interlocking appliances must be immediately blocked to prevent movements into or through the affected area. No movement shall be permitted until the Dispatcher has been advised by a competent employee that the defective facilities and/or hazardous conditions have been examined, repaired (if necessary) and determined safe for train movements.

When notified that work will be performed that will interfere with the safe passage of trains, the Dispatcher shall ensure that all applicable rules are complied with. In addition, interlocking exits, Controlled Signals and/or interlocking appliances must first be blocked to prevent movements into or over the affected track(s). No movement shall be permitted until the employee supervising or performing the work notifies the Dispatcher that the work has been completed.

18.1D De-Energized Third Rail

Before the Dispatcher authorizes the de-energizing of a Third Rail section and immediately after an unexpected Third Rail de-energization, interlocking exits, Controlled Signals and/or interlocking appliances must be immediately blocked to prevent movements into or through the affected area. In the case of an unexpected Third Rail de-energization, trains having third-rail shoes that are closely approaching or have passed the last Controlled Signal before the de-energized section shall be immediately instructed to stop short of the de-energized section if able to do so.

When there are no other reasons for the Blocking Devices to be applied, one or more of these Blocking Devices may be removed for the following reasons:

- To route a train that does not have any third-rail shoes into or through the de-energized Third Rail section.

- To route a train having third-rail shoes that will "turn" before reaching the de-energized Third Rail section, after the Engineer and Conductor have been properly instructed.

If the Third Rail is still de-energized, the Blocking Device(s) must be immediately reapplied after the train passes the involved Controlled Signal.

18.1E Restoring Interlocking Appliances to Normal Position

Except at end-of-line terminals, interlocking switches, derails and movable-point frogs must be restored to the normal position as soon as possible after a movement is completed.

18.1F Record Keeping

Dispatchers and Operators must each maintain a careful record of train and track car movements, and must also maintain a careful record of all significant activities and incidents. Dispatchers and Operators must maintain their "Record of Train and Track Car Movements and Unusual Conditions" in black ink, except that records of track car movements and Blocking Devices must be recorded in red ink.

Whenever the use of Blocking Devices is required, a record must be maintained of why they were applied, when they were applied and when they were removed. This record must be made at once, and never from memory or memoranda. The information pertaining to blocking must be recorded on the Dispatcher's AND Operator's "Record of Train and Track Car Movements and Unusual Conditions" in red ink.

The record must indicate the time that Blocking Devices are applied (BDA) and removed (BDR) by specific interlocking exit, Controlled Signal or interlocking appliance, in accordance with the following examples:

- LDX BDA IXB NUM 2 TRK EAST – 9:01 AM
- LDX BDR IXB NUM 2 TRK EAST – 9:50 AM
- LDX BDA SIG 2W1, SW 1 NOR, SW 3 REV – 11:03 AM
- LDX BDR SIG 2W1, SW 3 REV – 11:15 AM
- LDX BDR SW 1 NOR – 11:55 AM

In the above examples, LDX stands for Landing Interlocking and IXB represents "interlocking exit block". "LDX BDA IXB NUM 2 TRK EAST" means that the interlocking exit blocking has been applied to NUM 2 Track east of Landing Interlocking.

18.1G Transfer to Relieving Employee

Dispatchers and Operators must not leave their post until relieved. They must notify proper authority if their relief fails to report at the prescribed time.

Dispatchers and Operators going off duty must make a written transfer to the relieving employee of all conditions affecting the movement of trains and track cars, including:

1. The number of the latest SB and SBS,

2. All unusual conditions and non-scheduled operations,

3. The location and destination of all extra trains and track cars,

4. Foul Time(s) still in effect,

5. Form X's and Form Z's still in effect,

6. Blocking Devices applied and the reason(s) why they are applied, and

7. Tracks and sidings that are blocked.

The relieving employee must read the transfer information aloud to the employee being relieved and must be certain that he understands the information contained in the transfer. He then must sign the "transfer" in the presence of the employee being relieved.

This rule also applies to when control of an interlocking or territory is transferred from one control machine to another control machine. In such situations, the employee giving up control must read the transfer information aloud to the employee taking control, who must record and repeat the transfer information. The employee taking control must be certain that he understands the information contained in the transfer. He then must sign the transfer information and advise the employee giving up control that he has done so.

18.2 Train Dispatchers – Additional Requirements

18.2A Receiving Instructions

Dispatchers report to and receive their instructions from the Superintendent of Transportation or his designee.

18.2B Qualification

Dispatchers must be qualified on the current versions of these Operating Rules, the Timetable Special Instructions, the Timetable Schedules, the Superintendent's Bulletin, and all Superintendent's Bulletin Supplements in effect, and must also be qualified on the current physical characteristics of the territory, before accepting an assignment as a Dispatcher. A Dispatcher who has not performed service during the previous three (3) months as Dispatcher for a territory must not accept assignment as a Dispatcher for that territory without approval of the Superintendent of Transportation or his designee.

18.2C Authority

Dispatchers are in charge of all interlockings and Main Tracks within their assigned territory, and are also in charge of any Other Than Main Tracks that are stipulated to be under the jurisdiction of the Dispatcher in the Timetable Special Instructions. Dispatchers are in charge of the movement of all trains and track cars on such tracks, and have jurisdiction over all activities on such tracks, including jurisdiction over all activities that have the potential to foul such tracks. The Dispatcher has supervisory responsibility over all employees involved with the above-described operations and activities within his assigned territory.

When Operators or Switch Tenders are used, Dispatchers must supervise their activities and require them to report train and track car movements promptly.

18.2D Issuing Instructions

Dispatchers are typically highly knowledgeable and experienced employees. They are also in a position to be more aware of many issues, reasons and activities than are many other employees. Because of this, Dispatchers must not make unreasonable assumptions but must take reasonable steps to ensure that employees understand all instructions that are issued by the Dispatcher.

Dispatchers must not yell at or berate any employee or improperly cause him to become flustered, but must communicate with all employees in a professional manner.

Dispatchers shall issue written Form X and Form Z authorities, restrictions and instructions, and issue other verbal instructions, as required for the safe and efficient movement of trains and track cars. Safety-critical information must be conveyed by

Form X or Form Z whenever feasible. All Form X's and Form Z's must be transmitted, recorded and repeated on the prescribed forms in accordance with the applicable rules. Written and verbal communications must use approved and proper terminology to the maximum extent possible.

The need for Form X's, Form Z's and other pertinent instructions must be anticipated and, when possible, they shall be issued in a timely fashion so as to avoid unnecessary delays.

Except as specifically provided for in these Operating Rules, additions may not be made to a Form X or Form Z once a "Time Effective" has been given.

When conditions change, a new Form X or Form Z shall be issued and the previous Form X or Form Z shall be cancelled.

Dispatchers must avoid the delivery of unnecessary Form X's and Form Z's to a train, track car, train crew or Track Car Driver by canceling Form X's and Form Z's when they are no longer needed.

A Form X or Form Z must not be cancelled to a train, track car, train crew or Track Car Driver unless they previously have received copies of the Form X or Form Z being cancelled.

Operators must be issued copies of Form X's and Form Z's that apply to and/or affect operations within the area of the interlockings and tracks that they are responsible for.

18.2E Additional Record Keeping and Coordination

Dispatchers must maintain a permanent record of each Form X and Form Z issued in the appropriate booklet.

Dispatchers must record all Foul Time that they authorize in accordance with Rule 10.11, and they must also record the reason(s) for all temporary speed restrictions. Dispatchers must periodically record the prevailing weather conditions. Dispatchers must record all reports of defective mirrors at curved stations.

Dispatchers must prepare the Daily Exception Report of late trains and unusual conditions.

Dispatchers must keep track of and record the location of all locomotives and cars, and must provide this information to the relieving Dispatcher. The Dispatcher shall enter the information from Work Train Car Location Reports in the appropriate section of the Daily Exception Report.

Dispatchers must provide necessary information and notifications to designated SIRTOA officials in various departments when required or requested. This includes providing notification of all dangerous conditions requiring correction.

In accordance with SIRTOA policy, Dispatchers must coordinate as required with external police and fire departments, and with other transit and governmental agencies.

18.2F Rule and Other Violations

In the case of any violation of the Operating Rules or Special Instructions, or any irregularity in the movement of trains or track cars, or any failure to comply with the requirements of a Form X or Form Z, the Dispatcher must make an immediate report to the Superintendent of Transportation or his designee.

18.2G Adverse Weather and Other Unusual Conditions

Dispatchers must keep informed of weather and unusual conditions that may affect operations within their territory. When temperatures are near or below freezing, interlocking switches, derails and movable point frogs that are expected to be needed for train operations must be operated as often as is necessary to keep them from freezing. Dispatchers shall instruct Operators as required.

Switch heaters must be turned on when required by weather conditions, and must be turned off when no longer required. The Dispatcher must request third-rail heaters to be turned on and off as required by the weather conditions.

When weather related conditions are forecasted to be or when actual weather conditions become such that the weather conditions may interfere with the operation of trains or interlocking appliances, the Superintendent of Transportation or his designee shall be notified so that arrangements may be made for emergency staffing and coverage as deemed appropriate by the pertinent department managers.

Nothing in these Operating Rules shall be deemed to prevent compliance with a Snow Emergency Plan that has been issued/authorized by proper authority.

18.2H Granting Form X Authority to Pass a Stop Aspect

Permission to pass a Stop aspect shall only be given per the applicable rules when the Dispatcher knows that it is safe and proper to do so, and when the Controlled Signal cannot be cleared because of equipment failure, traffic/directional locking, or because of a rule.

If the interlocking control machine fails to indicate that an interlocking appliance is in “correspondence” and locked in the correct position, the Dispatcher must instruct the employee (when it is safe to do so) to hand-operate the interlocking appliance using the dual-control feature to the proper position and leave the interlocking appliance in that

position and in the dual-control “Hand” mode until the movement clears the interlocking appliance.

18.2I Verification of Instructions

Upon assuming duty, the Dispatcher must verify with all Operators under his jurisdiction that they have all Form X's, Form Z’s, and other instructions that are in effect and addressed to or in care of their location. The Dispatcher must also verify that all Blocking Devices that should be applied are in fact applied.

18.2J Blocking Protection Not Available

When the rules require the application of Blocking Devices at interlockings and it is not possible to do so because of signal-system or central-control failures, or when the Dispatcher is notified that work is being performed that could interfere with the normal functioning of the blocking feature, the Dispatcher must take immediate steps to provide alternative protection such as applying blocking at another interlocking, or issuing Form X or Form Z instructions. When in doubt, the safe course must be taken.

18.2K Granting Authority to Hand-Operate Dual Control Switches

Before authorizing an employee to hand-operate a dual-control crossover, switch and/or derail, the Dispatcher must know that all Controlled Signals governing movement over such interlocking appliance(s) are displaying Stop and are not “running time”, and that there are no train or track car movements approaching or occupying the involved interlocking appliance(s). In addition, the Dispatcher must know that the appropriate signals and switches are blocked to protect against conflicting routes and to protect against trains being routed towards the interlocking appliance(s) to be hand-operated.

The Blocking Devices must not be removed until the employee hand-operating the switch(es) reports that all movements over the switch(es) in hand-operation are completed and that the switch has been restored to power operation.

When Signal System “indications” are not received confirming that the involved signals are displaying Stop and not “running time” or when Signal System “indications” are not received confirming that the involved interlocking appliances are blocked in the correct positions, and after all reasonable steps have been taken to notify all approaching trains, the Dispatcher shall instruct the field employee to place all of the interlocking appliances to be hand operated in the “Hand” mode but to NOT manually operate the appliance until after a four (4) minute delay to ensure Signal System protection.

18.2L Signal System Failures

The Dispatcher must promptly report any unusual operation of interlockings, signals, appliances or Signal System indications to the Superintendent of Signals. Unauthorized

repairs, alterations or additions must not be made to the Signal System, interlocking or Central Control equipment.

When a track occupancy indication shows an apparent false occupancy for no apparent reason, instructions must be given to trains and track cars to proceed at Restricted Speed on all tracks at that location until it is known the track(s) is (are) safe for normal operation.

18.2M Rusty Rail

When notified that the rail head on a track is covered with rust or other material that may interfere with the shunting of track circuits, the Dispatcher must immediately comply with the requirements of Rule 11.8.

18.3 Tower Operators – Additional Requirements

18.3A Receiving Instructions

Operators report to and receive their instructions from the Superintendent of Transportation or his designee. They must obey the instructions of Dispatchers, and advise them immediately of any occurrence that might affect the proper operation or safety of train movements.

18.3B Qualification

Operators must be qualified on the current versions of these Operating Rules, the Timetable Special Instructions, the Timetable Schedules, the Superintendent's Bulletin and all Superintendent's Bulletin Supplements in effect, and must also be qualified on the current physical characteristics of the territory, before accepting an assignment as an Operator. An Operator who has not performed service during the previous three (3) months as Dispatcher or Operator for a territory must not accept assignment as an Operator for that territory without approval of the Superintendent of Transportation or his designee.

18.3C General Responsibilities

Operators shall operate interlocking control machines and monitor train and track car movements. They shall arrange for the use of blocks, tracks, signals and switches for the prompt movement of trains and track cars. Operators must operate hand-operated switches and other devices as required. They must promptly report all train and track car movements to the Dispatcher and to any other Operator(s) controlling affected tracks or interlockings. All unusual conditions must be reported to the Dispatcher.

Operators are also responsible for receiving, delivering and implementing written Form X's and Form Z's, and for engaging in other verbal communications, as required by these Operating Rules for the safe and efficient movement of trains and track cars. All Form X's and Form Z's must be recorded and repeated on the prescribed forms in accordance with the applicable rules. Written and verbal communications must use approved and proper terminology to the maximum extent possible.

Operators must report to the Dispatcher any violation of the Operating Rules or Special Instructions, any irregularity in the movement of trains or track cars, and any failure to comply with the requirements of a Form X or Form Z.

When Blocking Devices have been applied by order of the Dispatcher, they must not be removed until the BDR is authorized by the Dispatcher.

18.3D Verification of Instructions

Upon assuming duty, the Operator must verify with the Dispatcher that he has all Form X's, Form Z's, and other instructions that are in effect and addressed to or in care of his location. The Operator must also verify that all Blocking Devices that should be applied are in fact applied.

18.4 Engineers

18.4A Receiving Instructions

Engineers report to and receive instructions from the Superintendent of Transportation or his designee. They shall obey the instructions of their Conductor who is in general charge of the train, and shall also obey the instructions of Dispatchers, Operators, Foremen, Flagmen and Employees-in-Charge when in their jurisdiction.

Exception: Engineers must not carry out any instruction if doing so would endanger safety or cause a violation of the rules.

18.4B Qualification

Before accepting assignment as an Engineer, Engineers must be qualified on:

1. The current versions of these Operating Rules, the Timetable Special Instructions, the Timetable Schedules, the Superintendent's Bulletin, and all Superintendent's Bulletin Supplements in effect,

2. The current Train Handling Rules, and the mechanical, electrical, and air brake instructions pertaining to the safety, inspection, preparation and operation of trains and engines,

3. The current physical characteristics of the territory, and

4. The type of engine(s) to which they are assigned, including any devices or auxiliary equipment attached to it.

An Engineer who has not operated the type of engine to be used during the previous twelve (12) months or who has not performed service over the territory during the previous three (3) months as Engineer must not accept assignment as an Engineer for that type engine or territory without approval of the Superintendent of Transportation or his designee.

18.4C General Responsibilities

Engineers and Conductors are jointly and equally responsible for the observance and enforcement of all rules and instructions.

Engineers are responsible for observing and complying with the indications of all fixed signals, and with all other signals affecting the movement of their train. When the train is moving, they must be vigilant and use care to prevent collisions, derailments, damage to property, and avoidable injury to persons. If anything withdraws their attention from constant lookout ahead, or if weather or other conditions make observation of signals or warnings in any way doubtful, they must immediately regulate the speed of their train so as to operate in an entirely safe manner.

The Engineer is responsible for the vigilance and conduct of other employees in the control compartment of the engine. He must ascertain that they are familiar with their duties and issue instructions when necessary.

Engineers are responsible for not accepting routes into or entering tracks that they have been advised are out of service.

Engineers shall see that proper flagging equipment for signaling as specified by Rule 4.1 is available on the engine. Engineers shall, unless otherwise directed, see that the engine is in good working order and furnished with the necessary supplies and required tools. They shall permit only such material on the engine as is necessary, and shall see that the engine cab is kept in a neat and clean condition.

The Engineer or Conductor must advise the Dispatcher immediately of any occurrence, unusual condition, irregularity or failure that might affect the proper operation or safety of train movements.

At locations where mechanical forces are employed and on duty, Engineers shall accept the inspection of the engine and of the CSS, ATC and PSS apparatus by the mechanical forces.

Air brake tests are an exception. While Engineers shall accept Initial Terminal Air Brake Tests performed by mechanical forces, Engineers must personally make Intermediate Terminal Air Brake Tests whenever and wherever required.

At a location where no mechanical forces are on duty, Engineers shall check the prescribed forms in the engine's control compartment to be sure that the unit or units of the engine consist have been inspected as required.

If the engine unit's or units' inspections are not current, the Engineer and Conductor shall make the required inspection(s). After making the inspection(s), the Engineer shall record the date, time and location of the inspection on the prescribed form(s).

Engineers must report all defects on engines and equipment to the Dispatcher who will arrange for necessary inspection and/or repair, or who will relay necessary instructions.

When a train has more than one engine, these Operating Rules apply equally to the Engineer of each engine. However, the use of the engine bell, whistle, and air brake must be limited to the leading engine, except in an emergency.

In the absence of a qualified Conductor, Engineers must also conform to the rules relating to the Conductor position. They may enlist the assistance of other crew members to facilitate the safe and efficient movement of their train.

Engineers shall complete equipment and/or trip reports as required.

18.4D Multiple Unit Equipment – Engine Control Compartments

All doors to engine control compartments on MUE cars must be closed and locked to prohibit entrance EXCEPT when being used by the Engineer or Conductor. It shall be the duty of both the Engineer and the Conductor to see that these instructions are enforced.

18.5 Conductors

18.5A Receiving Instructions

Conductors report to and receive instructions from the Superintendent of Transportation or his designee. They shall cooperate with their Engineer to enhance safety and efficiency. Conductors shall obey the instructions of Dispatchers, Operators, Foremen, Flagmen and Employees-in-Charge when in their jurisdiction.

Exception: Conductors must not carry out any instruction if doing so would endanger safety or cause a violation of the rules.

18.5B Qualification

Before accepting assignment as a Conductor, Conductors must be qualified on:

1. The current versions of these Operating Rules, the Timetable Special Instructions, the Timetable Schedules, the Superintendent's Bulletin, and all Superintendent's Bulletin Supplements in effect,

2. The current mechanical, electrical, and air brake instructions pertaining to the safety, inspection, preparation and operation of trains,

3. The current physical characteristics of the territory, and

4. The type of train equipment to which they are assigned, including any devices or auxiliary equipment that are involved.

A Conductor who has not performed service using the type of equipment in the train during the previous twelve (12) months or performed service over the territory during the previous three (3) months as Conductor must not accept assignment as a Conductor for that type of train or territory without approval of the Superintendent of Transportation or his designee.

18.5C General Responsibilities

Engineers and Conductors are jointly and equally responsible for the observance and enforcement of all rules and instructions.

Conductors have general charge of the train to which they are assigned, and all employees assigned to the train are subject to their instructions. Conductors are responsible for the safe and prompt movement of their train. They are also responsible for the vigilance, conduct and proper performance of duty of all other employees assigned to the train. Conductors must ascertain that they are familiar with their duties and issue instructions when necessary.

The Engineer or Conductor must advise the Dispatcher immediately of any occurrence, unusual condition, irregularity or failure that might affect the proper operation or safety of train movements. Conductors must make a concerted effort to start and operate trains on time, consistent with safety. They must not permit delays due to avoidable causes without permission.

Conductors shall assist Engineers in making air brake tests when and where required.

Conductors are responsible for ensuring that hand-operated switches and associated derails (including Dual-Control switches and derails) are used subject to the applicable rules, and are personally responsible for knowing that all hand-operated switches and derails used are left and secured in the proper position when finished using them.

Conductors must promptly report all defects on the train to the Dispatcher who shall arrange for necessary inspection and/or repair, or who will relay necessary instructions. When a passenger-car side door is found to be defective, they shall de-energize and lock-out such door and notify the Dispatcher as to the car number, specific door and type of defect.

Conductors shall complete equipment and/or trip reports as required.

Conductors must report to the Dispatcher the failure of any members of their crew to report for duty at the assigned reporting time.

Conductors must familiarize themselves and their crew members with the location and use of all manually operated brake valves, hand brakes and Communicating Signal Appliances.

Equipment with defective hand brakes must not be left standing on a track unless conditions are such that there is no danger of movement. When necessary to preclude movement, wheels should be chocked and the Dispatcher must be notified.

Conductors must inform the Engineer when there are cars or equipment in their train that require movement at less than MAS.

Employees must be respectful and considerate in their dealings with passengers, politely giving them any information to which they are entitled, and endeavoring to contribute to their comfort.

As far as practicable, passengers must be prevented from getting on or off a moving train, or from boarding or detraining at other than passenger stations.

Conductors must not occupy seats with passengers, nor enter into unnecessary conversations with them, other than what is required in the discharge of their duty and to answer questions politely.

All lost articles found on trains or at passenger stations must be reported at once to the Dispatcher. They must be tagged, showing date, location and who found them. These articles must be turned over to the Dispatcher not later than the completion of the Conductor's tour of duty. Tags are available in the St. George Token Booth.

The Conductor shall report to the Dispatcher all cases of overrunning a passenger station, and of all cases of rough starting, handling, or stopping of passenger trains.

Before leaving the train's initial station, and when cars are added to their train, the Conductor must know that the cars in their train have been inspected and that the brakes are in proper operative condition. On passenger equipment, Conductors must know that the Communicating Signal Appliance has been tested and is in proper working condition before each trip.

Conductors shall see that proper flagging equipment for signaling is available at the rear of the train, and shall see that cabooses are kept in neat and clean condition.

Conductors of all passenger trains shall exit their operating cab between stations to the maximum extent practical. This SIRTOA policy is intended to provide our customers with easy access to on-train personnel.

At all times and regardless of train consist, the Conductor must ensure that all passengers disembark the train at all terminals.

All cars of trains used in passenger service are to be open and available to the customers at all times.

Whenever all of the side doors on a passenger train are not to be opened at any station, prior announcements must be made to allow passengers adequate time to move to the appropriate car(s) for that station.

18.5D Disorderly, Disabled or Ill Passengers

When trains are receiving passengers, Conductors must not (if possible to avoid it) allow disorderly persons to board trains. When necessary, a report should be made to the Dispatcher requesting police assistance at the nearest station.

It is the duty of the Conductor to see that passengers are protected from rudeness, threatened violence, and abusive or obscene language. Any person acting in a disorderly manner may be removed from the train at the next passenger station. Care must be taken to ensure that the passenger is not discharged at an inaccessible passenger station, or where contact for other transportation services cannot be made. Each Conductor shall use discretion in the performance of this duty. He must not use unnecessary force that might subject the Company to litigation.

In the event of an incident, Conductors must attempt to obtain the names, addresses and phone numbers of several witnesses to the occurrence and make a full report of all circumstances to the Superintendent of Transportation. Should a Conductor consider it his duty, for good reasons, to permit a person to remain on his train contrary to the foregoing instructions, he shall promptly make a full written report to the Superintendent of Transportation.

Conductors must give particularly courteous attention to those who are ill, infirm, inexperienced, disabled or otherwise unable to care for themselves.

If passengers become ill on a train, they should be asked by the Conductor if they desire medical attention. The Conductor shall be governed by their answer, unless it is obvious that the passenger is not able or competent to determine the answer to this question, in which case medical attention should be requested by the Conductor. When practicable to

do so, the Conductor must radio ahead to have an ambulance meet the train at the next passenger station.

18.5E Announcements

The Americans with Disabilities Act (ADA), contains various requirements regarding the provision of nondiscriminatory, accessible transportation service by public and private entities. As part of that legislation, SIRTOA must make announcements at stations and transfer points sufficient to permit individuals with visual impairments or other disabilities to be oriented to their location.

Announcements necessary for the information and guidance of passengers must be made as appropriate. When taking charge of a train, the Conductor must ensure that the P.A. system is functioning as intended. When the P.A. system is not functioning properly, the Dispatcher must be notified and announcements must be made in as many cars as practicable.

On departing from passenger stations, the next passenger station must be clearly announced and repeated in accordance with the following example – "*The next station stop is (station name), (station name).*"

As the train is entering a station, the name of the station must be clearly announced and repeated in accordance with the following example – "*This station stop is (station name), (station name).*"

Except for St. George, for all station stops that have bus connections, the announcement must include the information*: "Transfer to the _____ bus at this station."*

Approaching any station at which the doors will be opening on the "left" side of the train, the announcement must also include "*Please exit to your left.*"

When any delay occurs, passengers on the train must be fully informed of the cause and probable extent of the delay. As well as being the law, it is good business to make announcements that permit our customers, particularly those with visual impairments and those who are not regular users of our service, to be able to orient themselves as to their location.

18.5F Multiple Unit Equipment - Door Operation

The Conductor must test the doors of each train consist assigned to him to verify that they are functioning properly on both sides of the train. Before testing doors on a side of the train for which there is no station platform, the doors on the other side of the train must be closed AND it must be verified that there are no passengers on the train.

If a door panel fails to open, the Conductor must cut-in the door motor, after which another test of the doors must be made to determine whether that panel functions properly. If the follow-up test reveals that there is a problem with the door, it must be cut-out electrically and mechanically. The Dispatcher must be notified of the problem, including the car number, specific door and type of defect.

Before opening the side doors, it must first be determined that the train doors have been properly "zoned" and/or that the train is properly positioned so that the side doors will only be opened on cars and for doors that are properly platformed.

Before closing the side doors on an MUE train, the Conductor (or crew member designated by the Conductor to operate the doors) must visually observe that passengers are finished boarding and detraining, and are clear of the doors. The Conductor or designated crew member shall not give a signal to the Engineer to proceed until he has observed, as far as is practicable, that the side doors are clear of all passengers and other encumbrances, and until after receiving "indication" that all side doors are closed. (This rule does not prohibit Engineers from departing intermediate stations upon side-door locked indication in accordance with Rule 9.15.) The Conductor or designated crew member shall then remain in a position to observe the conditions in both directions along the outside of the train until the position from which he is operating the door system reaches the end of the station platform. He must be prepared to stop the train in the event that unsafe conditions are observed.

18.5G Multiple Unit Equipment – Engine Control Compartments

All doors to engine control compartments on MUE cars must be closed and locked to prohibit entrance EXCEPT when being used by the Engineer or Conductor. It shall be the duty of both the Engineer and the Conductor to see that these instructions are enforced.

18.6 Trainmen, Flagmen and Switch Tenders

18.6A Receiving Instructions

Trainmen, Transportation Department Flagmen and Switch Tenders report to and receive instructions from the Superintendent of Transportation or his designee. Maintenance of Way Flagmen report to and receive instructions from the Superintendent – Maintenance of Way or his designee. When working in train service, Trainmen shall obey the instructions of their Conductor who is in general charge of the train. Flagmen and Switch Tenders shall obey the instructions of Dispatchers, Operators, Foremen and Employees-in-Charge when in their jurisdiction.

Exception: Trainmen, Flagmen and Switch Tenders must not carry out any instruction if doing so would endanger safety or cause a violation of the rules.

18.6B Qualification

Before accepting assignment as a Trainman, Flagman or Switch Tender, they must be qualified on the current versions of these Operating Rules, the Timetable Special Instructions, the Timetable Schedules, the Superintendent's Bulletin, and all Superintendent's Bulletin Supplements in effect, as they pertain to the duties and responsibilities of Trainmen, Flagmen and Switch Tenders.

A Trainman, Flagman or Switch Tender who has not performed service in at least one of these job classifications or as an Engineer or Conductor during the previous three (3) months must not accept assignment as a Trainman, Flagman or Switch Tender without approval of the Superintendent of his department, or of his designee.

18.6C General Responsibilities

Trainmen shall assist their Conductor as directed, within and subject to their qualifications.

Flagmen shall assist the Foreman or other Employee-in-Charge to whom they are assigned by providing flag protection in accordance with the rules and ensuring that tracks are not fouled in violation of the rules.

Flagmen who are not working under the jurisdiction of a Foreman or other Employee-in-Charge and who are qualified on the characteristics of the territory may obtain Foul Time in accordance with Rule 10.11.

All employees assigned to work as Flagmen shall report for duty with the following equipment:

1. Radio assigned by supervision;

2. Safety vest with proper identification displayed;

3. Red flag, white light, at least twelve (12) fusees and at least twelve (12) torpedoes;

4. Hard hat, which must be worn at flagging location; and

5. Safety glasses where conditions require their use.

Switch Tenders will manually operate Main Track and interlocking switches and derails within and subject to their qualifications as directed by the Dispatcher. Switch Tenders may manually operate other switches and derails on Other Than Main Track in accordance with the rules.

In the case of any occurrence, unusual condition, irregularity or failure that might affect the proper operation or safety of train movements, Trainmen must immediately advise their Conductor, Flagmen must immediately advise the Foreman or other Employee-in-Charge and the Dispatcher, and Switch Tenders must immediately advise the Dispatcher.

Trainmen must familiarize themselves with the location and use of all manually operated brake valves, hand brakes and Communicating Signal Appliances. Trainmen must be respectful and considerate in their dealings with passengers, politely giving them any information to which they are entitled, and endeavoring to contribute to their comfort.

As far as practicable, passengers must be prevented from getting on or off a moving train, or from boarding or detraining at other than passenger stations. Trainmen must not occupy seats with passengers, nor enter into unnecessary conversations with them, other than what is required in the discharge of their duty and to answer questions politely.

All lost articles found on trains or at passenger stations must be reported at once to the Dispatcher. They must be tagged, showing date, location and who found them. These articles must be turned over to the Conductor not later than the completion of the trip. Tags are available in the St. George Token Booth.

18.7 Work Foremen (Foremen) and Other Employees-in-Charge

18.7A Receiving Instructions

Foremen and other Employees-in-Charge report to and receive instructions from their department heads or their designee concerning all activities that are subject to these Operating Rules or the Special Instructions. They shall obey the instructions of Dispatchers and Operators when in their jurisdiction.

Exception: Foremen and Employees-in-Charge must not carry out instructions if the instructions would endanger safety or cause a violation of the rules.

18.7B Qualification

Before accepting assignment as a Foreman or Employee-in-Charge, they must be qualified on the current versions of these Operating Rules, the Timetable Special Instructions, the Timetable Schedules, the Superintendent's Bulletin, all Superintendent's Bulletin Supplements in effect, and the current physical characteristics of the territory, as they pertain to the duties and responsibilities of Foremen and Employees-in-Charge.

A Foreman or Employee-in-Charge who has not performed service as such during the previous three (3) months must not accept assignment as a Foreman or Employee-in-Charge without approval of his department head or his designee.

18.7C General Responsibilities

Foremen and other Employees-in-Charge are typically supervisors in departments other than the Transportation Department, which departments are responsible for the proper construction, inspection, maintenance and operation of various facilities/systems, such as tracks, bridges, structures, signals, or power.

Except in emergencies and except for work activities that were previously planned and approved by proper authority, Foremen and Employees-in-Charge shall not permit any work to be done that will delay or interfere with on-time train operations. Safety is first and foremost! Foremen and other Employees-in-Charge have authority over and are responsible for all SIRTOA employees and contractor employees under their jurisdiction.

Foremen and Employees-in-Charge (or their department) must notify the Transportation Department and the Dispatcher in advance and receive approval whenever any of the following operational provisions must be made for necessary maintenance work:

1. Temporary Speed Restrictions,

2. Removing a Track from Service in accordance with Rule 10.4,

3. Protection by Stop Signs in accordance with Rule 10.7,

4. Foul Time in accordance with Rule 10.11, or

5. De-energizing a section of Third Rail.

Foremen and other Employees-in-Charge must know in advance that they have sufficient time and resources to complete all work without impacting train operations any greater than was planned and approved. Foremen and other Employees-in-Charge must avoid delaying trains unnecessarily.

They must not perform any work that might interfere with the safe passage of trains without first notifying the Dispatcher. Tracks may only be fouled or obstructed after obtaining proper authority AND after fully complying with all applicable Operating Rules.

Foremen and other Employees-in-Charge shall ensure that all material and equipment along the right-of-way is placed and stored where trains and employees will not be endangered.

Foremen and Employees-in-Charge are responsible for seeing that all Roadway Workers under their jurisdiction are provided with safe working conditions. Foremen and Employees-in-Charge must provide themselves with the required proper equipment for signaling (flagging) and see that each Flagman assigned to him is also so equipped.

Foremen and Employees-in-Charge shall provide clear verbal instructions to each Flagman assigned to him explaining the Flagman's assignment.

Foremen and other Employees-in-Charge shall advise the Dispatcher immediately if any Temporary Speed Restrictions are required, and the reason(s) therefore. If the nature of the work requires a temporary speed restriction to ensure safety, the Foreman or Employee-in-Charge must be advised by the Dispatcher that all trains have or will receive notification of the temporary speed restriction BEFORE the Foreman or other Employee-in-Charge allows the work to begin.

If an event occurs or if any conditions of any nature are found that may interfere with the safe passage of trains and no protection has been provided, Rule 10.3 must be immediately complied with.

Foremen and Employees-in-Charge must report immediately to the Dispatcher any and all violations of temporary speed restrictions; SB, SBS, Form X or Form Z instructions; flagging instructions and signals; stop signs; and violations of any other rule, Special Instruction or directive, that they become aware of.

Foremen and Employees-in-Charge may only use/reverse hand-operated Main Track switches and associated derails for which they have been granted authority in accordance with SB, SBS, Rule 10.4 by Form X or Form Z Line 2, or Rule 10.7 by Form X or Form Z Line 3, but only when the switch is within the authorized work limits. Foremen and Employees-in-Charge may also obtain permission to reverse a hand-operated Main Track switch and associated derail in accordance with Rule 11.5B.4, but the Main Track must not be fouled under this rule. Foremen and Employees-in-Charge are personally responsible for knowing that all hand-operated switches and derails used are left and secured in the proper position when finished and before reporting clear.

Except in an emergency, work that may potentially require flag protection must not be done during dense fog or severe storms.

18.7D Signal Foremen – Additional Rules

Signal Foremen must not perform or allow to be performed work that might interfere with the proper functioning of the Signal System, an interlocking, a control machine, associated code apparatus or any other related system/feature without first notifying the Dispatcher AND arranging for any necessary protection.

18.8 Track Car Drivers

18.8A Receiving Instructions

Track Car Drivers report to and receive instructions from the Superintendent – Maintenance of Way or his designee concerning all activities that are subject to these Operating Rules or the Special Instructions. They shall obey the instructions of Dispatchers, Operators, Foremen, Flagmen and Employees-in-Charge when in their jurisdiction.

Exception: Track Car Drivers must not carry out any instruction if doing so would endanger safety or cause a violation of the rules.

18.8B Qualification

Before accepting assignment as a Track Car Driver, they must be qualified on the current versions of these Operating Rules, the Timetable Special Instructions, the Timetable Schedules, the Superintendent's Bulletin, all Superintendent's Bulletin Supplements in effect, and the current physical characteristics of the territory, as they pertain to the duties and responsibilities of Track Car Drivers.

A Track Car Driver who has not performed service as a Track Car Driver during the previous three (3) months must not accept assignment as a Track Car Driver without approval of the Superintendent – Maintenance of Way or his designee.

18.8C General Responsibilities

Track Car Drivers are typically in a department that is responsible for the proper construction, inspection, maintenance and operation of various facilities/systems, such as tracks, bridges, structures, signals, or power.

Track Car Drivers or their department must notify the Transportation Department and the Dispatcher in advance and receive approval whenever Track Cars are to be operated on Main Track or within Interlocking Limits.

Track Car Drivers must know in advance that they have sufficient time to complete the trip and all associated work without impacting train operations any greater than planned and approved. Track Car Drivers are responsible for the safe movement of their track car. They have authority over and are responsible for all SIRTOA employees and contractor employees riding on the track car.

Track Car Drivers must provide themselves with the required proper equipment for flagging.

If an event occurs or if any conditions of any nature are found that may interfere with the safe passage of trains and no protection has been provided, Rule 10.3 must be immediately complied with.

Track Car Drivers are responsible for ensuring that hand-operated switches and associated derails are used subject to the applicable rules, and are personally responsible for knowing that all hand-operated switches and derails used are left and secured in the proper position when finished and before reporting clear.

Except in an emergency, track cars must not be operated during dense fog or severe storms.

END OF SECTION

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SIRTOA Form X or Z
Movement Instructions

Form Z NUM: _____
Form X NUM: _____
Delivered To: _____

Form _____ **NUM** _____ **Date** _____/_____/_____

To: _____

_____

1. **Temporary Speed Restrictions** – Rules 9.26 and 15.15.

Track	Between or At	Effective Time	Speed Class A	Speed Other	Speed Signs Displayed Yes	Speed Signs Displayed No

2. **Tracks Removed from Service** – Rule 10.4.

Track	Between	Effective Time	Employee-in-Charge

3. **Obstructed Tracks Protected by Stop Signs** – Rule 10.7.

Track	Between	Effective Time	Employee-in-Charge

4. (X only) **Reverse Movement in Rule 11.5 Territory** – Rule 11.5A, or
Entering Rule 11.5 Territory without Proceed Controlled Signal Indication – Rule 11.5.
Proceed on Track _____ from _____ to _____

5. (X only) **Remain Where Standing** on Track _____ at _____
until head-end assistance arrives – Rule 10.8A.

6. (X only) **Proceed on Track** _____ from _____ to _____
where there is disabled train unattended equipment – Rule 10.8A/Rule 10.10B. (Strike out words "disabled train" or "unattended equipment").

7. (X only) **Override Electric Lock** – Rule 11.5B.3 or Rule 11.5B.4.
Switch and/or Derail on Track _____ at _____

8. (X only) **Track Car Authorities** – Rules 16.6B and 16.8.

Track	Between/From	Dispatcher's Initials	Time Added
		---	---

9. (X only) **Block Condition** – Rule 16.6B: _____

10. (X only) **Proceed at Restricted Speed** on Track _____ from _____ to _____

11. (X only) **Permission to Pass Stop Aspect** – Rule 11.2.

Signal	Route and Exit Track	Dispatcher's Initials	Time Added
		---	---

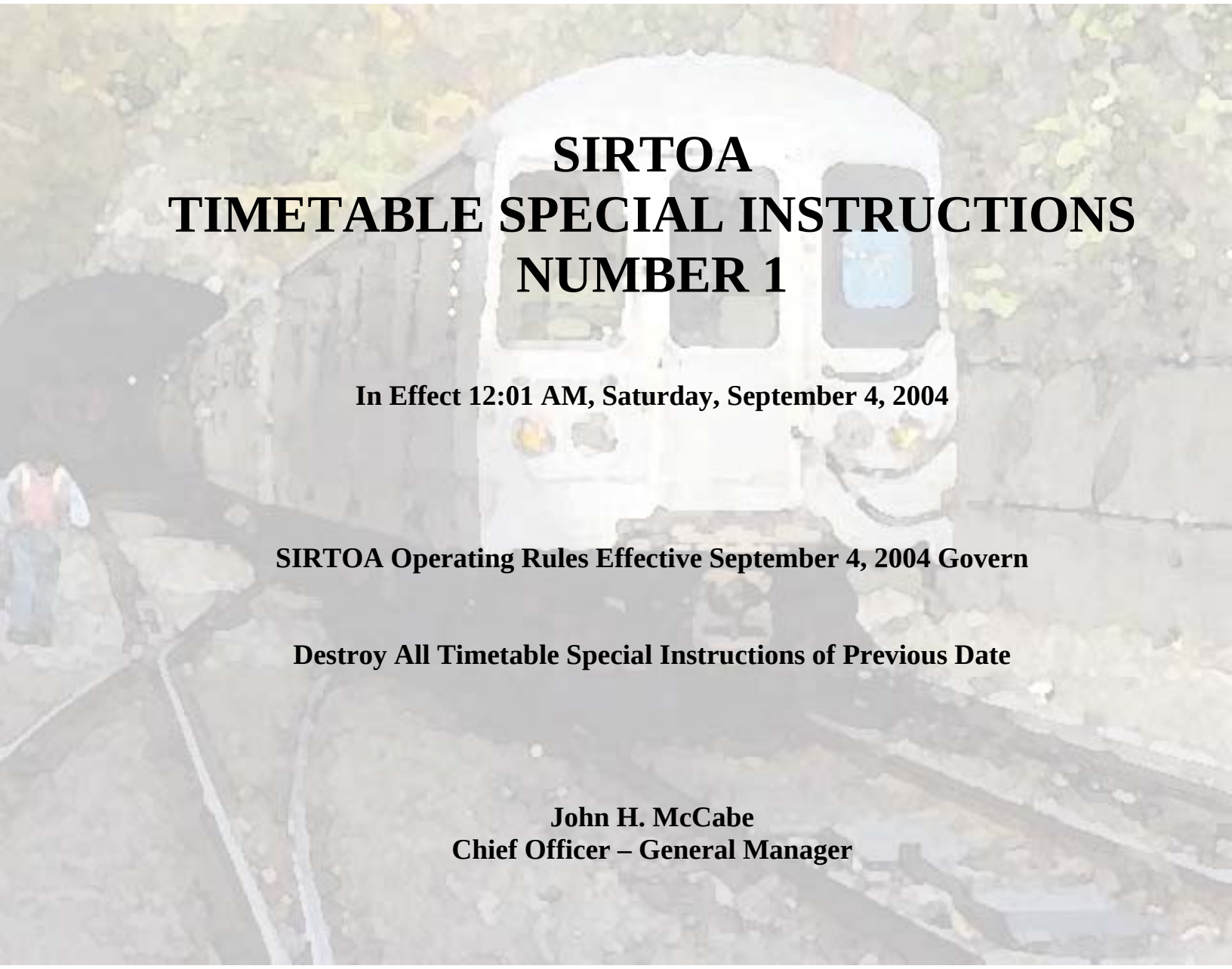
12. **Other Instructions/Information:** _____

_____

Dispatcher: _____ Repeat Time: _____ Time Effective: _____ Rec'd by: _____
(signature)

Cancel Time: _____ Date: _____/_____/_____ Dispatcher: _____

Metropolitan Transportation Authority
Staten Island Rapid Transit Operating Authority
Staten Island Railway



SIRTOA
TIMETABLE SPECIAL INSTRUCTIONS
NUMBER 1

In Effect 12:01 AM, Saturday, September 4, 2004

SIRTOA Operating Rules Effective September 4, 2004 Govern

Destroy All Timetable Special Instructions of Previous Date

John H. McCabe
Chief Officer – General Manager

Prepared by

SYSTRA
ENGINEERING

TABLE OF CONTENTS

INTRODUCTION

The key to these Timetable Special Instructions (TTSIs) is knowing the SIRTOA Operating Rules.

Timetable Special Instructions relating to particular Operating Rules are numbered by adding the prefix "T" to the Operating Rule number.

> Example: The locations of Superintendent's Bulletin (SB), Superintendent's Bulletin Supplements (SBS) and Administrative Notice Books, where "3.2" is the related Operating Rule, are included in these Timetable Special Instructions under the heading "T – 3.2".
>
> Example: The Table of Speed Restrictions, where "9.26 is the related Operating Rule, is included in these Timetable Special Instructions under the heading "T – 9.26-B". The suffix "B" after the hyphen has been applied because there are multiple TTSIs related to Operating Rule 9.26, and the suffix is used to distinguish between them.

The Emergency Train Evacuation Procedures TTSI has been arbitrarily numbered T – 100 to facilitate numbering the many subparts of this safety-critical TTSI.

All references to rules in these Timetable Special Instructions refer to the SIRTOA Operating Rules, unless otherwise noted.

Safety and Professionalism

Our customers are the sole reason for SIRTOA's very existence. They deserve professional and courteous service by all of our employees. Safety is first and paramount!

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SIRTOA TRANSPORTATION AND OTHER DEPARTMENTAL OFFICERS AND TELEPHONE CONTACT INFORMATION

The telephone numbers provided in the following table are for internal business use only, and are not to be given out for public use. Customers who request SIRTOA train, bus or other passenger information should be given the public phone number 718-966-SIRT (7478).

Title	**Name**	**Location**	**Phone**
Train Dispatcher	---	Central Control	718-876-8302
Tower Operator	---	Central Control	718-876-8287
Chief Officer – General Manager	John McCabe	60 Bay Street	718-876-8239
General Superintendent – Operations	John Russell	60 Bay Street	718-876-8238
Superintendent – Transportation	Joseph Kimbrig	St. George Terminal	718-876-8289
Deputy Superintendent – Transportation	Kevin Benson	St. George Terminal	718-876-8291
Deputy Superintendent – Transportation	Grover Dale	St. George Terminal	718-876-8304
Deputy Superintendent – Transportation	David Filimon	St. George Terminal	718-876-8303
Deputy Superintendent – Transportation	Maryann Laborante	St. George Terminal	718-876-8304
Deputy Superintendent – Transportation	Ralph Taliento	St. George Terminal	718-876-8303
General Superintendent – Police	Thomas Odessa	331 Bay Street	718-876-8271
Captain – Police	Gerald Damora	331 Bay Street	718-876-8270
General Superintendent – Maintenance	Peter Argenziano	60 Bay Street	718-876-8256

Superintendent – Bridges and Buildings	Donald Yarczower	331 Bay Street	718-876-8267
Superintendent – Cleaning Services	Patricia Lacewell	St. George Terminal	718-876-8290
Superintendent – Maintenance of Way	Alphonso Sorrentino	331 Bay Street	718-876-8265
Deputy Superintendent – Maintenance of Way	John Dooley	331 Bay Street	718-876-8266
Superintendent – Mechanical	George McGowan	845 Bay Street	718-876-8274
Deputy Superintendent – Mechanical	Cosimo Cascio	845 Bay Street	718-876-8277
Deputy Superintendent – Mechanical	Robert Yarbrough	845 Bay Street	718-876-8277
Superintendent – Power and Signals	Martin Gearns	331 Bay Street	718-876-8268
Deputy Superintendent – Non-Revenue Shop	Thomas Curran	293 Bay Street	718-876-8314
Senior Director – Employee Policy Compliance	Owen Swords	60 Bay Street	718-727-9312
Director – Engineering and Safety	Samuil Kolta	60 Bay Street	718-876-8252
Director – Finance and Administration	William Massi	60 Bay Street	718-876-8255

STATION PAGES

Tottenville Line

STATIONS	MP	PS	INT	NOTES
St. George Terminal (STG)	14.3	X		
St. George INT (SGX)	14.3		SG	North Shore Branch; Wye
Slosson (SNX)	14.1		SN	Trailing Xover
Victory (VYX)	13.9		VY	Tompkinsville Siding; Facing Xover
Tompkinsville (TKS)	13.8	X		
Hannah (HNX)	13.7		HN	Tompkinsville Siding and Tail Track; Facing Xover
Stapleton (STS)	13.2	X		
Landing (LDX)	13.0		LD	Clifton MUE Siding; Trailing Xover
Clifton MOW Siding (MWSD)	12.8			EL Switch and Derail
Clifton (CLS)	12.7	X		
Tompkins Ave. OH BR	12.4			
Grasmere (GRS)	11.3	X		
Brady (BRX)	11.0		BR	Brady Siding; Universal Xovers
Old Town (OTS)	10.8	X		
Dongan Hills (DHS)	10.1	X		
Jefferson Ave. (JAS)	9.6	X		
Adams (ADX)	9.5		AD	Universal Xovers
Grant City (GCS)	9.1	X		
New Dorp (NDS)	8.6	X		
Oakwood Heights (OHS)	7.8	X		
Bay Terrace (BTS)	7.0	X		
Great Kills (GKS)	6.1	X		
Holly (HLX)	6.0		HL	Holly Siding; Facing Xover
Fern (FRX)	5.7		FR	Trailing Xover
Eltingville (ELS)	5.3	X		
Annadale (ANS)	4.5	X		
Huguenot (HGS)	3.7	X		
Wolf (WFX)	3.5		WF	Wolf Siding; Trailing Xover

STATION PAGES

Tottenville Line (continued)

STATIONS	MP	PS	INT	NOTES
Pond (PDX)	3.3		PD	Facing Xover
Princes Bay Siding (PBSD)	3.1			EL Switch and Derail
Princes Bay (PBS)	2.9	X		
Pleasant Plains (PPS)	2.0	X		
Mount (MTX)	1.8		MT	Universal Xovers
Richmond Valley (RVS)	1.4	X		
Richmond Valley Siding (RVSD)	1.3			EL Switch and Derail
Nassau (NAS)	0.8	X		
Atlantic (ATS)	0.4	X		
Tottenville INT (TNX)	0.0		TN	
Tottenville Terminal (TNV)	0.0	X		MP 0.0 at east end of station platform.

The direction from St. George to Tottenville is Eastward.
The north track is designated NUM 1 Track and the south track is designated NUM 2 Track.

North Shore Branch

STATIONS	MP	PS	INT	NOTES
St. George Terminal (STG)	14.3	X		
St. George INT (SGX)	14.3		SG	Tottenville Line; Wye
St. George Ballpark (BPS)	14.4	X		
End of Track	14.5			

The direction from St. George to End of Track is Westward.

MP – Milepost
PS – Passenger Station
INT – Interlocking. The letters shown are the abbreviations used on signal number plates for that interlocking.
Xover(s) – Main Track Crossover(s)
EL – Electric-Lock

REFERENCED OPERATING RULES

T – 3.2 LOCATIONS OF SB, SBS AND ADMINISTRATIVE NOTICE BOOKS

SB, SBS and Administrative Notice Books are available at the following locations:

- St. George Central Control
- Maintenance of Way Headquarters 331 Bay Street

T – 3.3 MEDICAL EXAMINATIONS

Employees required to satisfactorily pass Periodical Physical Examinations or Special Periodical Physical Examinations (as explained herein) are personally responsible for obtaining an appointment from their department manager or his designee. Periodical Physical Examinations must be completed during the month of the employee's birth. Employees in the following crafts are required to pass Periodical Physical Examinations:

- Engineers and Conductors,
- Trainmen, Flagmen and Switch Tenders,
- Train Dispatchers and Tower Operators,
- Track Car Drivers, Work Foremen and other Employees-in-Charge, and
- Other employees when directed by the department manager or his designee.

Periodical physical examinations are required as follows:

- Under 55 years old: once every two years
- 55 years old to 65 years old: once every year
- Over 65 years old: once every six months

Special Periodical Physical Examinations are required of all employees as follows:

- Before resuming duty after a hospital admission with an overnight stay,
- After being off for more than 30 days for other than paid vacation,
- If deemed necessary by the department manager or his designee when returning from furlough, illness, accident or personal injury,
- When the employee has reason to believe that he has a medical condition that may interfere with safely performing his work responsibilities, and/or
- When directed by the department manager or his designee.

T – 3.9 UNIFORM REQUIREMENTS FOR PASSENGER SERVICE

The following uniform requirements are in effect:

- June 1st through September 15th -
  Uniform Cap and Badge
  Uniform Short-Sleeve Shirt
  Uniform Trousers
  Authority issued or approved Safety Shoes and Black Socks

- September 16th through May 31st -
  Uniform Cap and Badge
  Uniform Long-Sleeve Shirt
  Uniform Jacket
  Uniform Necktie
  Uniform Trousers
  Authority issued or approved Safety Shoes and Black Socks

T – 3.19-A CONSULTING PHYSICIANS AND HOSPITALS

In the case of a medical emergency, the Dispatcher must be immediately notified. If communication cannot be immediately established with the Dispatcher, employees must attempt to telephone 911 by any available means.

Consulting Physicians
NYCT Medical Assessment Center - 1
180 Livingston Street
Brooklyn, NY 11201

Hospitals
Staten Island University Hospital North
475 Seaview Avenue
Staten Island, NY 10305
Telephone – 718-226-9000

Staten Island University Hospital South
775 Sequine Avenue
Staten Island, NY 10309
Telephone – 718-226-2000

St. Vincent's Hospital
355 Bard Avenue
Staten Island, NY 10310
Telephone – 718-818-1234

T – 3.19-B CLOSE CLEARANCE

All employees on trains and track cars at or near Tompkinsville Station west end Staircase operating in either direction on either Main Track must keep head, hands and all body parts inside of the train or track car on account of extremely close clearance.

All employees on trains and track cars near or within the St. George Tunnel operating in either direction on either Main Track must keep head, hands and all body parts inside of the train or track car on account of extremely close clearance.

All employees on trains and track cars at or near St. George Ballpark Station operating in either direction must keep head, hands and all body parts inside of the train or track car on account of extremely close clearance.

T – 7.3 LOCATIONS OF STANDARD CLOCKS

St. George – Central Control

T – 8.1-A EQUIPMENT RESTRICTIONS

The following equipment restrictions are in effect at St. George because of insufficient clearance.

LOCATION	EQUIPMENT	RESTRICTION
Tracks 5, 6 and 9	Engines 407, 821 and All Caboose Cars	Must not operate between 100 feet east of Bumper Block and Bumper Block
Track 11	All Caboose Cars	Must not operate without authority of Superintendent Transportation.
Track 12	Engines 407, 821 and All Caboose Cars	Must not operate in vicinity of Overhead Ramp
Tracks 9 and 10	All Caboose Cars	Must not operate in vicinity of Overhead Canopy.

T – 8.1-B MAXIMUM TRAIN LENGTH

The maximum length of a passenger train in revenue service is five (5) MUE cars or one (1) locomotive hauling five (5) MUE cars.

T – 8.5-A R44 SNOW BRAKES - GENERAL

The R44 Snow Brake feature is intended to minimize degradation of braking capabilities due to ice buildup between the brake shoes and wheels. This is accomplished by applying a low brake-cylinder pressure when the brakes are released, thus maintaining near-zero wheel/shoe clearance and leaving virtually no space for ice formation. Since slack adjustment is accomplished by a mechanism that adjusts during the brake-release cycle, and to prevent any loss of braking capabilities due to brake-shoe wear, the following Snow Brake procedures shall apply:

T – 8.5-B R44 SNOW BRAKES – FALL SEASON SLIPPERY RAIL CONDITIONS

During Fall Season slippery rail conditions, Engineers shall activate the Snow Brake at least five (5) seconds prior to making a planned brake application. The Snow Brake shall remain activated in the ON position until the train has either come to a complete stop at the desired location, or until the train has decelerated to the appropriate speed. At that time, the Snow Brake feature shall be disengaged.

T – 8.5-C R44 SNOW BRAKES – WINTER ICING AND OTHER CONDITIONS

The following Snow Brake Procedures must be utilized throughout any period of freezing precipitation, whenever directed by proper authority, or whenever in the judgment of the Engineer the train's braking capability is improved thereby:

1. Upon charging a train at a terminal, a sufficient number of hand brakes (not less than two when two are available) must be applied, the Master Controller Handle must be placed in the COAST position, and the SNOW BRAKE must be applied and fully released at least three (3) times. The Engineer must verify with the Conductor on the rear end of the train that increase and decrease in brake cylinder pressure was observed as the snow brake was applied and released.

2. The Master Controller Handle is then to be placed in the FULL SERVICE position, the Snow Brake switch placed in the OFF position, and the hand brakes released.

3. Upon completion of required Running Brake Test, the Snow Brake shall be placed and kept in the ON position.

4. When operating in local service, the Snow Brake shall be placed in the OFF position after stopping at each station, and reapplied upon departure as soon as the train has traveled one-half car length.

5. When operating in other than local service, while passing every other station, the Snow Brake shall be released for approximately three (3) seconds and then reapplied.

T – 8.5-D INITIAL TERMINAL AIR BRAKE TEST – MUE TRAINS

An Initial Terminal Air Brake Test must be conducted as prescribed herein when:

1. The train is originally made up, and

2. As prescribed by Operating Rule 8.5.

The procedures for conducting the Initial Terminal Air Brake Test are as follows:

1. Charging for Initial Terminal Brake Test

   The brake pipe must be charged to 130-150 PSI and the Snow Brake cut out. Employees making the test shall apply hand brakes on the head and rear cars to prevent the train from rolling during the test. The train must be charged from the operating cab to be used on the first trip.

2. Inspection of Brakes

   a. Upon receiving the proper signal (4 short sounds on the Communicating Signal Buzzer) from the employee located in the rear Operating Cab, the Engineer shall move the Master Controller Handle to the FULL SERVICE position. The Engineer and the employee in the rear cab must note that the brake cylinder gauge shows a minimum pressure of 55 PSI and that the Air Brake Indication Lamp is lit. The Employee in rear cab must descend to the roadbed and make an inspection of the train brakes on both sides of the train to verify that the brakes are applied on each car, that the angle cocks are properly positioned, that the hand-brake riggings do not bind or foul, and that all parts of the brake equipment are properly secured.

   b. After this inspection, the Employee on the roadbed shall signal to the Engineer for a brake release. The Engineer shall then move the Master Controller Handle to the COAST position in three distinct movements. (An exhaust of air from the release magnet valves at each graduation indicates that the electric brake is operable.) The Engineer must observe that the Air Brake Indication Light (Red) has extinguished. The Employee on the roadbed must then inspect the train to verify that all air brakes have released properly.

Upon arrival at the rear cab, the Employee performing the test shall signal the Engineer with one long sound on the Communicating Signal Buzzer to perform a test of the SNOW BRAKE.

c. The SNOW BRAKE shall then be tested. With the Master Controller Handle in the COAST position, the SNOW BRAKE request switch shall be placed in the ON position. An observation of a Snow Brake Application shall be made on the leading unit by the Engineer observing that the SNOW BRAKE Indication Light (Blue) is illuminated.

d. The Master Controller Emergency Brake (Deadman) Feature shall be tested. With the Master Controller Handle in the COAST position, the Engineer shall release the handle. The Engineer and the Employee in the rear cab must both note that the brake cylinder (RED needle) gauge shows a minimum pressure of 55 PSI and that the brake pipe (BLACK Needle) pressure is depleted to zero.

The Employee in the rear cab must descend to the roadbed and make an inspection of the train brakes on both sides of the train to determine that the brakes are applied on each car.

Upon verification that all brakes have properly applied, the Employee performing the inspection shall then notify the Engineer that the test has been completed.

NOTE: R44 cars are equipped with tread brake units and have four brake cylinders per truck, one cylinder per wheel, which are visible from outside of the truck. When the brake shoe is away from the wheel, the brakes are released, and when the brake shoe is against the wheel, the brakes are applied.

NOTE: When an Initial Terminal Air Brake Test is being performed in St. George Terminal or at Tottenville on a station-platform track, the ground inspections shall be made only from the side of the train that is away from the platform.

Whenever the ground inspections are made on only one side of a train because of the above, this fact must be reported to and documented by the Dispatcher. To the maximum extent feasible, the Dispatcher shall position that train for the next day's inspection on a track where the other side of the train can be inspected.

3. <u>Notification of Completion of Initial Terminal Air Brake Test</u>

When the Initial Terminal Air Brake Test has been completed, the Engineer and Conductor must be advised that the test has been completed and that the train is in proper condition to proceed.

As prescribed by Operating Rule 8.5, a written report of each Initial Terminal Air Brake Test must be completed by the qualified Employee making the test and the most recent such report must be kept in the MUE operating cab that was tested.

Form T-8.5 (Report on Condition of Air Brakes) shall be used for this purpose. In no case shall a train be operated without a current/effective copy of this form being in the locomotive or MUE operating cab being used for the control of the train.

T – 8.5-E INTERMEDIATE TERMINAL AIR BRAKE TEST – MUE TRAINS

When a current written report of a current Initial Terminal Air Brake Test as prescribed by Operating Rule 8.5 is in the MUE operating cab being used for the control of the train, an Intermediate Terminal Air Brake Test shall be conducted (instead of an Initial Terminal Air Brake Test) as prescribed herein when:

1. Taking charge of a train, or

2. Changing operating ends at a terminal or turnaround point.

The procedures for conducting the Intermediate Terminal Air Brake Test are as follows:

1. The Engineer shall charge the Emergency Brake Pipe to at least 130 PSI.

2. The Conductor, from the cab of the rear car, shall signal the Engineer to start the Intermediate Terminal Air Brake Test by transmitting 4 short sounds on the Communicating Signal Buzzer.

3. The SNOW BRAKE shall be cut out and placed in the OFF position.

4. The Engineer (on the lead car) and the Conductor (on the rear car) shall both note that the brake cylinder pressure is at least 55 PSI and that the Air Brake Indication Light (Red) is illuminated.

5. The Conductor, upon making this verification, shall signal for a brake release by transmitting one long sound on the Communicating Signal Buzzer.

6. Upon receiving this signal, the Engineer shall place the Master Controller Handle in the COAST position in three distinct movements. (An exhaust of air from the release magnet valves at each graduation indicates that the electric brake is operable.)

   The Conductor and Engineer must both observe that the brake cylinder pressure is depleted to zero PSI and that the Air Brake Indication Light (Red) is extinguished.

7. The Conductor shall then signal the Engineer for an Emergency Brake Application by transmitting one long sound on the Communicating Signal Buzzer. With the Master Controller Handle in the COAST position, the Engineer shall release the handle. The Engineer and Conductor must both observe that the brake pipe pressure is depleted to zero and that the brake cylinder pressure is at least 55 PSI.

8. When the test has been successfully completed, the Conductor shall signal the Engineer by transmitting two long sounds on the Communicating Signal Buzzer.

T – 8.5-F RUNNING AIR BRAKE TEST – MUE TRAINS

A Running Air Brake Test must be conducted as prescribed herein:

1. Upon initial movement following an Initial Terminal Air Brake Test OR an Intermediate Terminal Air Brake Test, and

2. When preparing to descend Grasmere Hill if not stopping at Grasmere Station.

When a Running Air Brake Test is required westbound approaching Grasmere Hill, it must be completed prior to passing Grasmere Station.

The procedures for conducting the Running Air Brake Test on R44 equipment are as follows:

The Master Controller Handle must be placed in the braking range, it must be observed that train speed is reduced, and it must be observed that brake cylinder pressure exceeds 15 PSI and that the Air Brake Indication Light (Red) is illuminated.

If the air brakes do not operate properly, the train must be stopped, the cause of the failure corrected, and the Running Air Brake Test must be repeated.

NOTE: At speeds above 10 MPH, the dynamic brake is operable, and the brake cylinder pressure should be between 6 and 8 PSI. At speeds below 10 MPH, the dynamic brake fades and the brake cylinder pressure increases to an amount corresponding with the position of the Master Controller Handle in the braking zone.

T – 8.5-G BRAKE PIPE LEAKAGE TEST FOR LITE LOCOMOTIVE

Before a lite locomotive is operated, it must be determined that brake pipe leakage does not exceed five (5) pounds per minute after a reduction of 10 pounds has been made from a brake pipe pressure of not less than 70 pounds.

T – 8.5-H STANDING LOCOMOTIVE BRAKE TEST

This test must be made:

- When initially taking charge of a lite locomotive,
- After changing control stations on a lite locomotive, and
- Before making an initial movement of a lite locomotive when cutting away from a train.

Determine the condition of the locomotive brakes by carefully using sufficient power before releasing the air brakes to insure that the brakes are cut in and effective for holding the locomotive in place and stopping. If the locomotive moves and this test of the locomotive brakes reveals that the brakes holding power is ineffective, reverse the locomotive and open the throttle to 1/4 position until the movement stops, unless conditions permit the unintended movement to be stopped by the use of the hand brake.

T – 8.5-I RUNNING AIR BRAKE TEST OF LITE LOCOMOTIVE

As soon as operating conditions permit after initial movement of a lite locomotive, a Running Air Brake Test must be made in the following manner:

1. Make a service application of the independent brake and note the development of brake cylinder pressure and retarding effect on the locomotive.
2. Release the independent brake and make a service application with the automatic brake valve. Note the development of brake cylinder pressure and retarding effect on the locomotive.
3. Hold the independent brake valve in the Release position. Note that brake cylinder pressure reduces to zero and that the retarding effect is eliminated.

T – 8.5-J PREPARATION FOR AIR BRAKE TESTS – NON-MUE TRAINS

Before beginning a brake test, air hoses must be coupled, angle cocks and cut out cocks must be properly positioned and the air brake system must be charged to the required air pressure.

In addition, condensation must be blown from the brake pipe before connecting motive power to a train.

T – 8.5-K INITIAL TERMINAL AIR BRAKE TEST – NON-MUE TRAINS

An Initial Terminal Air Brake Test must be conducted as prescribed herein when:

1. The train is originally made up,

2. Train consist is changed other than by adding or removing solid blocks of cars and keeping brake system charged, and

3. As prescribed by Operating Rule 8.5.

The procedures for conducting the Initial Terminal Air Brake Test are as follows:

1. Charging for Initial Terminal Brake Test

   With the automatic brake valve in the Running position and the pressure maintaining brake equipment in the Release position, the train air brake system must be charged to the required pressure of 70 pounds.

2. Brake Test

   When the automatic brake valve is equipped with pressure maintaining, this feature must be cut out. When signal to apply the brakes is received, make a 15-pound brake pipe service reduction and place the automatic brake valve in the Lap position. After the exhaust of brake pipe air stops, wait one minute. Then note brake-pipe pressure and time brake-pipe leakage for one minute. BRAKE PIPE LEAKAGE MUST NOT EXCEED 5 POUNDS PER MINUTE. If it does, corrective action must be taken and the test repeated. After timing brake-pipe leakage, reduce equalizing-reservoir pressure to full service and place the brake valve in the Lap position. When signal for brake release is received, return the automatic brake valve to the Running position. On pressure maintaining equipment, return the automatic brake valve to the Release position and cut in the pressure maintaining feature.

3. Inspection of Car Brakes

   The car brakes must be inspected to determine that each brake has applied, that piston travel is between 7 and 9 inches on body mounted brakes, that piston travel is a maximum of 6 inches on truck mounted brakes, or that the piston travel is as specified by “badge plate” on the car. Inspection must then be made to see that all brakes release properly. The release inspection may be made while standing or as the train departs. When the release inspection is made as the train departs and the train is found not to be in proper condition to proceed, the employee making the inspection must stop the train and ensure that the condition is corrected.

4. Train in Condition to Proceed

When test of air brakes has been completed, the Engineer and Conductor must be advised that the train is in proper condition to proceed.

As prescribed by Operating Rule 8.5, a written report of each Initial Terminal Air Brake Test must be completed by the qualified Employee making the test and the most recent such report must be kept in the locomotive operating cab that was tested.

Form T-8.5 (Report on Condition of Air Brakes) shall be used for this purpose. In no case shall a train be operated without a current/effective copy of this form being in the locomotive operating cab being used for the control of the train.

5. Signals Required For Brake Test

During the standing test, the brakes must not be applied or released until the proper signal is given. Alternatively, positive and clear instructions may be given in accordance with the radio rules.

6. Restoring Pressure

Before proceeding, it must be known with certainty that the brake pipe pressure on the rear of the train is being restored.

T – 8.5-L INTERMEDIATE TERMINAL AIR BRAKE TEST – NON-MUE TRAINS

When a current written report of a current Initial Terminal Air Brake Test as prescribed by Operating Rule 8.5 is in the locomotive operating cab being used for the control of the train, an Intermediate Terminal Air Brake Test shall be conducted (instead of an Initial Terminal Air Brake Test) as prescribed herein when taking charge of a train.

Before motive power is detached or angle cocks closed prior to uncoupling, the brakes must be applied with not less than a 20-pound reduction of brake pipe pressure. The automatic air brakes must not be depended upon to hold equipment when standing on a grade.

1. Locomotive Cut Off and Re-coupled

After re-coupling the locomotive and opening the angle cocks, it must be determined that the brake pipe pressure is being restored by observing the application and release of the brakes on the rear car.

2. Locomotive or Caboose Changed or Cars Cut Off

After a locomotive and/or caboose is changed or a block of cars is cut off from either end of the train, the brake pipe must be charged to the required pressure of 70 pounds and a 20-pound brake-pipe reduction must be made. It must then be determined that the brakes on the rear car apply and release properly.

3. Brake Test When Cars are Picked Up

When cars are picked up, an inspection and test must be made after the train air brake system is charged to the required pressure of 70 pounds to determine that leakage does not exceed five (5) pounds per minute as indicated by the brake pipe gauge. This test is to be done following a 15-pound brake-pipe reduction. After the leakage test is completed, the brake-pipe reduction must be increased to full service, and it must be known that the brakes on each of the cars picked up and on the rear car of the train apply and release properly. The test on the cars being picked up may be made prior to attaching the "pickup" to the main body of the train.

4. Restoring Pressure

Before proceeding, it must be known that the brake-pipe pressure at the rear of the train is being restored.

T – 8.5-M RUNNING AIR BRAKE TEST – NON-MUE TRAINS

A Running Air Brake Test must be conducted as prescribed herein:

1. Upon initial movement after either an Initial Terminal Air Brake Test OR an Intermediate Terminal Air Brake Test, and

2. When preparing to descend Grasmere Hill if not stopping at Grasmere Station.

When a Running Air Brake Test is required westbound approaching Grasmere Hill, it must be completed prior to passing Grasmere Station.

The procedures for conducting the Running Air Brake Test on non-MUE equipment are as follows:

1. Make a service reduction of 10 to 15 pounds on the automatic brake valve and note the development of brake cylinder pressure and retarding effect on the locomotive and train.

If train is equipped with a caboose or other car with a brake pipe gauge, the employee assigned to that car shall observe the service reduction and so inform the Engineer.

2. Place the automatic brake valve handle in the running/release position. Note that brake pipe pressure increases to 70 pounds and that brake cylinder pressure reduces to 0 pounds, and that the retarding effect is eliminated.

   If train is equipped with a caboose or other car with a brake pipe gauge, the employee assigned to that car shall observe that the brake pipe pressure increases to 70 pounds and so inform the Engineer.

If the air brakes do not operate properly, the train must be stopped, the cause of the failure corrected, and the Running Air Brake Test must be repeated.

T – 8.5-N HELPER SERVICE BRAKE TEST

1. <u>After a Helper Locomotive is Coupled to the Train</u>

   The Engineer of the leading locomotive shall operate the brakes. After the air brake system is charged to the required pressure of 70 pounds, a full service reduction will be made. It must be noted that the brake pipe exhaust stops and that the brakes apply on the rear of the train. After the brake-pipe pressure is restored, it must be known that the brakes have released on the rear of the train.

2. <u>Changing Control before Destination</u>

   In the event that it is necessary for the leading locomotive to give up control of the train short of destination, a brake test must be made by making a full service reduction to determine that the brakes are operative from the locomotive taking control of the train.

T – 8.5-O BACK-UP HOSE OR BACK-UP VALVE BRAKE TEST

When a back-up hose or valve is to be used to control a train's movement, the Conductor will ensure that air is connected from the locomotive to the back-up valve. The Engineer shall then be informed that a brake test will be made from the back-up valve. The Engineer will position the automatic brake valve in the Running position and charge the air brake system.

When the air brake system is charged to the required pressure of 70 pounds, the back-up valve will be opened. While the brake-pipe air is exhausted, it will be determined that the train brakes have applied.

If cars are set out or picked up, or if the locomotive is detached and re-coupled, this test must be repeated.

T – 8.5-P MINIMUM PERCENTAGE OF OPERATING BRAKES REQUIRED

Trains leaving initial terminals must have all cars that are equipped with air brakes in effective operating condition. After leaving initial terminals, cars on which the air brakes have become inoperative may continue in the train provided that not less than 85 percent of the train's brakes are operational. If the 85-percent requirement is not met, movement may only be authorized by the Superintendent of Transportation or his designee, who will specify the manner in which the train is to be operated.

Any car found to have air brakes inoperative must be reported to the Dispatcher by the first available means. The Conductor must also submit an Incident Report prior to the end of his tour of duty.

T – 8.5-Q CHANGING CREWS - NO CHANGE OF CONSIST

At points where crews are changed and the consist of the train remains intact, the Engineer taking charge shall ascertain that the brakes are in operative condition by:

1. Reviewing the Form T-8.5 (Report on Condition of Air Brakes) in the locomotive or MUE operating cab being used for control of the train to ensure that it is current, and

2. Personally communicating with the previous engineer.

NOTE: When personal communication with the previous Engineer is not possible, and if a current Form T-8.5 is in the locomotive or MUE operating cab, an Intermediate Terminal Air Brake Test shall be performed.

T – 9.22-A PRIMARY COUPLING AND UNCOUPLING PROCEDURES FOR PASSENGER EQUIPMENT

1. <u>Procedure for Coupling Passenger Equipment</u>:

   Passenger equipment must not be coupled when passengers are on board, or when side doors are open. The Conductor is responsible to ensure for the cars being coupled to that sufficient hand brakes are applied (no less than two when two are available) and that the brakes are in emergency.

The Engineer must operate from the cab closest to where the coupling is to be made. If the Engineer is not positioned at the coupling location, continuous voice communication or hand signals must be maintained.

Before coupling, a full stop must be made approximately five (5) feet from the equipment to be coupled to. An inspection shall be made to ensure that the couplers are aligned properly. After the stop, the Master Controller Handle must not be moved beyond the SWITCH position. The cars must be brought together in a manner that will not result in damage. Upon proper coupling, the air lines should automatically make up and all electric circuits should automatically be made up after a three (3) second delay.

A "stretch" test shall be made. All safety chains and inter-car safety barriers are to be connected between the cars, after which all side doors must be tested. An Initial Terminal Air Brake Inspection must be performed immediately after the desired consist has been coupled together and before further movement of the equipment. The Engineer shall perform this inspection/test from the departing-end cab of the train. In addition, the Markers on the rear car are to be inspected.

2. <u>Procedure for Automatically Uncoupling Passenger Equipment:</u>

Passenger equipment must not be uncoupled when passengers are on board, or when side doors are open. The Conductor is responsible for ensuring that sufficient hand brakes are applied (no less than two when two are available) on cars to be left standing, that the brakes are in emergency, and that all safety chains and inter-car safety barriers are disconnected at the location where the uncoupling is to be made.

The Conductor shall shut off all Air Comfort and Main Lights, insert the Console Key into the coupler control box and depress the ISOLATE push button for three (3) seconds. This isolates the trainline circuits (power will be removed from the pins).

The Conductor shall then press the UNCOUPLE push button for one (1) second, a warning signal will sound and the hooks should unlock.

The Engineer shall charge the brake pipe and release the hand brakes on the cars to be moved. The Engineer shall, without moving the Master Controller Handle beyond the SWITCH position, buff the cars to release hook tension, and then pull away a distance of one foot.

After the uncoupling is made, and once the desired consist is made up and before further movement of the equipment, an Initial Terminal Air Brake Inspection must be performed. The Engineer shall perform this inspection/test from the departing- end cab of the train. In addition, the Markers on the rear car are to be inspected.

T – 9.22-B SECONDARY COUPLING AND UNCOUPLING PROCEDURES FOR PASSENGER EQUIPMENT

The following procedures shall apply when the primary procedures do not achieve the desired results.

1. Procedure for Coupling Passenger Equipment:

   Passenger equipment must not be coupled when passengers are on board, or when side doors are open. The Conductor is responsible to ensure for the cars being coupled to that sufficient hand brakes are applied (no less than two when two are available) and that the brakes are in emergency.

   The Engineer must operate from the cab closest to where the coupling is to be made. If the Engineer is not positioned at the coupling location, continuous voice communication or hand signals must be maintained.

   Before coupling, a full stop must be made approximately five (5) feet from the equipment to be coupled to. An inspection shall be made to ensure that the couplers are aligned properly. After the stop, the Master Controller Handle must not be moved beyond the SWITCH position. The cars must be brought together in a manner that will not result in damage.

   After the coupling is made, the TRAINLINE/ISOLATE Drum Switches at the coupling location are to be placed in the TRAINLINE position. A "stretch" test shall be made. All safety chains and inter-car safety barriers are to be connected between the cars, after which all side doors must be tested. An Initial Terminal Air Brake Inspection must be performed immediately after the desired consist has been coupled together and before further movement of the equipment. The Engineer shall perform this inspection/test from the departing-end cab of the train. In addition, the Markers on the rear car are to be inspected.

2. Procedure for Manually Uncoupling Passenger Equipment:

   Passenger equipment must not be uncoupled when passengers are on board, or when side doors are open. The Conductor is responsible for ensuring that sufficient hand brakes are applied (no less than two when two are available) on cars to be left standing, that the brakes are in emergency, and that all safety chains and inter-car safety barriers are disconnected at the location where the uncoupling is to be made.

The Conductor shall shut off all Air Comfort and Main Lights, open both coupler control boxes at the uncoupling location, and place the TRAINLINE/ISOLATE Drum Switches in the ISOLATE position. The Conductor shall close all Angle Cocks on the car(s) to be moved.

The Engineer shall charge the brake pipe and release the hand brakes on the cars to be moved.

While maintaining continuous voice communications with the Engineer, the Conductor shall operate the uncoupling handle and instruct the Engineer to buff, if necessary to release hook tension, and then instruct the Engineer to pull away a distance of one foot.

After the uncoupling is made, the Conductor must place the Angle Cocks back into their normal (open) position.

After the uncoupling is made, and once the desired consist is made up and before further movement of the equipment, an Initial Terminal Air Brake Inspection must be performed. The Engineer shall perform this inspection/test from the departing- end cab of the train. In addition, the Markers on the rear car are to be inspected.

T – 9.22-C ADDITIONAL INSTRUCTIONS APPLYING TO PASSENGER EQUIPMENT

The following procedures shall apply when passenger trains are in service AND when passenger trains are tied up. Compliance with the following instructions is mandatory:

1. Main Lights are to be kept ON.
2. All Cab Lights when not in immediate use by crewmember (including Cab Lights of cars in the middle of train) are to be turned on.
3. All Cab Doors not in immediate use by a crewmember are to be secured and locked. End doors of B units are to be left locked.
4. When a train is to be tied up at St. George or Tottenville, the EDL circuit breaker in each car shall be turned OFF to ensure that all end doors are locked out. The EDL breakers are to be restored to the ON position at least ten (10) minutes before scheduled leaving time.
5. Before leaving a train at St. George, Tottenville or any other location, a “walk through” of the train must be made to ensure compliance with this Special Instruction and to verify that no passengers or items of any kind have been left on the train.

NOTE: All defective equipment must be promptly reported to the Train Dispatcher. Employees finding improperly secured equipment must also make an immediate report to the Train Dispatcher.

T – 9.22-D FORM T-8.5 AND THE COUPLING/UNCOUPLING OF TRAINS

This TTSI does not apply when a non-MUE train's consist is changed by adding or removing solid blocks of cars and keeping brake system charged.

When equipment is coupled together or uncoupled, all Forms T-8.5 on the equipment become void.

For MUE trains, the Conductor responsible for the coupling or uncoupling movement must remove all Forms T-8.5 on the equipment and mark them void. On non-MUE locomotives, the Engineer must remove all Forms T-8.5 on the locomotive and mark them void.

Care must be taken not to remove any other written records such as for CSS/ATC/PSS Daily Departure Tests.

T – 9.26-A TABLE OF MAXIMUM AUTHORIZED SPEEDS

LOCATION AND CONDITION	CLASS* A TRAINS (MPH)	ALL OTHER TRAINS (MPH)
Within St. George Interlocking Limits (excepting Station Track 1) and on St. George Station-Platform Tracks	10	10
St. George East Interlocking Limits to 500 feet east of Tompkins Ave. Overhead Bridge	45	20
500 feet east of Tompkins Ave. Overhead Bridge to Tottenville Interlocking Signals 2E and 4E	60	30
Tottenville Interlocking Limits East of Signals 2E and 4E:		
Eastward Trains (Except to Storage Tracks)	35	15
Westward Trains (Except from Storage Tracks)	60	30
To/from Storage Tracks	15	10
East of Tottenville Interlocking Signals 2W and 4W1:		
Eastward on Tracks 1 and 2	20	10
Westward on Tracks 1 and 2	45	20
Tottenville Storage Tracks	10	10
North Shore Branch (Ballpark Track) from St. George West Interlocking Limits to End of Track	10	10

* Class A Train – A train consisting exclusively of one or more NYCT Class R44 cars modified for SIRTOA service.

T – 9.26-B TABLE OF SPEED RESTRICTIONS

LOCATION AND CONDITION	CLASS*† A TRAINS (MPH)	ALL OTHER TRAINS (MPH)
Westward non-Class A trains descending grade from Grasmere to Clifton REGARDLESS OF CAB-SIGNAL ASPECT	-	Restricted Speed
Diverging through mainline interlocked crossovers Unless higher speed is authorized by CSS	15	10
Within St. George Interlocking on Station Track 1	5	5
Within St. George Interlocking on North Shore Leg Track 10	3	3
Tompkinsville Siding, Tompkinsville Tail Track And interlocked turnouts leading thereto	10	10
Clifton MUE Siding and interlocked turnout	10	10
All Clifton MUE Shop/Yard Tracks	5	5
Clifton MOW Siding and turnout	5	5
Brady Siding and interlocked turnout	10	10
Holly Siding and interlocked turnout	10	10
Wolf Siding and interlocked turnout	10	10
Princes Bay Siding and turnout	5	5
Richmond Valley Siding and turnout	5	5
All other tracks and turnouts	5	5
Passing scheduled flag stops	10	-

* Class A Train – A train consisting exclusively of one or more NYCT Class R44 cars modified for SIRTOA service.

† Table includes speeds for tracks that are not currently electrified.

T – 9.26-C OTHER THAN MAIN TRACKS

The Other Than Main Tracks are as follows:

1. North Shore Branch – MUE trains on this track are limited to 12 cars. This track is under the jurisdiction of the Dispatcher whose verbal permission is required before making any train or track car movement on this track. A proceed Controlled Signal aspect displayed at St. George Interlocking for a westward train to enter this track constitutes such permission. The Operator must not clear a

Controlled Signal for a westward train movement into this track without permission of the Dispatcher. Eastward train movements may be made without verbal permission when St. George Controlled Signal 24 is seen to be displaying a proceed aspect AND when the track is seen to be unoccupied to this signal.

2. Tompkinsville Siding

3. Tompkinsville Tail Track (Including NRS Building and Associated Trackage)

4. Clifton MUE Siding and associated trackage – The numerical designations of the Clifton MUE Shop/Yard Tracks are Track 1 through Track 8 beginning with the first yard track adjacent to mainline NUM 1 Track. Fouling Point (FP) Markers are in service on Yard Tracks 4, 5, 6 and 7. In the absence of an applicable FP marker, a movement must not be made unless it is determined with certainty that the route to be used is not fouled.

5. Clifton MOW Siding – The length of this siding from the derail to the end-of-track bumper is approximately 550 feet.

6. Brady Siding – The length of this siding from the "leaving" Controlled Signal to the end-of-track bumper is approximately 350 feet.

7. Holly Siding – The length of this siding is approximately 567 feet from the "leaving" Controlled Signal to the bumper.

8. Wolf Siding – The length of this siding from the "leaving" Controlled Signal to the end-of-track bumper is approximately 485 feet.

9. Princes Bay Siding – The length of this siding from the derail to the end-of-track bumper is approximately 460 feet.

10. Richmond Valley Siding – The length of this siding from the derail to the end of track is approximately 475 feet. This siding must only be used with the joint permission of the Superintendent of Transportation AND the Superintendent of Signals.

T – 9.27B HAND-OPERATED SWITCHES

All switches on Other Than Main Track that are not connecting to a Main Track (as in a crossover) may be left unlocked (but properly closed) in the position of last use.

T – 9.28 DUAL CONTROL SWITCHES AND DERAILS

Every powered switch and powered derail on SIRTOA is Dual Control.

T – 9.31 SIDE DOOR OPERATION – TRAIN AT STATION

In order to provide the safest possible operation in the event of en route loss of Side Door Indication (Zone Light or Engineer's Side Doors Closed Indication Light), the following instructions must be strictly adhered to:

If no Side Door Indication (Zone Light) upon closing side doors at a station:

1. Employee operating side doors must reopen and reclose the side doors to attempt to establish Side Door Indication (Conductor's Zone Light).

2. Employee operating the side doors shall then inspect each side door panel of each car to verify that the side doors are closed, closing and locking out any open or defective side door panels.

3. If Side Door Indication is restored, the Engineer shall announce via the PA: "*Indication Light restored*". The Engineer may then resume operating the train in the normal manner.

4. If the Conductor’s Zone Light is not obtained after inspection of all side door panels AND IF ALL SIDE DOORS ARE KNOWN TO BE CLOSED, the Conductor shall signal the Engineer to proceed by transmitting a “PROCEED” Buzzer Signal from the rear car.

5. If the Side Doors Closed Indication Light does not illuminate while the Zone Light does illuminate, and once the Engineer is informed by the Conductor of the condition, the train may proceed using the Communicating Signal Buzzer.

The Dispatcher must be notified if side-door indication is lost, providing location (station) where the loss occurred, and if restored, what condition or cause was found.

T – 9.34 FARE COLLECTION AT ST. GEORGE

All fare collection shall be handled at St. George utilizing the eastbound and westbound turnstiles.

T – 10.17-A TRACKS HAVING ELECTRIFIED THIRD RAIL

The following tracks are equipped with electrified third rail:

- All tracks St. George Station and Interlocking.

- North Shore Branch.
- NUM 1 and 2 Tracks between St. George and Tottenville Interlockings, and all crossovers between these Main Tracks.
- Clifton MUE Siding and Clifton MUE Yard Tracks, except Clifton Yard Track 8.
- Holly Siding.
- All tracks Tottenville Station and Interlocking, including Storage Tracks 1, 2 & 3.

T – 10.17-B LOCATION AND PURPOSE OF THIRD RAIL GAPS

Gap Name	Location
Clifton	18 feet east of Clifton Circuit Breaker House
Old Town	Opposite Old Town Sub-Station
Dongan Hills	18 feet west of Dongan Hills Circuit Breaker House
Grant City	19 feet west of Grant City Sub-Station
New Dorp	20 feet west of New Dorp Circuit Breaker House
Eltingville	121 feet west of Eltingville Sub-Station
Princes Bay	22 feet east of Princes Bay Circuit Breaker House
Atlantic	97 feet west of Atlantic Sub-Station

Third rail gaps are provided to permit the Sub-Station Operator to safely de-energize the third rail in one section, while allowing it to remain energized in the adjacent section. These gaps are sixty (60) feet in length, a sufficient distance to prevent MUE equipment from bridging adjacent third rail sections.

When able, the Dispatcher shall prevent trains from entering a de-energized third rail section.

T – 10.17-C LOCATION AND PURPOSE OF THIRD RAIL JUMPER CABLES

Location of Third Rail Jumper Cables (Bullwhips)

St. George	Approximately 40 feet east of grade crossing on north side of track.
St. George	Approximately 120 feet west of St. George Tunnel West Portal in between Wye Track and route leading to and from Station Tracks 6 to 10.
Victory Interlocking	North side of crossover.
Landing Interlocking	North side of crossover.
Fern Interlocking	North side of crossover.
Wolf Interlocking	North side of crossover.
Tottenville	South side of west crossover.

The above listed bullwhip boxes have standard switch locks - Key #104.

These jumper cables are for emergency use to carry electric (propulsion power) current from a nearby third rail section to an MUE car when the car's contact shoes fail to make contact with the third rail. Care must be exercised to ensure that the metal ends of the jumpers are kept clear of all personnel, running rails, car bodies, car trucks, the ground, or any other grounded object at all times when in use.

T – 11.1-A ST. GEORGE CONTROLLED SIGNAL 66

St. George Controlled Signal 66 is located on the Wye Track and governs movements from the North Shore Branch to NUM 2 Track in the St. George Tunnel. When this Controlled Signal displays Stop, the train must stop at least sixty-five (65) feet prior to the signal.

T – 11.1-B AUTHORIZED NON-CONFORMING SIGNAL ASPECTS

St. George Controlled Signal 70, located on NUM 1 Track at the west end of the St. George Tunnel, governs westward movements. This Controlled Signal has a single lens capable of showing the following signal aspects, signal names and signal indications:

Signal Aspect	**Signal Name**	**Signal Indication**
One Yellow Light	Slow Approach	Rule 12.7 shall govern.
One Lunar Light	Restricting	Rule 12.11 shall govern.
One Red Light	Stop	Rule 12.13 shall govern.

T – 11.5-A MAIN TRACKS SIGNALED IN BOTH DIRECTIONS

All Main Tracks are signaled in both directions, and are subject to Rule 11.5, as follows:

- St. George Station Tracks 1 through 12 inclusive.
- NUM 1 and NUM 2 Tracks from Hannah to Tottenville, excluding all Interlocking Limits and Extended Interlocking Limits.
- Tottenville Station Tracks 1 and 2, and Storage Tracks 1, 2 and 3.

T – 11.5-B NORMAL DIRECTION OF TRAFFIC

The Normal Direction of Traffic between St. George and Tottenville Interlockings is as follows:

- NUM 1 Track – Westward
- NUM 2 Track – Eastward

T – 13.1 INTERLOCKING LIMITS AND EXTENDED INTERLOCKING LIMITS

Extended Interlocking Limits exist between the following interlockings:

- St. George and Hannah
- Holly and Fern
- Wolf and Pond

The west limits of Tottenville Interlocking are:

- NUM 1 Track – Controlled Signal TN-4E
- NUM 2 Track – Controlled Signal TN-10E

The east limits of Pond Interlocking are:

- NUM 1 Track – Controlled Signal PD-10W
- NUM 2 Track – Controlled Signal PD-8W

T – 13.4 PROTECTION AGAINST FAILOVER TO FIELD AUTOMATIC SWITCHING

The following interlockings have automatic failover capability:

- Hannah,
- Landing,
- Brady,
- Adams,
- Holly,
- Fern,
- Wolf,
- Pond, and
- Mount.

Exit blocking and switch blocking are provided for in the field circuits for these interlockings. Once indication is received that the field blocking is in effect, failover to Field Automatic Switching will not override the field blocking which will remain in effect.

However, signal blocking is not provided for in the field circuits at these interlockings. The application of blocking devices such as caps and tags on the signal controls for these interlockings does NOT afford protection against failover and the unintended clearing of the signal.

Therefore, signal blocking must NEVER be relied upon at these interlockings. If blocking protection is to be provided for activities within interlocking limits at these locations, a proper combination of switch and exit blocking must be used.

For instance, if blocking protection is required for activities on NUM 1 Track within Adams Interlocking, blocking protection can be afforded such as by blocking the two crossovers in the normal position AND by also blocking the two exits on NUM 1 Track (the exit east of the interlocking and the exit west of the interlocking).

This blocking scenario will allow a train to be routed towards the interlocking on NUM 1 Track, but without the risk that the signal may clear because of a failover.

Positioning a switch by Auxiliary Switch Control must not be used in lieu of switch blocking at these interlockings because failover to Field Automatic Switching may cause the switch to throw.

This TTSI applies to all Operating Rules and TTSIs referring to signal blocking.

T – 13.16 ROUTE REQUEST PUSHBUTTONS

Route Request Pushbuttons are located at the following Controlled Signals:

- Landing Controlled Signals 2E, 2W2 and 4W.
- Holly Controlled Signals 2E2, 4E and 2W.
- Fern Controlled Signals 6E and 8W.
- Wolf Controlled Signal 4W.

T – 14.1 TRACKS SUBJECT TO THE CSS, ATC AND PSS RULES

All tracks are subject to the Operating Rules Section 14.0 (Cab Signal System and Related Rules), although the most favorable cab signal aspect on many tracks is Restricting. The PSS feature may not be effective within and leaving yards, terminals and Other Than Main Track until after a favorable Cab Signal speed command has first been received.

T – 14.5A-A DAILY DEPARTURE TEST – MUE EQUIPMENT

Before beginning the Daily Departure Test, the following conditions must exist – the air brake system must be charged, the master controller must be in a brake position, the train must be stopped (no motion), and the ADU must display a zero (0) speed limit (speed command).

When these conditions are all met, the Daily Departure Test may be initiated by pressing the DEPT TEST pushbutton on the ADU. The DEPT TEST indicator on the ADU will illuminate. The EBR relay will de-energize causing the emergency brake valve to exhaust and the train's brakes to be applied in emergency.

The Daily Departure Test will then automatically generate all of the code rates, enforced speeds and simulated speeds to test the equipment's vital operation per the sequence listed below. The employee conducting the test must verify that the ADU displays the correct indications per the following sequence. When an overspeed condition is simulated, the overspeed indicator on the ADU will illuminate and the ALARM will sound.

1. 0 MPH speed command and 3 MPH simulated speed. Overspeed.
2. 0 MPH speed command and 1 MPH simulated speed. No overspeed.
3. 15 MPH (Restricting) speed command and 18 MPH simulated speed. Overspeed.
4. 15 MPH (Restricting) speed command and 16 MPH simulated speed. No overspeed.
5. 20 MPH speed command and 23 MPH simulated speed. Overspeed.
6. 20 MPH speed command and 21 MPH simulated speed. No overspeed.
7. 35 MPH speed command and 38 MPH simulated speed. Overspeed.
8. 35 MPH speed command and 36 MPH simulated speed. No overspeed.
9. 45 MPH speed command and 48 MPH simulated speed. Overspeed.
10. 45 MPH speed command and 46 MPH simulated speed. No overspeed.

11. 60 MPH speed command and 63 MPH simulated speed. Overspeed.

12. 60 MPH speed command and 61 MPH simulated speed. No overspeed.

If at the end of the Daily Departure Test the Fault Display Panel shows "Daily Departure Test Failed", the ATC/CSS/PSS equipment cannot be used on the leading end of a train and the equipment must be repaired, unless otherwise permitted or authorized under Operating Rule 14.5D.

Upon a successful completion of the Daily Departure Test, the Fault Display Panel will show the message "Daily Departure Test Passed". The ADU will display a 60-MPH speed command with a 61-MPH simulated speed. To exit the Daily Departure Test, the employee conducting the test must press the ADU DEPT TEST pushbutton and then press the ACKNOWLEDGE button. The DEPT TEST indicator on the ADU will extinguish, the speed command will drop to 0 MPH and the simulated speed will drop to the actual speed of 0 MPH.

The employee conducting the Daily Departure Test MUST ensure that the train's brakes recharge. If the train does not recharge, this indicates that the testing of the ACKNOWLEDGE feature/function has failed. If this occurs, the ATC/CSS/PSS equipment cannot be used on the leading end of a train and the equipment must be repaired, unless otherwise permitted or authorized under Operating Rule 14.5D.

T – 14.5A-B DAILY DEPARTURE TEST – DIESEL LOCOMOTIVES

Before beginning the Daily Departure Test, the following conditions must exist – the air brake system must be charged, the 'throttle" handle must be in the idle position, the train must be stopped (no motion), and the ADU must display a zero (0) speed limit (speed command).

When these conditions are all met, the Daily Departure Test may be initiated by pressing the DEPT TEST pushbutton on the ADU. The DEPT TEST indicator on the ADU will illuminate. The FSBR relay will de-energize causing the Overspeed magnet valve to open, resulting in a service brake application.

The Daily Departure Test will then automatically generate all of the code rates, enforced speeds and simulated speeds to test the equipment's vital operation per the sequence listed below. The employee conducting the test must verify that the ADU displays the correct indications per the following sequence. When an overspeed condition is simulated, the overspeed indicator on the ADU will illuminate and the ALARM will sound.

1. 0 MPH speed command and 3 MPH simulated speed. Overspeed.

2. 0 MPH speed command and 1 MPH simulated speed. No overspeed.

3. 10 MPH (Restricting) speed command and 13 MPH simulated speed. Overspeed.

4. 10 MPH (Restricting) speed command and 11 MPH simulated speed. No overspeed.

5. 15 MPH speed command and 18 MPH simulated speed. Overspeed.

6. 15 MPH speed command and 16 MPH simulated speed. No overspeed.

7. 20 MPH speed command and 23 MPH simulated speed. Overspeed.

8. 20 MPH speed command and 21 MPH simulated speed. No overspeed.

9. 30 MPH speed command and 31 MPH simulated speed. Overspeed.

10. 30 MPH speed command and 30 MPH simulated speed. No overspeed.

If at the end of the Daily Departure Test the Fault Display Panel shows "Daily Departure Test Failed", the ATC/CSS/PSS equipment cannot be used on the leading end of a train and the equipment must be repaired, unless otherwise permitted or authorized under Operating Rule 14.5D.

Upon a successful completion of the Daily Departure Test, the Fault Display Panel will show the message "Daily Departure Test Passed". The ADU will display a 30-MPH speed command with a 30-MPH simulated speed. To exit the Daily Departure Test, the employee conducting the test must press the ADU DEPT TEST pushbutton and then press the ACKNOWLEDGE button. The DEPT TEST indicator on the ADU will extinguish, the speed command will drop to 0 MPH and the simulated speed will drop to the actual speed of 0 MPH.

The employee conducting the Daily Departure Test MUST ensure that the train's brakes can be released, after which the brakes must be immediately reapplied. If the brakes cannot be released, this indicates that the testing of the ACKNOWLEDGE feature/function has failed. If this occurs, the ATC/CSS/PSS equipment cannot be used on the leading end of a train and the equipment must be repaired, unless otherwise permitted or authorized under Operating Rule 14.5D.

T – 14.8C OPERATOR'S AND DISPATCHER'S RESPONSIBILITY

When Operating Rule 14.8C requires that "Blocking Devices must be applied to the 'next' Controlled Signal…", and when that next Controlled Signal is subject to TTSI T-13.4, alternative exit and switch blocking shall be employed in lieu of the signal blocking to ensure compliance with the Operating Rule.

When a "turnback" or other movement must be made at the interlocking protected by the "next" Controlled Signal ahead of the Failed Train making it impossible to apply the

appropriate switch and exit blocking, the Dispatcher will instruct the Failed Train to not pass the "next" Controlled Signal before clearing the prior Controlled Signal.

The verbal instruction by the Dispatcher to the Engineer of the Failed Train shall be in the format *"Train 123 do not pass Controlled Signal FR-8W at Fern."*

The proper blocking must be applied as soon as is feasible.

Once the block of the "next" Controlled Signal is unoccupied and the signal has been cleared in accordance with the applicable rules, the Dispatcher will cancel the verbal instruction to not pass the "next" Controlled Signal by verbally instructing the Engineer of the Failed Train in the format *"Train 123 may pass Controlled Signal FR-8W at Fern if the signal is displaying an appropriate aspect."*

T – 16.19 TRACK CAR MAXIMUM SPEEDS

The table of "additional speed restrictions" in Operating Rule 16.19 does not apply to trains being treated as a track car in accordance with Operating Rule 11.7. The remaining portions of Operating Rule 16.19 do apply to such movements.

T – 18.1B BLOCKING DEVICES

For St. George and Tottenville Interlockings, blocking shall be placed into affect as follows:

- Signal blocking – By placing an approved cap on the signal button for that signal and ensuring that the signal is indicating Stop and not running time.

- Switch blocking – By placing the Auxiliary Switch Control lever for that switch in the desired position and ensuring that the switch is indicating that it is in the correct position, and then by placing an approved cap on the switch lever.

- Exit blocking – By applying exit blocking, if available, otherwise by placing an approved cap on the exit button for that track and ensuring that no signal is cleared or running time for a route entering that track.

When blocking is afforded by applying caps to signal and exit buttons (applicable only to interlockings not having automatic failover capability), the Operator is responsible for not requesting "Through Routes" that would bypass and negate the blocked signal(s) or exit(s).

Operating Rule 18.1B is also modified by TTSI T-13.4.

T – 18.1C PROVIDING PROTECTION AND PROTECTION OF UNSAFE CONDITIONS

Operating Rule 18.1C is modified by TTSI T-13.4.

T – 18.1D DE-ENERGIZED THIRD RAIL

Operating Rule 18.1D is modified by TTSI T-13.4.

T – 18.1F RECORD KEEPING

Operating Rule 18.1F is modified by TTSI T-13.4. Landing Interlocking is used in Operating Rule 18.1F to illustrate the record keeping requirements for blocking devices. Even though the Operating Rule illustration refers to signal blocking at Landing Interlocking, be reminded that this illustration is superceded by the requirements of TTSI T13.4 (which apply to Landing Interlocking).

T – 18.2K GRANTING AUTHORITY TO HAND-OPERATE DUAL CONTROL SWITCHES

For the interlockings listed in TTSI T-13.4, Operating Rule 18.2K is modified to prescribe interlocking-exit blocking in lieu of signal blocking, and to read as follows:

Before authorizing an employee to hand-operate a dual-control crossover, switch and/or derail, the Dispatcher must know that all Controlled Signals governing movement over such interlocking appliance(s) are displaying Stop and are not "running time", and that there are no train or track car movements approaching or occupying the involved interlocking appliance(s). In addition, the Dispatcher must know that the appropriate **interlocking exits** and switches are blocked to protect against conflicting routes and to protect against trains being routed towards the interlocking appliance(s) to be hand-operated.

The Blocking Devices must not be removed until the employee hand-operating the switch(es) reports that all movements over the switch(es) in hand-operation are completed and that the switch has been restored to power operation.

When Signal System "indications" are not received confirming that the involved **interlocking exits** are blocked or when Signal System "indications" are not received confirming that the involved interlocking appliances are blocked in the correct positions, and after all reasonable steps have been taken to notify all approaching trains, the Dispatcher shall instruct the field employee to place all of the interlocking appliances to be hand operated in the "Hand" mode but to NOT manually operate the appliance until after a four (4) minute delay to ensure Signal System protection.

T – 18.5F-A SPECIAL DOOR-OPERATION REQUIREMENTS

Unless stated otherwise, the following Special Instructions apply on all tracks and in both directions. As with any change to the service, varied train lengths may require adjustments on the part of our customers. Your traditional courteous and patient handling of any customer questions or concerns is essential to our delivery of a quality professional service.

When all side doors of a train will not be opened at a station, prior to closing the side doors at the previous station, an announcement shall be made over the PA advising our customers as to the cars on which the doors will open at the next station. Upon closing the side doors at the previous station, appropriate COS switches must be placed in the OFF (down) position to prevent doors from opening as required. After leaving the station at which all doors are not opened, and before arrival at the next station beyond that station, the side doors shall not be opened until the appropriate COS switches have been placed in the ON (up) position.

The following standard procedures apply:

1. Five-Car Trains:

   At all stations except Richmond Valley, Nassau, Atlantic and on NUM 1 Track at Clifton, the platforms are of sufficient length to properly berth a five (5) car train. After ascertaining that the train is properly berthed, the crew member operating the doors shall open and close the side doors of the train from the rear car. Under no circumstances shall any other operating position be used without permission of proper authority.

2. Richmond Valley Station:

   a. Two- and three-car trains – All cars are to be properly platformed and doors opened.

   b. Four-car train – When properly platformed, the doors shall be opened only on the first three cars.

   c. Five-car train – When on the platform, only the crew door of the rear car shall be opened.

3. Nassau Station (on both tracks) and Clifton Station on NUM 1 Track:

   a. Two-, three- and four-car trains – All cars are to be properly platformed and doors opened.

   b. Five-car train – When properly platformed, the doors shall be opened only on the first four cars.

4. Atlantic Station:

When on the platform, only the crew door of the rear car shall be opened.

T – 18.5F-B "VAPOR" MASTER DOOR CONTROL EQUIPMENT

Train service personnel must adhere to this Special Instruction when operating R44 Cars equipped with the "VAPOR" MASTER DOOR CONTROL equipment.

1. The "VAPOR" MASTER DOOR CONTROL PANEL Operating Key Switch has three positions: "RUN" - "ON" - "TERMINAL". A Conductor's Operating Position is established by moving the Operating Key Switch to the ""ON" position. This illuminates the Zone Switch Button and Conductor's Indication on the Master Door Control Panels in that cab (both sides). On a train, only one Conductor's Operating Position should be established at a time. (Establishing more than one Conductor's Operating Position will result in the Conductor and Engineer not receiving indication for the entire train.)

2. When the Operating Key Switch is moved to the "ON" position, it results in the loss of Side Door Indication. The side doors may then be opened and/or closed at a station stop.

3. When all side doors are closed and locked, the Conductor's Indication (Zone Lights) will illuminate, but the Side Door Indication will NOT illuminate until the Operating Key Switch is moved to the "RUN" position. When moving and when changing to the other side of that cab, the Operating Key Switch MUST be in the "RUN" position.

4. The Door Control Key can be removed from the Operating Key Switch only when in the "RUN" or "TERMINAL" position. If doors are open (such as at a terminal) and the Operating Key Switch is moved to the "TERMINAL" position, the doors will remain open and the Zone Switch Button will remain illuminated to identify that cab as the Conductors Operating Position. If the side doors are open and the Operating Key Switch is moved to the "RUN" position, the doors will close. THIS METHOD MUST NOT BE USED TO CLOSE THE DOORS.

5. The Conductor's Operating Position may be canceled by pushing the illuminated Zone Switch Button when the Operating Key Switch is in the "RUN" position on BOTH Master Door Control Panels in that cab.

6. Before leaving the train for any reason (except when laying up), the Conductor must move the Operating Key Switch to the "TERMINAL" position and remove the Door Control Key.

7. When a train is to be laid up and when no Conductor will be on board the train for the run to the storage location, the Operating Key Switch MUST be moved to the "RUN" position to provide Side Door Indication. The employee closing the doors at the terminal shall be responsible for seeing that this is done.

8. If Side Door Indication is lost en route, the train may continue in service based on and using the Conductor's Indication, Buzzer signals and the Side Door By-Pass Button. The Conductor MUST move the Operating Key Switch to the "RUN" position before transmitting the "PROCEED" Buzzer signal. UNDER NO CIRCUMSTANCES shall an Operating Key Switch be left in the "ON" position when transmitting a "PROCEED" Buzzer Signal.

T – 18.5F-C CHANGING/SETTING UP OPERATING POSITIONS

Changing the Conductor's Operating Position at Terminals is the responsibility of the arriving Conductor. Upon observing that all passengers have exited the train at a terminal, the arriving Conductor shall make the following announcement: "*Attention please, the doors must be closed temporarily for resetting. The doors shall be reopened before the train leaves. Please stand clear and thank you for your cooperation.*"

The Conductor shall then:

1. Press the Zone Switch Button and cancel the existing Conductor's Operating Position in that cab (the Zone Switch Buttons will go dark.)

2. Proceed to the cab where the new Conductor's Operating Position will be established.

3. Insert the Door Control Key in the Operating Key Switch and move it from the "RUN" to the "ON" position. Observe that the Conductor's Indication and Zone Switch Buttons have illuminated, then press the Door Opening Button to open the side doors.

4. Move the Operating Key Switch to the "TERMINAL" position, remove the Door Control Key and secure the cab(s).

   NOTE: Setting up the Conductor's Operating Position when a train is first put into service is the responsibility of the Conductor placing that train in service. A layout illustration of the "VAPOR" MASTER DOOR CONTROL PANEL is provided on the following page:

R44 “VAPOR” MASTER DOOR CONTROL PANEL

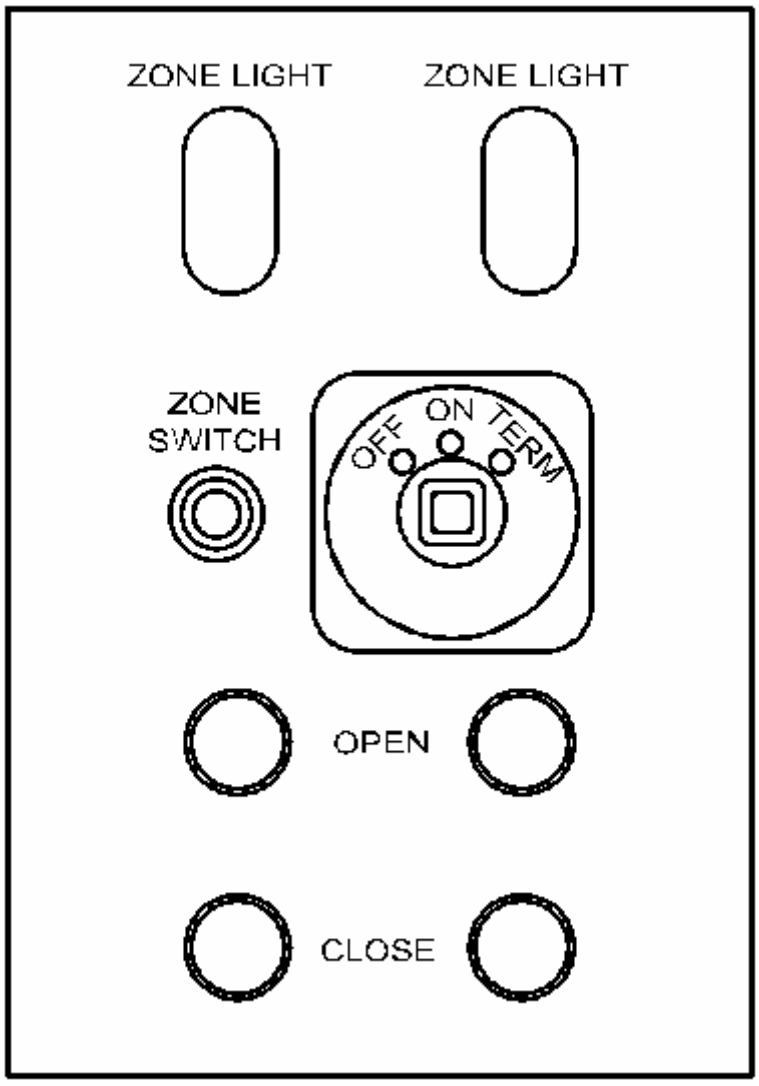

TABLE OF BRIDGES

The following table of bridges is provided for the information of employees. Unless listed on the Station Pages of the TTSIs, a bridge listed herein must NOT be considered a "station" for any purpose.

Bridge Name	Bridge Type	Milepost
Arthur Kill Road	OH	0.72
Page Avenue	OH	1.05
Mill Creek	UG	1.23
Richmond Valley Road	OH	1.37
Amboy Road –Pleasant Plains	UG	2.05
Sharrott Avenue	UG	2.19
Woodvale Avenue	UG	2.41
Manee Avenue	UG	2.58
Bayview Avenue	UG	2.65
Seguine Avenue	OH	2.90
Amboy Road – Huguenot	UG	3.39
Huguenot Avenue	OH	3.61
Albee Avenue	OH	4.23
Annadale Road	OH	4.58
Arden Avenue	UG	4.93
Richmond Avenue	UG	5.27
Armstrong Avenue	UG	5.64
Giffords Lane	OH	6.20
Greaves Avenue	OH	6.47
Amboy Road – Bay Terrace	UG	6.77
Justin Avenue	UG	7.11
Willowbrook Pkwy.	UG	7.51
Guyon Avenue	OH	7.77
Tysen Lane	UG	8.08
Beach Avenue	OH	8.36
Ross Avenue	OH	8.47
Rose Avenue	OH	8.55
New Dorp Lane	OH	8.63
Bancroft Avenue	OH	8.97
Lincoln Avenue	OH	9.18
Midland Avenue	OH	9.29

Bridge Name	Bridge Type	Milepost
Jefferson Avenue	UG	9.64
Cromwell Avenue	UG	10.19
Delaware Avenue	UG	10.31
Burgher Avenue	UG	10.45
Old Town Road	UG	10.78
Fingerboard Road	OH	11.19
Clove Road	OH	11.36
Staten Island Expressway	OH	11.56
Tompkins Avenue	OH	12.39
Bay Street – Clifton	UG	12.72
Thompson Street – Viaduct	UG	13.13
Canal Street – Viaduct	UG	13.18
Water Street – Viaduct	UG	13.23
Prospect Street – Viaduct	UG	13.30
Wave Street – Viaduct	UG	13.39
Hannah Street	OH	13.84

Bridge Type: OH = Overhead; UG = Undergrade

T – 100.0 EMERGENCY TRAIN EVACUATION PROCEDURES

T – 100.1 GENERAL

As used herein, the term "evacuation" is defined as the discharge of passengers from a train under unusual conditions that threaten the safety or health of passengers. While this definition excludes a transfer of passengers at a passenger station from one train to another train under arrangements prescribed by the Dispatcher to expedite train operations and minimize delays (such as the transfer of passengers from a defective train to a substitute train, or from an annulled or expressed preceding train to a following train), it is understood that such transfers must be carried out in such a way that passengers are subjected to the least possible inconvenience.

The decision to evacuate a train must be confirmed with the Superintendent – Transportation or a Deputy Superintendent – Transportation in all instances UNLESS there is imminent danger to the safety of the passengers or crew. In making a decision to evacuate, the safety of passengers must be the primary concern and the employees on the scene must immediately take charge of the situation to avoid panic among the passengers.

When and if a series of related or unrelated evacuations are necessary, the procedures contained herein shall be followed. Each train shall be considered to be an individual evacuation to be handled as is appropriate.

T – 100.2 SYSTEMATIC ASSESSMENT OF EMERGENCIES

The following criteria are to be used in assessing and prioritizing the need for evacuation:

1. **Critical Emergency** - Imminent danger to life, including fire, fumes, smoke, or injury.

2. **Serious Emergency** - Conditions that may jeopardize the safety or health of the passengers, including excessive heat, no ventilation, excessive crowding, unruly or uncontrollable passengers, or special medical needs of individual passengers.

3. **Emergency** - Includes train delays that are expected to exceed 60 minutes, train delays exceeding 30 minutes when it is expected that service will be not be restored within 30 additional minutes, and train delays exceeding 60 minutes when it is expected that service will not be restored within 15 additional minutes. In assessing whether an Emergency does exist, location and other relevant factors/conditions should also be considered.

T – 100.3 OUTSIDE AGENCY INVOLVEMENT

The Superintendent – Transportation or the Deputy Superintendent – Transportation on duty may direct that Crews evacuate trains without assistance from outside agencies if conditions warrant.

T – 100.4 EMPLOYEE IN CHARGE OF EVACUATION

For any train, the Conductor of that train is responsible for the train, its passengers and crew unless relieved by proper authority. In the event of a Conductor's inability or failure to act, the responsibility shall flow as follows:

- Engineer
- Any other Train Crew Member
- SIRTOA Police Department Personnel
- Officers of other SIRTOA departments
- Any other SIRTOA employee

T – 100.5 EVACUATION PROCEDURES

T – 100.5A NO IMMINENT DANGER TO LIFE

In the event of a train delay or service interruption, the Conductor or Engineer must immediately establish and maintain communication with the Dispatcher by on-train radio, telephone or any other available means. To facilitate a prompt decision concerning evacuation and/or other alternative measures to alleviate the train delay, the following information shall be transmitted to the Dispatcher as soon as is possible:

- A description of the problem including train consist and number of passengers.
- The precise location of the affected train and whether it is at a passenger station, at grade, on an embankment, in a cut, in a tunnel, or on a bridge or trestle.
- The length of time that the train has been stopped and an estimate of how much longer it will be before it can be moved, if that information is known.
- A description of any adverse conditions jeopardizing the safety or health of passengers.

- Any other information or condition affecting a decision to evacuate or the evacuation procedure, such as a handicapped, sick, or injured passenger(s) on board.

As soon as possible after being informed of any condition that may require evacuation of passengers, the Dispatcher must notify the following:

1. Superintendent –Transportation or Deputy Superintendent – Transportation;

2. SIRTOA Police;

3. Emergency Service Agencies, if required.

The decision to evacuate passengers from a train will normally be made by the Superintendent – Transportation, or by the Deputy Superintendent – Transportation on duty. The Dispatcher is responsible for coordinating those employees, SIRTOA Departments and Agencies involved in handling the evacuation procedure. A Transportation Department Official will be dispatched to the scene and will be in full charge of the evacuation, including coordinating the activities of all departments, employees and Agencies.

Once a decision is made to evacuate a train, the Dispatcher must notify the New York City Fire Department (FDNY).

The Dispatcher shall then inform the Conductor of the affected train of the decision to evacuate, who is en route to assist in the evacuation, and keep a log of each event that takes place at the scene, including who was notified, who responded, actions taken, procedures used, etc.

The Dispatcher or Transportation Department Official shall then instruct the Conductor to make the following (or similar) announcement over the public address system:

"Ladies and Gentlemen, may I have your attention please. Since … (the situation should be briefly described in a manner which will minimize distress among the passengers)…, arrangements have been made to evacuate you from the train. The Crew will assist you in making your evacuation as prompt and simple as possible. For your safety, please follow the Crew's directions, because they are trained in evacuation procedures. We sincerely regret this inconvenience and request your full cooperation. Thank You."

NOTE: If the train's public address system is inoperable, the Conductor shall make this announcement in each car.

If another train is to be used to effect the evacuation, the Dispatcher will direct the Crew of the relief train to proceed to the nearest location where emergency evacuation equipment is available. The Dispatcher will also notify personnel at the location where the equipment is to be picked up that a relief train is en route to obtain the emergency

equipment. When the equipment has been placed aboard the relief train, the Dispatcher will direct the Crew to proceed to the affected train. The Crew of the relief train will also be informed of the location of any handicapped or injured passengers aboard the affected train that require special evacuation procedures.

T – 100.5B IMMINENT DANGER TO LIFE

In the event of a Critical Emergency that presents imminent danger to the lives of passengers or Crew, the decision to evacuate a train shall immediately be made by the Conductor and the Dispatcher notified. The Conductor shall remain in charge of the evacuation until relieved by proper authority.

T – 100.6 PREFERRED METHODS OF EVACUATION

The method of evacuation chosen must be the one offering maximum passenger safety and minimum passenger inconvenience.

Evacuation requiring movement of passengers onto the roadbed must be avoided unless no other means of evacuation is possible.

NOTE: Before an evacuation is initiated, the air brakes on all trains involved in the evacuation must be applied and maintained in Emergency. Also, a sufficient number of handbrakes must be applied on each such train to prevent unwanted movement, but not less than two handbrakes when a train has two or more cars.

T – 100.6A TRAIN FULLY BERTHED AT STATION PLATFORM

Whenever possible, a train to be evacuated that is able to be moved safely will proceed or be directed to proceed subject to applicable rules to the nearest passenger station and be evacuated at that location. Evacuation of a train fully berthed at a station platform consists of discharging the passengers onto that station platform. Special attention must be provided by crew members, and by other employees at the scene, to the handicapped, sick, injured, and those unable to care for themselves. The apparent need of any individual for special assistance must be reported to the Dispatcher.

T – 100.6B TRAIN PARTIALLY BERTHED AT STATION PLATFORM

If the train is only partially berthed at a station platform and cannot be moved to the fully berthed position, the Crew must open those doors that are properly berthed. The Conductor will make the necessary announcements directing passengers toward the berthed end of the train and will assist passengers who must walk between cars to reach an open doorway.

Every assistance shall be offered to handicapped passengers who must be moved from one car to another. Persons confined to wheelchairs cannot be moved through R44 cab doors because of the door width. Depending on the seriousness of the emergency, those persons who are unable to be evacuated because of consist configuration should remain in the car until a doorway can be berthed. If conditions dictate immediate evacuation of all passengers, crew members must carry the persons through the cab into the next car.

T – 100.6C USE OF SECOND TRAIN ON THE SAME TRACK

T – 100.6C.1 RELIEF TRAIN

The Dispatcher will direct the relief train to proceed to the train to be evacuated, closing in directly ahead of or behind it, and evacuate the passengers through the end doors. This procedure may also be accomplished using two relief trains, one at each end, to speed up the evacuation procedure.

T – 100.6C.2 AS A BRIDGE TO STATION PLATFORM

If the passengers are to walk from car to car and train to train, on the same track, to reach a station platform, the Crew must advise the passengers of the circumstances and:

1. Announce which direction the passengers are to walk.

2. Assist passengers in moving from car to car.

3. Assist passengers while crossing to the second train.

4. Take whatever special precautions are necessary to move handicapped, sick, or injured persons from car to car and from train to train.

5. Open only those side doors that are properly berthed on the station platform.

6. Instruct passengers how to proceed after reaching the second train.

T – 100.6D USE OF SECOND TRAIN ON ADJACENT TRACK

If impractical or unsafe to bring a relief train in on the same track, the Dispatcher shall direct a relief train to proceed to a position alongside the train to be evacuated and instruct the Crew to evacuate the passengers through the side doors using rescue boards.

Rescue boards are located in Tower B and next to the Circuit Breaker House at Tottenville. These boards may be used to assist in transferring passengers from the train to be evacuated to the relief train. However, they must not be used where there are wider track centers than for which the rescue boards were designed, such as at St. George, Tompkinsville, Stapleton, Grasmere, Bay Terrace or Tottenville.

When it is necessary to evacuate passengers from one train to another train in this manner, the rescue boards are to be used to bridge the gap between adjacent doorways of the two trains. Personnel must be positioned at each rescue board, preferably one on each train at each end, to assist passengers in crossing over from one train to another. Whenever possible, the doorway of a car in which any handicapped, sick, or injured persons are located will be used as the primary place of transfer.

To transfer passengers, the crew must:

1. Open the side doors to be used for the evacuation by operating the RED emergency handle located behind the panel adjacent to the doorway panel(s) to be opened.

2. Set the rescue boards so that the ends of the boards are resting on the sills of the doorways to be used.

3. Test the rescue boards before use.

4. Instruct passengers to move to the car where rescue boards are installed.

5. Assist passengers in crossing from train to train.

6. Exercise special care in assisting handicapped, elderly, sick, or injured passengers.

NOTE: Rescue boards are of sufficient width to accommodate wheelchairs. Particular care must be exercised while transferring any persons so confined.

T – 100.6E TRAIN TO ROADBED

If impractical or unsafe to evacuate trains at a station platform or using a relief train, the passengers may be evacuated onto the roadbed, but only if consistent with passenger safety.

Before initiating any evacuation necessitating walking on, adjacent to or crossing any tracks by passengers, all trains on those tracks must be stopped AND the third rail power must be removed.

The Conductor or Transportation Department Official on the scene will direct personnel in the detraining of passengers utilizing the following procedure:

1. First detrain and select a safe means of exiting from the right of way.

2. Determine which doorway or doorways are to be used for evacuation, preferably a doorway nearest to the next station or point of exit from the right of way.

3. Emergency egress ladders are stored at St. George, Tottenville (in the crew/break room) and Great Kills. If ladders cannot be obtained, or if there is imminent danger to life, the arrangement of grab irons, drawhead, and stirrup located at an open end of the train will be used.

4. Sand, if available, may be spread in the area onto which passengers are to alight to prevent slipping on ice, grease, etc.

5. When evacuation equipment has been set up, personnel must be stationed at the doorway to be used for evacuation, preferably one on the train and another on the roadbed.

6. All evacuation equipment must be tested by the Crew prior to use by passengers.

7. Passengers who must walk from car to car must be informed of the direction in which they are to move and measures must be taken to prevent overcrowding in the car being used for the evacuation.

8. Personnel positioned at the doorway to be used must assist passengers in alighting safely to the roadbed.

9. If any handicapped/disabled passengers are among those being evacuated, the employee-in-charge must direct SIRTOA Police, local Police and/or Fire Department personnel to them so that they can be removed, as necessary.

T – 100.6F EVACUATION FROM ROADBED

Assistance from local Police and/or Fire Department may be utilized during evacuations from the roadbed to public areas.

T – 100.6F.1 ALONG ROADBED TO PASSENGER STATION

If the train being evacuated is in close proximity to a passenger station, the Crew must walk Passengers along the roadbed to the station. The evacuation must be conducted in such a way that passengers remain grouped together until they reach the station platform.

The procedures contained in T – 100.6E must be followed to evacuate passengers from the train to the roadbed. As the passengers are evacuated from the train, personnel must direct them to the passenger station.

1. Sufficient light and guidance must be provided to ensure the safe movement of passengers along the roadbed to the station.

2. If any handicapped/disabled passengers are among those being evacuated, personnel must direct SIRTOA Police, local Police and/or Fire Department personnel to them so that they can be helped or taken to the station, as necessary.

T – 100.6F.2 FROM ROADBED TO PUBLIC AREA

If train is NOT in close proximity to a passenger station, the Crew must obtain permission to evacuate directly to a public area.

The procedures contained in T – 100.6E must be followed to evacuate passengers from the train to the roadbed. As passengers are evacuated from the train, personnel must direct them to the chosen public area via the safest route.

1. The Crew must detrain and select the nearest safe means of exiting from the right of way.

2. In the event that the area is fenced or other obstructions are encountered, personnel must assist SIRTOA Police, M of W personnel, and/or Outside Agencies in providing safe access to a public area. (Cut an opening in fence, clear debris, etc.)

3. Sufficient light and guidance must be provided to ensure the safe movement of passengers to the chosen public area under the prevailing conditions.

4. Evacuation procedures must be conducted so that passengers remain grouped together until having exited from the right of way into a public area.

5. If any handicapped/disabled passengers are among those to be evacuated, personnel must direct SIRTOA Police, local Police and/or Fire Department personnel to them so that they can be helped or taken to a public area, as necessary.

T – 100.6F.3 EVACUATION ON TRESTLES

Trestle evacuations must only be used as a last resort. Before considering evacuation onto a trestle, the Dispatcher must exert every effort to move the train off the trestle by any safe means possible, or to evacuate to another train on the same or adjacent track. A Transportation Department Official, accompanied by SIRTOA Police, local Police, and Fire Department personnel should be on the scene, conditions permitting, before any evacuation to the trestle is initiated. The procedures contained in T – 100.6E and T – 100.6F (all subparts) must be strictly adhered to as they relate to the evacuation of passengers from trains to the roadbed and from the roadbed to passenger stations or public areas. SIRTOA employees, Police and Fire Department personnel MUST be used extensively in safely assisting passengers along the trestle.

T – 100.6F.4 TRESTLE TO PUBLIC AREA DIRECTLY BELOW

This is the least desirable evacuation method, and will be used only under extreme circumstances. Local emergency rescue units (Fire and Police) will effect this evacuation utilizing "cherry picker" ladders and/or other equipment available to them. The procedures contained in paragraphs T – 100.6E must be strictly adhered to if passengers must be evacuated to the trestle before the emergency units can start their evacuation from the trestle.

T – 100.7 PASSENGERS REQUIRING SPECIAL HANDLING

Train Crew personnel should always be on the alert for those passengers who might require special assistance on board their trains before emergencies develop.

In the event of an emergency requiring evacuation, the Crew must seek immediate assistance from other passengers in helping those requiring special assistance. Persons must not be bypassed in the evacuation flow because of age, illness, or other handicap.

T – 100.7A BLIND ACCOMPANIED BY GUIDE DOG

Rely on the blind person to control his/her dog and encourage them to do so. Quickly give the person any additional information he/she may require or you think they may require to negotiate possible obstacles to their safety. Quickly assist the blind person from the train to a safe location through the assistance of others. The dog will follow by jumping or being assisted to the roadbed after being called by its master.

T – 100.7B WHEELCHAIRS

In the event of an evacuation, see that wheelchair passengers move along with the passenger flow. Do not bypass wheelchair passengers in the order of evacuation.

NOTE: Wheelchairs will not pass through cab doors.

Prior to a wheelchair confined person actually reaching a cab door through which he/she must pass, inform the person and those in the immediate vicinity that the wheelchair will not fit through the door and that he/she will be removed from the chair and passed through the door with the assistance of others. If the wheelchair can be folded so that it can be passed through the door, this should be done. Otherwise, the wheelchair must be immediately disposed of by the passengers behind it by removing the wheelchair from the aisle. Once the person has been passed through the cab door, place the passenger back in the wheelchair (if still available) or seek the assistance of others in carrying the person to a position of safety.

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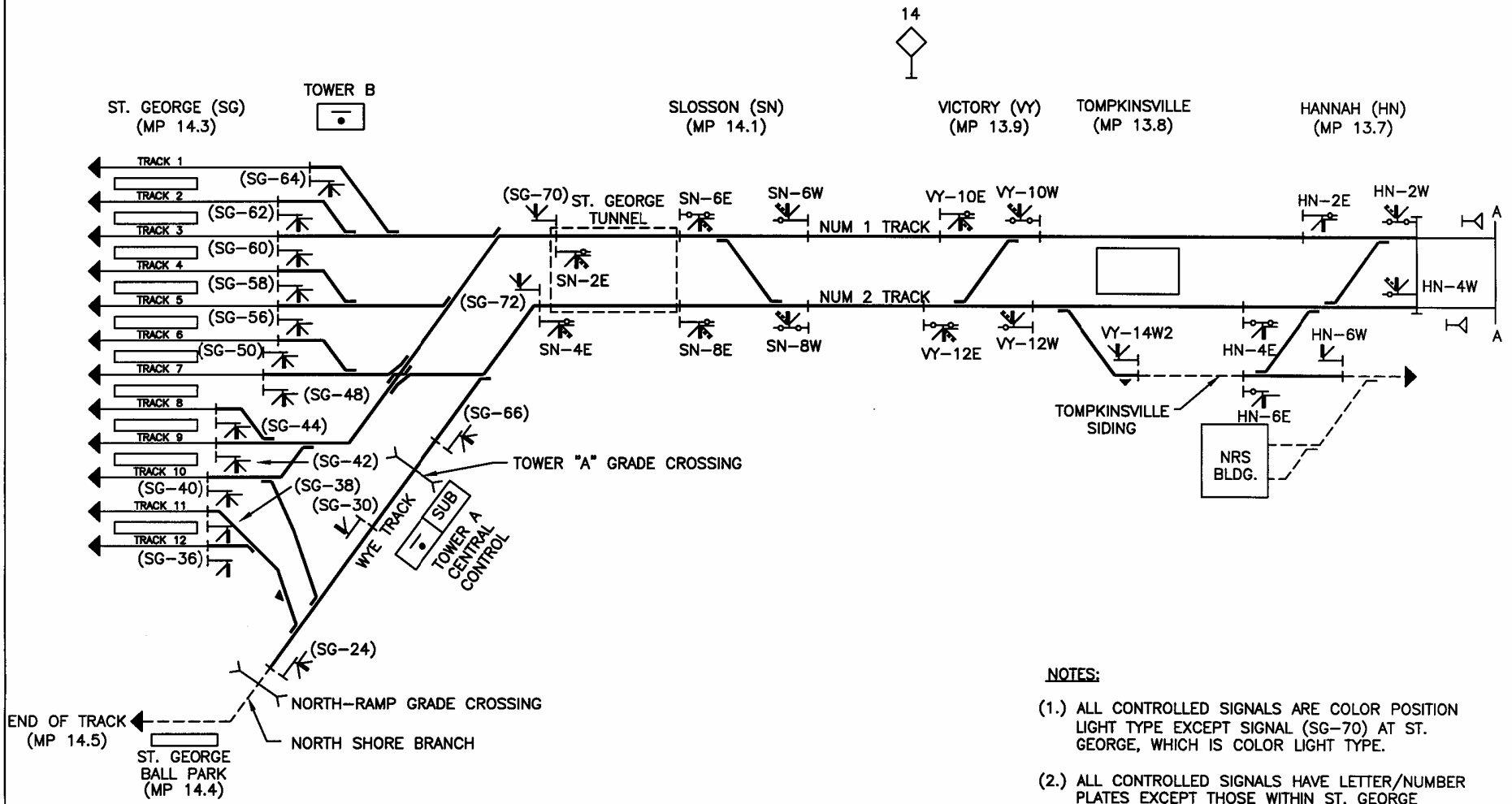
DIAGRAM OF SIRTOA TRACK AND SIGNAL LAYOUT
(PAGE 1 OF 4)

February 18, 2004



NOTES:

(1.) ALL CONTROLLED SIGNALS ARE COLOR POSITION LIGHT TYPE EXCEPT SIGNAL (SG-70) AT ST. GEORGE, WHICH IS COLOR LIGHT TYPE.

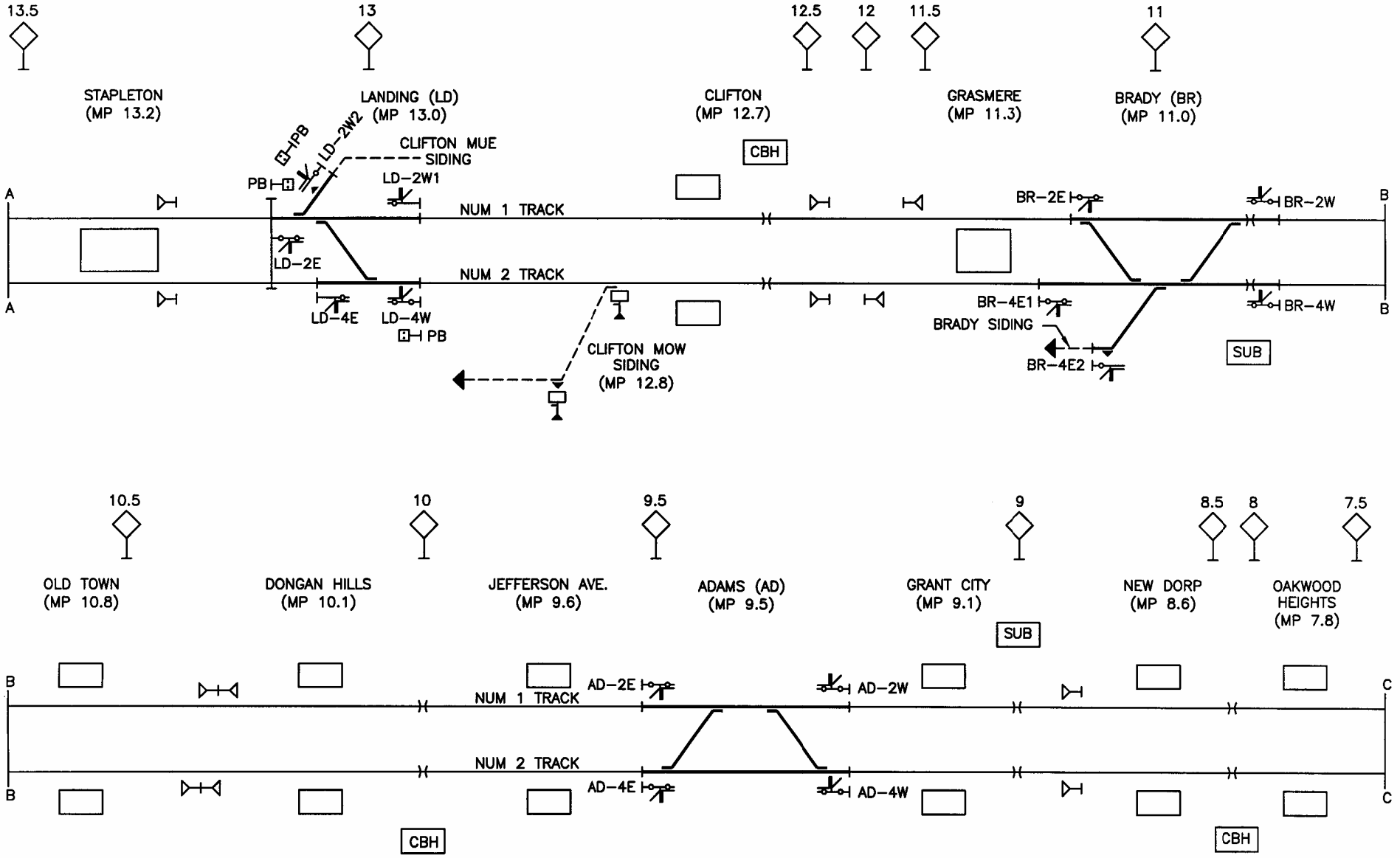
(2.) ALL CONTROLLED SIGNALS HAVE LETTER/NUMBER PLATES EXCEPT THOSE WITHIN ST. GEORGE INTERLOCKING AND CERTAIN SIGNALS WITHIN TOTTENVILLE INTERLOCKING, WHICH ARE ALL SHOWN IN PARENTHESES.

(3.) THESE DIAGRAMS DO NOT SUPERSEDE THE RESPONSIBILITY OF EMPLOYEES TO PERSONALLY KNOW THE SIRTOA OPERATING RULES, SPECIAL INSTRUCTIONS, AND PHYSICAL CHARACTERISTICS.

NOT TO SCALE

DIAGRAM OF SIRTOA TRACK AND SIGNAL LAYOUT
(PAGE 2 OF 4)

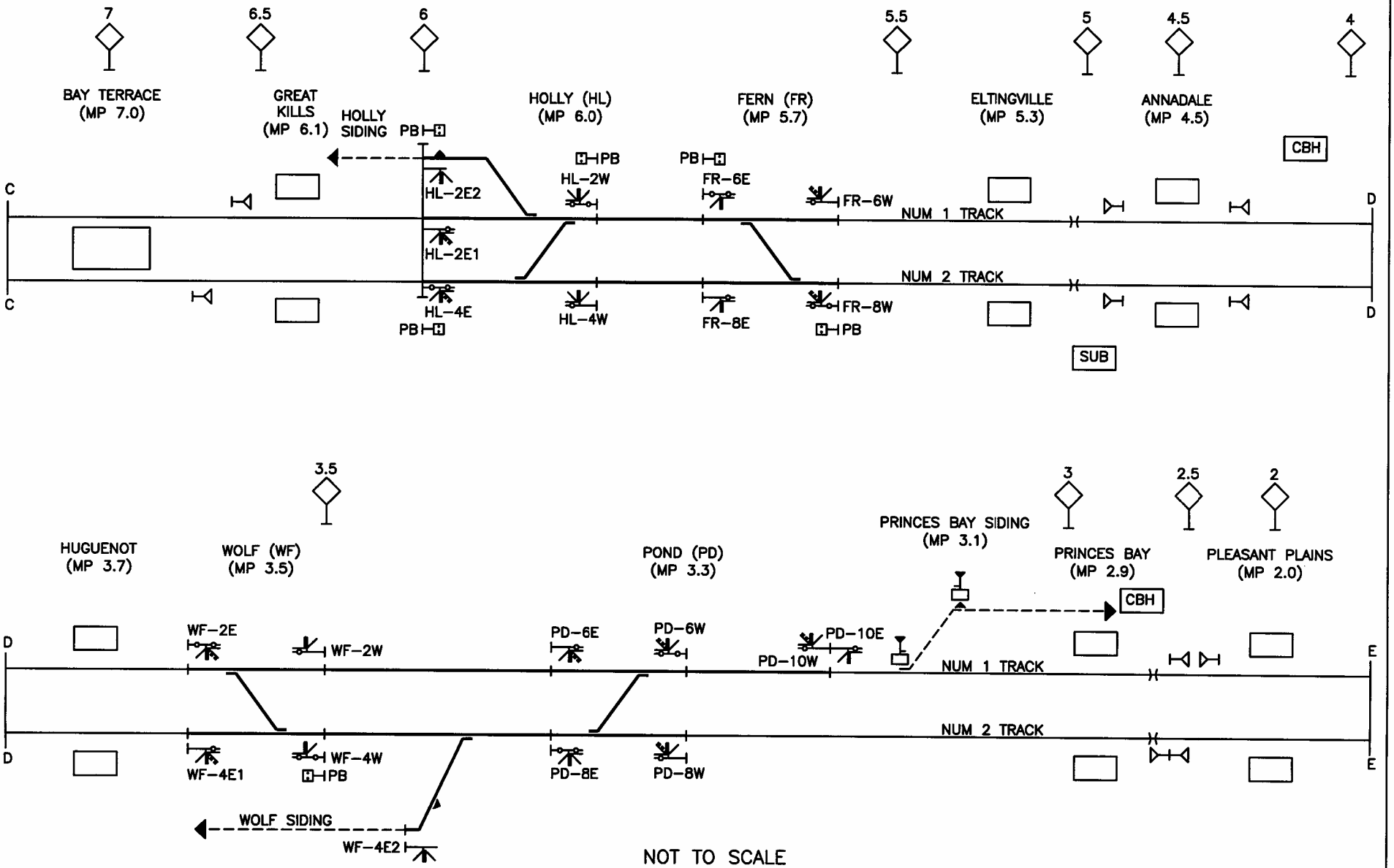
February 18, 2004



NOT TO SCALE

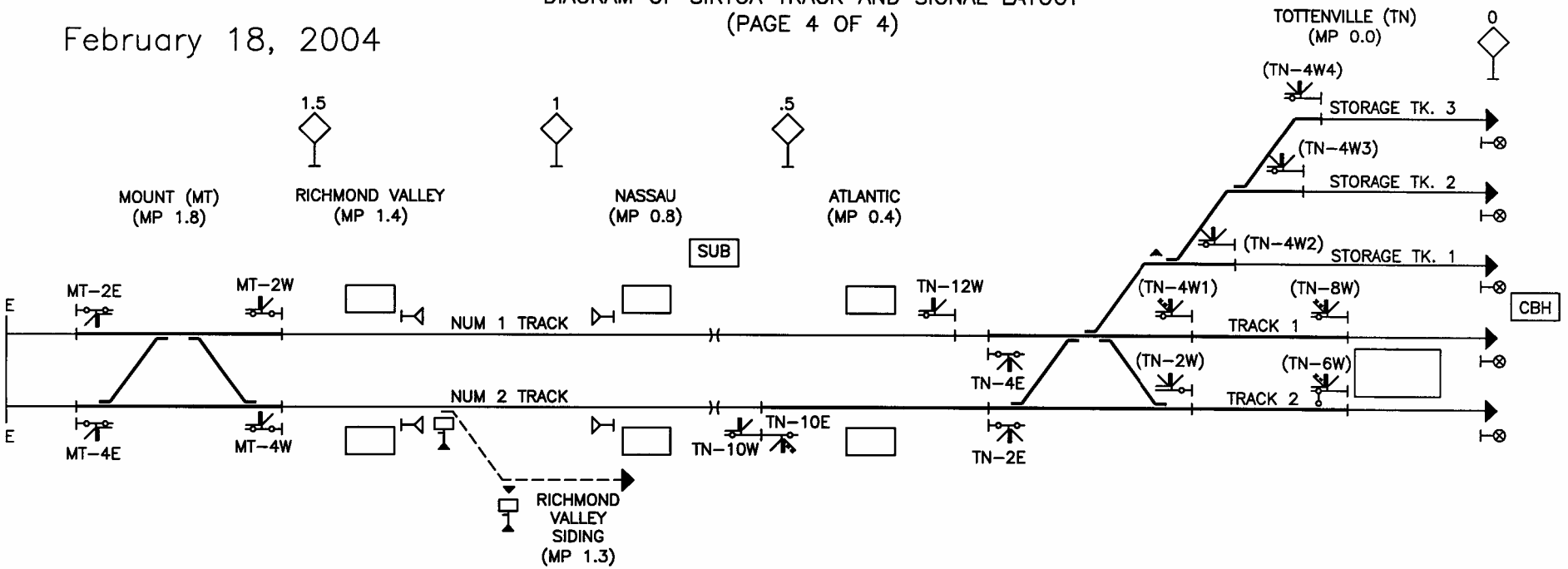
DIAGRAM OF SIRTOA TRACK AND SIGNAL LAYOUT
(PAGE 3 OF 4)

February 18, 2004



February 18, 2004

DIAGRAM OF SIRTOA TRACK AND SIGNAL LAYOUT
(PAGE 4 OF 4)



TRACKS:

——— = MAIN TRACK

═══ = INTERLOCKING LIMITS

– – – = OTHER THAN MAIN TRACK

>——< = GRADE CROSSING

LEGEND:

MP = MILEPOST

◄ = BUMPER

⊗ = FIXED STOP SIGNAL

▲ = DERAIL

= ELECTRIC-LOCKED, HAND-OPERATED SWITCH OR DERAIL

PB = ROUTE-REQUEST PUSH BUTTON

= APPROACH SIGNAL SIGN

SUB = THIRD-RAIL SUB-STATION

CBH = THIRD-RAIL CIRCUIT BREAKER HOUSE

= THIRD-RAIL GAP

NOT TO SCALE