

# Southeastern Pennsylvania Transportation Authority

# RAIL OPERATIONS DIVISION

# **RULES MANUAL**

4th Edition

Effective Sunday, November 4, 2018

For The Government Of SEPTA Employees
Performing Transportation, Maintenance, Construction
and Dispatching
Related Services

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#### Introduction

This Operating Manual governs SEPTA personnel performing duty in its rail transit system. It was developed to enhance safety and the efficiency of SEPTA's Rail Transit Operations.

Regardless of the nature of any individual item, all policies, rules, special instructions and procedures contained herein are referred to as "rules" for convenience and clarity, only, as well as the use of the male gender throughout. All rules apply equally to male and female personnel.

Compliance with all rules is mandatory. Failure to comply as required may result in disciplinary action.

Employees whose duties are affected by this manual must obtain a copy and carry it with them while performing duty. Those employees whose duties require them to be qualified on these rules and procedures must attend a program of instruction and pass the required examination. Qualified employees must attend periodic recertification classes and pass the required examinations.

When there is uncertainty or questions about the proper application or interpretation of any rule, employees must consult with a supervisor or other authority for an explanation.

# **Safety Notice**

Safety is the priority in the performance of duty. In case of doubt, the safe course must be taken.

The rules, procedures, practices, information, and guidelines prescribed for the employee provide for a safe and efficient operation. If in doubt, the safest course must always be followed.

Employees must give full cooperation to individuals performing safety-related functions on behalf of the Authority, its unions, or outside agencies.

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#### **Using Your Operations Manual**

This Manual is divided into sections based on the subject of the rules as follows:

**Definitions and Authorized Abbreviations** – explanation of terms commonly used in rail transit operations or this Operating Manual. Self-explanatory terms or those common to every-day conversations are not included.

**Authority Standard Rules** – rules applicable to all transit operations that prescribe the required conduct of all affected employees with regards to ethical and moral principles by which the Authority conducts business.

**Report For Duty Rules** – Rail Operations Division rules covering basic requirements not covered in the Authority Standard Rules.

**Rules Governing Publications** - Rail Operations Division rules applicable to the standard publications affecting the Rail Operations Division.

**Rules Governing Miscellaneous Signals** - Rail Operations Division Rules applicable to basic signaling, not including automatic or interlocking signals, or temporary signage.

**Rules Governing Movement of Vehicles** – Rail Operations Division Rules governing the basic movements of all transit trains / vehicles, regardless of the territory.

**Rules Governing Yard Operations** – Rail Operations Division Rules applicable to all employees performing service within a yard.

Rules Governing Use of Hand Operated Switches and Derails - Rail Operations Division Rules applicable to all employees using or responsible for the use of hand operated switches and derails.

Rules Governing Street Operation of Light Rail Vehicles
- Rail Operations Division Rules applicable to the operation
of light rail vehicles on the street or otherwise non-private
right-of-way territories where movements are governed by
the Pennsylvania Motor Vehicle Code.

**Signal System Rules** - Rail Operations Division Rules applicable to the basic operation of trains / vehicles in territories governed by a signal system.

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**General Signal Rules** - Rail Operations Division Rules applicable to the operation of trains / vehicles governed by wayside signal systems and temporary signage.

Rail Transit Form W Rules - Rail Operations Division Rules applicable to the use of Rail Transit Form W's on territory governed by a signal system.

**Automatic Train Control System Rules** - Rail Operations Division Rules applicable to the operation of trains / vehicles where movements are governed by wayside signals, cab signals, or both.

**Non-Signaled System Rules** - Rail Operations Division Rules applicable to the operation of trains / vehicle in signal system territory when movements can not be governed by wayside signals.

**Communication Based Train Control Rules** - Rail Operations Division Rules applicable to the operation of trains / vehicles in SEPTA's Subway – Surface Tunnel.

Rules for Establishing On-Track Protection of Roadway Workers - Rail Operations Division Rules applicable to all employees involved in the maintenance, inspection, construction or repair of the transit system when such work has the potential to foul the transit rail system.

**Interlocking Rules** - Rail Operations Division Rules applicable to the operation of interlockings and the movement of trains / vehicles through interlockings.

Radio and Telecommunication System Rules - Rail Operations Division Rules applicable to the use of radios, telephones and other telecommunication systems.

**Movement of Track Car Rules** - Rail Operations Division Rules applicable to the operation of track cars on territory governed by a signal system.

Train Dispatcher / Controller and Tower Operator Responsibility Rules - Rail Operations Division Rules applicable to the duties of train dispatchers / controllers and tower operators.

**Train / Vehicle Operator Responsibility Rules** - Rail Operations Division Rules applicable to the duties of train and vehicle operators.

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**Cashier Responsibility Rules** - Rail Operations Division Rules applicable to the duties of cashiers.

In addition, each District location is subject to special instructions that govern the duties of employees performing service in that territory. Employees are required to carry the Special Instructions relative to the operating mode on which they are performing service.

Certain locations are also affected by Bus Operations. Employees whose duties may require them to perform service with a bus are required to carry the applicable Bus Operating rules in their Operations Manual.

The following table identifies the rules applicable to employees performing service at each location.

	Subway / Elevated Division		Suburban / Light Rail Division: Green Line		Suburban / Light Rail Division: Victory	
	MFSE Line	BSS Line	Elmwood	Callowhill	MSH	NHSL
Definitions and Authorized Abbreviations	Х	Х	Х	X	Х	Х
Authority Standard Rules	Х	Х	Х	Х	Х	Х
Reporting For Duty Rules	Х	Х	Х	Х	Х	Х
Rules Governing Publications	Х	Х	Х	Х	Х	Х
Rules Governing Miscellaneous Signals	Х	Х	Х	Х	Х	Х
Rules Governing Movement of Vehicles	Х	Х	Х	Х	Х	Х
Rules Governing Yard Operations	Х	Х	Х	Х	Х	х
Rules Governing the Use of Hand Operated Switches and Derails	х	Х	Х	X	Х	X
Rules Governing Street Operation of Light Rail Vehicles			X1	X <sup>1</sup>	X <sup>2</sup>	
Signal System Rules	х	Х	<b>X</b> <sup>3</sup>	<b>X</b> <sup>3</sup>	X <sup>4</sup>	Х

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	Subway / Elevated Division		Suburban / Light Rail Division: Green Line		Suburban / Light Rail Division: Victory	
	MFSE Line	BSS Line	Elmwood	Callowhill	MSH	NHSL
General Signal Rules	Χ	Χ	<b>X</b> <sup>3</sup>	$X_3$	X <sup>4</sup>	Χ
Rail Transit Form W Rules	Х	Х	<b>X</b> 3	<b>X</b> 3	X <sup>4</sup>	Х
Automatic Train Control System Rules	Х					Х
Non-Signaled System Rules	Х	Х	<b>X</b> <sup>3</sup>	<b>X</b> <sup>3</sup>	X <sup>4</sup>	Х
Communication Based Train Control Rules			<b>X</b> <sup>3</sup>	<b>X</b> 3		
Rules for Establishing On-Track Protection of Roadway	Х	Х	<b>X</b> <sup>3</sup>	<b>X</b> <sup>3</sup>	X <sup>4</sup>	Х
Interlocking Rules	Х	Х	<b>X</b> <sup>3</sup>	<b>X</b> <sup>3</sup>		Χ
Radio and Telecommunication Rules	Х	Х	Х	Х	Х	Х
Movement of Track Car Rules	Х	Х	<b>X</b> <sup>3</sup>	<b>X</b> <sup>3</sup>	X <sup>4</sup>	Х
Train Dispatcher / Controller and Tower Operator Responsibility Rules	х	Х	х	х	Х	х
Train / Vehicle Operator Responsibility Rules	Х	Х	Х	Х	Х	Х
Cashier Responsibility Rules	Х	Х				

- 1 All operations outside the Subway Surface Tunnel.
- 2 Media operation west of Bowling Green; Sharon Hill operation between Springfield Road and North St
- 3 Within Subway Surface Tunnel and Buist to Eastwick Loop.
- 4 Media operation between 69th St and Bowling Green; Sharon Hill operation between 69th St and Clifton, and North St and Sharon Hill.

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Definitions And Authorized Abbreviations

Absolute Block - A block that may not be occupied by more than one train.

**Adjacent Track** - A controlled or non-controlled track whose track center is spaced less than 19 feet from the track center of the occupied track.

**Authorized business purpose-** means a purpose directly related to the tasks that an employee is expected to perform during the current tour of duty, or other tasks specifically approved by Department or Division authority.

**Authority supplied electronic device-** means an electronic device provided to an employee by SEPTA for an authorized business purpose. An Authority-supplied device will be considered a personal electronic device when it is being used by the employee for other than an authorized business purpose.

Advance Route Indicator - A lighted letter or flashing lunar white light displayed beneath a signal used to give advance information as to the route selected by Identra equipment, or manually operated interlocking equipment, or manually operated interlocking.

**Approved Protective Equipment** - Personal protective equipment that has been tested, approved and assigned for a specific purpose.

**Aspect** - The appearance of a signal as it is configured by the lighted combination of colors, position, or both, and which conveys an indication as viewed from the direction of an approaching vehicle or train.

**Automatic Block Signal System (ABS)** - A block signal system in which the use of each block is governed by an automatic block signal actuated by a train or by certain conditions affecting the use of the block.

# **Automatic Routing (AR)**

**Automatic Train Control System (ATCS)** - A system that provides for a penalty application of the brakes upon exceeding limitations relating to vehicle occupancy, position, spacing, and speed.

**Automatic Train Dispatcher (ATD)** - A device used to light Train Starting Lights on a predetermined schedule.

**Automatic Train Stop (ATS)** - A device on a train that will cause a penalty application of the brakes if the operator fails to acknowledge a cab signal change to a more restrictive indication.

# Avenue (Ave.)

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#### Backing-Up -

- 1. The backward movement of equipment by placing the master controller/cineston in the reverse mode.
- 2. The reverse movement of equipment when it is controlled from a location other than the leading end of the movement.

**Block** - A length of track with defined limits, the use of which is governed by block signals, cab signals or both, or other written or verbal authority as prescribed by rule or special instruction. In Automatic Block System territory, the limits of a block are defined by block signals, cab signs, or both. In Non-Signaled System territory, the limits of a block are defined by interlocking, Temporary Block Station, or both.

**Blocking Device** - A lever, plug, ring, or other method of control that restricts the operation of a switch or signal.

**Block Signal** - A fixed signal at the entrance of block to govern the use of that block.

#### **Boulevard (Blvd)**

## Blue Line (BL)

**Blue Signal** - A clearly distinguishable blue flag, blue light, blue paddle, blue tag, or blue cone by day, or blue light, blue paddle or blue tag by night. When displayed, it signifies that workers are on, under, or about rolling equipment.

**Braced Position** - Firm footing with feet apart, set to resist movement and, if possible, with handhold.

**Bulletin Order (BO)** - A publication used to notify employees of changes to rules, procedures, and other instructions affecting the movement of trains or vehicles.

**Cab Signal** - A speed indicator located on the vehicle's cab signal display unit that indicates the overspeed warning point. The cab signal is used in conjunction with interlocking signals with or in lieu of block signals.

**Casual Inspection** - an inspection performed by an individual who is not qualified as a lone worker and involves routine observations that do not interfere with the person's ability to detect the approach of trains.

**Certified Employee** - A qualified employee who has been authorized to perform a specific purpose.

**Clear Block** - The condition of a block, conveyed either verbally or by signal indication, in which there are no other trains or equipment occupying the block.

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Clearance Lights - Amber light(s) located along and above spur tracks which illuminate whenever a train is entering the spur, and extinguish after the train has cleared the interlocking.

**Close Clearance** - A condition in which there is insufficient clearance to safely permit a person to occupy the area between a vehicle and an adjacent structure or other vehicle.

## Commercial Driver's License (CDL)

## Computer Assisted Dispatch (CAD)

**Control Center** - The location where remote control appliances or switches are operated and operating instructions are given.

**Controlled Point (CP)** - A designated location where signals/switches are remotely controlled from the Control Center.

**Controlled Siding (CS)** - A circuited siding controlled and governed by signals under the control of the Control Center.

**Crossover** - A combination of two switches connecting two adjacent tracks; when lined, this switch combination allows movements to cross from one track to another.

Communication Based Train Control (CBTC) - A system in which vehicle movement is determined through a radio signal network linked with the train and wayside communication systems.

**Current of Traffic** - the direction of movement assigned to a track in the Special Instructions.

#### Deadhead -

- 1. An out-of-service train movement.
- 2. Moving from one location to another location while not performing service; deadheading applies to both employees and equipment.

**Derail** - A track safety device to guide rolling equipment off the rail at a selected point as a means of protection against collision or other accidents.

**Detour Board** - A bulletin board at a designated location which contains information on both long term and short term detours on bus routes.

**District Dispatcher** - The person who assigns work to the Operator.

**District Notice** - A notice issued by the designated officer at specific locations that contains general information affecting employees assigned to that location.

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**Diverging** - Changing from one route to another.

**Division Notice** - A notice issued by the designated officer that contains information affecting employees of that Division.

**Dual Control Switch** - A power-operated switch also equipped for hand operation.

# Eastbound (EB)

**Effective Locking Device** - A switch padlock that is vandal and tamper resistant, and can be unlocked only by the group or craft of employees who locked it.

**Electrically Locked Switch** - A hand-operated switch equipped with an electrically controlled device that restricts the movement of the switch.

Electronic device- means an electronic or electrical device used to conduct oral, written, or visual communication; place or receive a telephone call; send or read an electronic mail message or text message; look at pictures; read a book or other written material; play a game; navigate the Internet; navigate the physical world; play, view, or listen to a video; play, view, or listen to a television broadcast; play or listen to a radio broadcast other than a radio broadcast by a railroad; play or listen to music; execute a computational function; or, perform any other function that is not necessary for the health or safety of the person and that entails the risk of distracting the employee or another employee from a safety-related task. This term does not include--

- (1) Electronic control systems and information displays within the locomotive cab (whether the displays or systems be fixed or portable) or on a remote control transmitter necessary to operate a train or conduct switching operations; or
- (2) A digital watch whose only purpose is as a timepiece;
- (3) A medical device, such as a hearing aid or blood sugar monitor, that is intended for use the cure, mitigation, treatment, or prevention of disease or other conditions.

**Employee-In-Charge (EIC)** - The person in charge of a work group and the work being performed.

**Entrance Buffer** – The area within a Work Zone that extends from the Stop Sign/Work Area Speed Limit Sign to the beginning of the Work Area.

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**Exclusive Track Occupancy** – Establishment of working limits on controlled tracks in which movement authority of trains, vehicles and other equipment is restricted and the authority for occupancy of the working limits is the responsibility of the QPE.

The following are the only means of protection that must be used under exclusive track occupancy:

Exclusive Track Occupancy (controlled tracks)

- 1. Out-of-Service
- 2. Work Zone
- 3. Foul Time
- 4. Location Control

**Exit Buffer**- The area within a Work Zone that extends from the end of the Work Area to the Work Area Resume Speed Sign.

**Extra Train** - A non-scheduled train operating on the main track.

**Facing Point Switch** - A track switch which has its points facing the train in its direction of travel. A facing point switch is used to separate, or divert one route from another.

**Fixed Signal** - A signal of fixed location that affects vehicle movement.

**Flagperson** - The SEPTA employee identified in the job briefing, who is responsible for holding trains and other equipment clear of a work area or other designated location.

**Form W** - Written authorization issued by the Train Dispatcher / Controller to remove tracks from service, authorize track car movement, establish working limits, restrict movements, and convey instructions not otherwise covered in the operating rules.

#### Foreman (Frm)

**Fouling** - Being in a position to be struck by moving on-track equipment.

**Foul Time** - A method of establishing a work area on an inservice track segment in which all movements are held clear of the track and fouling is authorized for a specified time limit by the Train Dispatcher / Controller.

**Frog** - 1) That portion of a track structure that is used to guide the flanges of a wheel as it passes over the juncture of two rails. 2) That portion of the overhead trolley structure that guides the trolley pole in the direction of the turn.

**Gang** - Two or more persons working together in a common task.

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Gauge / Gage - Distance measured inside running rails.

**General Order (GO)** - A publication issued periodically that contains revision pages for the Operations Manual.

#### Green Line (GL)

**Ground Inspection -** A physical inspection of the equipment, undercarriage, track area and/or infrastructure, by a qualified employee or operator, viewing all sides of the train to include from one train length prior to the point where the train went into emergency to the point where the lead car of the train came to a complete stop.

**Handhold** - Grip with both hands, when possible, on handrail or other suitable support.

Hand-Operated Switch - A track switch operated manually.

**Home Signal** - A fixed signal governing the entrance to an interlocking.

Immediate Supervisor - The supervisor who is immediately and directly next in line within the established chain of command at that location for the purpose of reporting incidents or defects, obtaining authorizations, etc.

**Incident Commander (IC)** - The recognized authority on the scene of any accident or incident.

**Indication** - The information that is conveyed by the display of a signal aspect and which requires an action.

**Individual Train Detection (ITD)** - A procedure by which a Lone Worker acquires on-track safety by detecting approaching trains and leaving the track area before they arrive.

# Instructor (Instr)

**Interlocking (Int)** - An arrangement of switch and signal appliances so interconnected as to prevent conflicting signal indication and to ensure the proper position of track switches. It may be operated manually or automatically.

**Interlocking Appliance** - The parts of an interlocking capable of movement, i.e. switch, derail, etc.

**Interlocking Control Mechanism** - A lever, button, or electronic device located in the interlocking station that is manipulated to operate interlocking appliances.

**Interlocking Limits** - The tracks between the opposing home signals of an interlocking.

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**Interlocking Signal** - A signal that governs the use of the routes of an interlocking.

**Interlocking Station/Tower** - A place from which an interlocking is operated.

**Initialization Signal** - The fixed signal at the entrance to Communication Based Train Control Territory that governs movement into the territory.

#### Lane (Ln)

## Light Rail Vehicle (LRV)

Location Control - A method of establishing on-track protection in which an employee (a QPE or employee under the direction of a QPE) who is qualified on the signal system and track circuits can locally manipulate local signal controls and track circuits to prevent train movement into a the working limits. This can be achieved by making signal aspects indicate "Stop", and/or installing a shunting device to simulate a track occupancy, and/or manipulate the track circuit to show track occupancy.

**Lone Worker** - An individual roadway worker who is not being afforded on-track safety by another roadway worker, who is not a member of a roadway work group, and who is not engaged in a common task with another roadway worker.

#### **Maintainer (Maint)**

**Main Track** - A track designated by the Special Instructions upon which train movements are authorized by block signal system or interlocking rules.

Marker - 1) 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. 2) A highly visible marking device to indicate the clearance specifications of a vehicle; lenses are red when affixed on the rear, yellow when affixed on the front or sides.

Media/Sharon Hill Lines (MSH)

Miles Per Hour (MPH)

Mile Post (MP)

**Movement Against the Current of Traffic** - A movement opposite the direction specified in the Special Instructions. There is no current of traffic if no direction is specified in the Special Instructions.

Multiple Unit (MU)

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#### Non-Clearance -

- 1. Condition on a curve in which there is insufficient clearance to safely permit two vehicles to pass simultaneously.
- 2. An area where a person should not be positioned between the sign and train.

**Non-Fouling Work** – Work that is not obstructing or create the potential to be struck by moving on-track equipment. Work that will be performed entirely in the clear.

#### In the Clear -

- 1. Not fouling.
- 2. Where no physical structures (fencing, railings, catwalks, bents, structural columns, etc.) are present, being at least four feet from the nearest running rail, including 3rd rail.
- 3. Where physical structures are present, behind the end/edge of the structure closest to the nearest running rail.

## Application of In the Clear:

- •"Not fouling" is 1st because, no matter where you are, you can't be in a location or position that would present the possibility of being struck by moving on-track equipment.
- •In an open environment where there is nothing physical to hide behind or in, not less than 4 feet from the nearest running rail. (Note: this keeps the distance codified in a federal regulation, but limits its application to where there is no fixed object to protect a worker.)
- •Where there is something physical to hide behind, that is erected for the sole purpose of creating a stable sound barrier between the workers and an active track, no closer than the end or edge of the object.

**Non-Shunting Vehicle** - An inspection or maintenance vehicle that will not shunt the signal system.

**Non-Signal System Rules (NSS)** - A group of operating rules that apply to train movements on main tracks where no wayside or cab signals are in service.

Non-Signaled Territory - A length of main track with defined limits on which occupancy is authorized by verbal authority of the Train Dispatcher / Controller or other designated employee, interlocking or hand signal, and upon which NSS rules apply.

**Normal Current of Traffic (Normal Direction)** - The direction assigned to a track by Special Instruction.

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Norristown High Speed Line (NHSL)

Northbound (NB)

Number (No.)

**Operator (Opr)** - The individual responsible for operating the rail vehicle or driving the bus vehicle.

Orange Line (OL)

**Personal electronic device-** means an electronic device that was not provided to the employee by the Authority for a business purpose.

**Pilot** - A qualified employee who operates or guides a train, work cars, or other vehicles.

**Place of Safety** - A location that is free from the danger of being struck by a moving train, rail vehicle or other on-track equipment. For example, a location where roadway workers can position themselves and not be in the fouling envelope of any track, including an adjacent track that is protected by some form of exclusive track occupancy.

**Portable Train Stop** - A device affixed to the bottom of a wayside style Stop Sign used to activate the trip arm on certain equipment.

**Proper Authority** - Any person designated by the Authority who is charged with the specific responsibility to which the rule or procedure refers.

**Qualified Employee** - An employee who has been formally tested and approved, within the required length of time, to perform a purpose defined by the Authority.

**Qualified Protection Employee (QPE)** - A SEPTA employee qualified on the operating rules, physical characteristics, and on-track protection procedures and is responsible for establishing on-track protection and safety.

**Recovery Time** - The time between the arrival and the departure at a terminus.

Red Tag Defect Signal - A clearly distinguishable red flag or red tag displayed on the coupler of a vehicle, or white sign with red lettering displayed on the control stand of a vehicle to signify the vehicle has a defect and may not be used in revenue service. When displayed, the vehicle may not be returned to revenue service until authorized by the Shop Foreperson.

Relay - A vehicle change.

**Reliable Watch** - A watch that accurately indicates hours, minutes, and seconds.

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**Reverse Direction** - Changing the direction of a movement that has been previously authorized for the opposite direction.

**Reverse Movement** -A movement opposite the direction made with the controlling employee on the lead end.

## Road (Rd.)

Roadway Worker - An employee, or an employee of a private contractor, who is engaged in inspection, construction, maintenance, or repair of track or facilities who has the potential to foul a track. Roadway workers include individuals who repair or maintain on-track maintenance equipment.

Route Cancel Switch - A switch located adjacent to an interlocking signal used to cancel a route already selected.

**Route Request Switch** - A switch located adjacent to an interlocking signal, used to request the proper route when none has been established, or to request another route other than the one already established.

**Run Guide** - Operator's schedule which prescribes direction, route/block number, frequency and times for movement of designated trains or vehicles.

**Safety Data Sheet (MSDS)** - A printed publication prepared by the manufacturer of a product which contains information on the proper and safe handling of the product.

**Schedule** - Information that prescribes direction, number, and times for movement of scheduled trains or vehicles. The actual passenger or hand held public timetable.

Scheduled Train - A train designated by schedule.

**Section Insulator** - Gaps in the wire which interrupt the flow of electrical current; power on either side of the section insulator normally comes from a different power source.

**Siding** - A track adjacent to a main track and used for meeting, passing, storing and turning back trains.

#### Signal (sig)

**Signal Aspect** - The appearance of a signal conveying an indication, as viewed from the direction of an approaching train.

**Signal Clearing Switch** - A switch encased in a white box, located adjacent to an interlocking signal, used to clear the interlocking signal.

**Signal Indication** - The information conveyed by the aspect of the signal.

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**Signal Plate** - The identifying number or letter (or both) attached to each signal.

**Single Track** - The designation used for a main track at a location where the adjacent main track has been removed from service for maintenance, inspection, etc.

**Signal Repeater** - A signal placed to the left of the track opposite a block signal which duplicates the aspect to facilitate the observation of the aspect displayed by a block signal.

**Skate** - A device secured on a rail to prevent a train from rolling.

Smart Mobile Data Terminal (SmartMDT) - A vehicle's onboard computer that provides all control and logic functions for radio communications, schedule and route adherence, data collection, etc.

**Special Instructions** - Information that contains operating instructions specific to a certain territory, including but not limited to stations, maximum speeds, speed restrictions, etc.

**Speed Control** - A device on the train that will cause a penalty application of the brakes if the Operator fails to reduce the train's speed required by the cab signal indication.

# Speeds:

Normal Speed - The maximum authorized speed.

Reduced Speed - Not to exceed 25 MPH.

Restricted Speed - A speed that will permit stopping within one half the range of vision short of other vehicles or equipment occupying or fouling the track, obstructions on or fouling the track, switches not properly lined for movement, derails set in the derailing position, the end of track, and any signal requiring stop. Employees controlling or directing a movement must be on the lookout for broken rail and misaligned track, Operator must look out for and, when practical, stop short of broken rail. When conditions permit, operate not exceeding 20 MPH outside interlocking limits, 15 MPH within interlocking limits and 5 MPH within yard limits and shop areas, unless otherwise specified or restricted. This restriction applies to the entire movement.

**Speed Restriction (SR)** - A speed lesser than the maximum authorized speed in a specific area.

**Starter / Loader** - The individual responsible for directing the safe loading of vehicles at the center door locations, and for providing information to passengers, as required.

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**Station** - A place identified by name on the station page in the special instructions.

# Street (St)

**Supervisor (Spvr)** - Any officer or individual employed by the Authority who supervises the work of others.

**Supplemental Bulletin Order**- A temporary bulletin order issued after the weekly Bulletin Order that contains information supplemental to the weekly Bulletin Order. Supplemental Bulletin Orders are issued when required and remain in effect until further notice.

**Switch (sw)** - The portion of a track structure used to divert equipment from one track to another.

## Switches (Types):

**Air/Electric Power** - Type of switch whose OPEN or CLOSED position is activated by remote electric control and operated by air.

**Directional** - Type of switch whose position is activated by turn signal.

**Hand Operated / Manual** - Type of switch whose position must be set by hand.

**Automatic Routing (AR)** - Type of switch whose position is activated automatically to align for the route selected in the VETAG system.

**Semi-Automatic** - A hand-operated switch that is designed to be trailed through in either position. The switch points stay in the position last used.

**Spring** - Type of manual switch permitting a trailing movement to operate through the points without first setting the position, and which springs back to its original position.

## Southbound (SB)

**Switching** - The moving of equipment from one track to another.

**Switch Target** - A light or banner used to indicate the position of a track switch.

**Switch Points** - The extreme ends of a track switch; the part of the switch which moves when the switch is manipulated. Switch points are connected to each other by rods thus enabling both points to move at the same time when the switch is thrown

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**Switch Tender** - An employee who is assigned to a location for the positioning of any hand-operated switch(es).

**Tag Relief** - Face-to-face relief made between the incoming and outgoing person.

**Temporary Block Operator (TBO)** - An employee authorized by the Train Dispatcher / Controller to move trains/vehicles or direct the movements of trains/vehicles at the Temporary Block Station.

Temporary Block Station (TBS) - A station opened temporarily for the purpose of controlling on-track movements, and which may or may not be manned. A Temporary Block Station may be opened by Bulletin Order or verbally by the Train Dispatcher / Controller when conditions do not permit written notification.

**Test/Training Track Signal** - A clearly distinguishable cone or drum in the red/orange color range to signify that the segment of track is being used for testing equipment or training purposes. When displayed, it signifies that the track beyond the cone is restricted to testing or training movements.

#### Track (Trk)

**Track Area** - That area along the right-of-way that is off the station platform.

**Track Car (TC)** - Equipment, other than trains, operated on track for inspection or maintenance that may not operate signals.

#### Track Equipment Operator (TEO)

**Track "In" or "Out" of Service Switch** - Switch and indicator light which enables an interlocking to store or reroute trains in a designated section of track.

**Track Segment** - A length of track with defined limits on which movements are authorized by signals, cab signals, or Form W.

**Traffic Preemptor** - A device on certain vehicles that manipulates highway traffic signals for transit operations.

**Trailing Point Switch** - A track switch that has its points trailing away from the train in its direction of travel. A trailing point switch is used to join or merge one route with another.

**Train** - An electronically powered transit car, operating as a single unit or a multiple unit.

**Train Approach Warning (TAW)** - A method of providing ontrack protection for a work group in which a watchperson(s) is positioned in such a manner to provide a warning of an approaching train or equipment.

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**Train Dispatcher / Controller** - The person, located in the Control Center, who controls remote functions, monitors and oversees the line operation.

Train Operator - Employee controlling the movement of a train

**Train Stop Arm Release Switch** - A switch encased in a white box, located adjacent to Automatic Block Signals, used to release the Train Stop Arm.

## Transportation Manager (TM)

**Tripper** - A scheduled extra train operating in service.

**Tower** - A station where the controls of an interlocking are housed.

Unscheduled Train - A train not designated by schedule.

**Unscheduled Train Switch** - A switch located adjacent to the signal leaving a station platform or spur track, where the time of departure is controlled by an A.T.D. Switch causes Train Starting Lights to illuminate.

Note: In Spur area, manipulation of UNSCHEDULED TRAIN SWITCH will cause the Train Starting Light to illuminate, after which Signal Clearing Switch must be manipulated to clear signal.

**Vehicle** - Self-propelled equipment designed for highway use or operation on rail.

**Vehicle Condition Report** - A form utilized to report any defects to equipment and which must be submitted at the conclusion of the assignment.

**Verbal Hold** - A spoken directive to hold or stop vehicle movement at a designated physical characteristic location.

**VETAG** - An inductive system utilized by designated trolley vehicles which has the following functions: 1) operating electric switches on either a manual selective basis or automatic basis via transmitted ID, 2) set switches, 3) activating station signs in the subway.

**Watchperson** - The person stationed at the work area who is responsible for warning workers when a train is approaching.

#### Westbound (WB)

**Wildcat** - An unscheduled train operating in revenue service.

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**Work Area** - A segment of track within the Work Zone where the actual work is going to be performed.

**Work Car** - Equipment dedicated to maintenance, inspection, construction type work. Non-revenue equipment.

**Work Group** - Two or more roadway workers engaged in a common task.

Work Zone - A method of establishing protection for roadway workers by the use of flagging personnel and signs used to restrict the movement of trains and other on-track equipment. The Work Zone begins at the Stop Sign/Work Area Speed Limit Sign and ends at the Work Area Resume Speed Sign. Bi-directional Work Zones overlap because of the Entrance and Exit Buffers.

**Wye** - A triangular arrangement of tracks and switches used to reverse the physical direction of equipment.

**Yard** - A system of tracks used for the making up of trains and storing of cars. Movements must be made at Restricted Speed in a yard.

Yard Limits - The limits of the yard as identified by Special Instruction, signals or signs.

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## **Reporting For Duty Rules**

## RDR-1. Attire, Appearance, Conduct

#### A. General

Employees required to be in uniform must be in the prescribed uniform, which must be properly fitted, clean, neat, and worn as intended. Clothing must not be torn, tattered, or worn loosely so as to present a safety hazard.

# **B.** Personal Protective Equipment

Employees who are required to wear personal protective equipment are required to maintain and have available while on duty the Authority approved reflective safety vest, highly visible shirt, or highly visible jacket.

Employees performing on-ground functions on or near the rail right-of-way are required to wear the Authority approved reflective vest, highly visible shirt, or highly visible jacket as their outer garment. On-ground functions include, but are not limited to, the following:

- Performing flagging duties as prescribed by operating rules or other protective flagging functions,
- 2. Working in yards or car house facilities,
- 3. Performing rescue or evacuation procedures,
- 4. Working or inspecting along the rail right-of-way,
- 5. Walking on or about the track area.

In addition to the safety vest, employees must have available for use a hand-held white light. This light must be used during the hours between sunset to sunrise, during periods when weather impedes visibility, and when in tunnel or low-lighting locations.

#### C. Appearance

Employees are prohibited from displaying any items, including pins, ribbons, tattoos or other paraphernalia that could be considered offensive, hostile, or discriminatory in any way. Examples of prohibited displays include, but are not limited to slogans, pictures, art work, statements, depictions of gestures, nudity or nakedness, symbols, pornography, or sex acts.

#### D. Conduct

Employees are prohibited from any conduct that discriminates, harasses or otherwise creates a hostile environment toward other employees or riders. Employees are required to be respectful and professional in all dealings with other employees or riders.

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# RDR-2. Job Briefings

#### a. General

Employees whose duties require coordination with other employees must hold a job briefing to review all operational and safety conditions before, during and after such duties, as outlined below. If these conditions change, employees must hold an additional job briefing to discuss the new conditions.

Job briefings should be conducted face to face. When not practical or possible to do so, radio or telephone communication is authorized.

Job briefings must not be considered complete until all involved employees have acknowledged their understanding of the information covered.

#### b. Standard Job Briefing Topics

Job briefings for all situations must include, but are not limited to, the following topics:

- 1. The nature of the work to be performed;
- Operational and safety hazards known to be present or that may be encountered relative to the tasks to be performed;
- Current information on Bulletin Orders, Form W's, or other Notices that could affect safety;
- 4. The location and responsibilities of each person involved in the task:
- 5. If applicable, a review of the current situation;
- 6. The means of communication to be used between workers

#### c. Operations and Safety Condition Topics

Operational and safety conditions that require a job briefing include, but are not limited to:

- 1. Shoving and reverse movements;
- 2. Movement directives from Control Center:
- 3. Speed restrictions (if applicable);
- 4. Any known special operating condition;
- Responsibilities for the handling of switches and derails;
- The placement and / or securing equipment to be uncoupled or left unattended.
- 7. Known safety hazards, including the presence of other crews or employees working in the area; and
- Work assignments for each employee involved in the task.

G.O. 18-02 RDR-2

## d. Job Briefings for Roadway Workers

For roadway workers, a job briefing documentation sheet must be completed by the Qualified Protection Employee and signed by all roadway workers participating in the job briefing, when practical. In addition, the following topics must also be addressed.

- The means by which on-track safety is to be provided, including any necessary protection on adjacent tracks.
- The means of communication to be used between roadway workers.
- 3. The location where employees will clear the track, when required.
- Identification and location of key personnel, including the qualified protection employee, flagpersons, watchperson / lookout, etc.
- 5. Any known special operating conditions.

## RDR-3. Requirement for Maintaining Qualification

Employees whose duties require them to be qualified on the rules and special instructions must attend a class of instruction and pass the required examinations.

Employees must be re-examined on the rules and special instructions each calendar year, or as required at other times by the Authority.

Employees will be given a written or computer based examination on rules and special instructions. When reporting for the class, employees must present their valid license (if required for employment), up-to-date copy of the Operating Manuals and all required equipment for inspection.

Employees who fail to pass the required examination must attend the next class of instruction scheduled by their respective District or Department and pass the required examination.

Employees who fail to attend a class of instruction and pass the examination as required will be considered not certified to perform service on that mode.

## RDR-4. Medical Examinations

Employees may be required to pass a regular or a special periodic physical examination of the type as designated and as assigned by management.

Employees who are required to pass a regular or a special periodical medical examination are responsible for appearing at the Medical Department at the assigned date and time.

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## **Rules Governing Publications**

# RDR-5. General Orders, Bulletin Orders, District and Division Notices

When reporting for duty, employees whose duties are affected by General Orders, Bulletin Orders, District and Division Notices must familiarize themselves with them, and must comply with those instructions pertaining to any portions of the territory on which they are qualified or ordered to operate. They must have a copy of each current General Order, Bulletin Order and Supplemental Bulletin Order with them while on duty, and make them available for inspection upon request.

General Orders are issued at least twice a year, on a date that corresponds with the first Sundays of May and November. Additional General Orders will be issued as needed. General Orders consist of replacement pages to the Operating Manuals, which must be inserted properly.

A summary Bulletin Order is issued weekly and is effective on Sundays, at 00:01. Effective Bulletin Orders supersede the previous weeks Bulletin Order.

Supplemental Bulletin Orders are issued on an as needed basis. District and Division Notices are issued on an as needed basis and are in effect until superseded or canceled. Employees reporting for duty must examine the Bulletin Board.

An employee must contact the Train Dispatcher / Controller if a copy of the current information affecting the movement of his train / vehicle is not available. The Train Dispatcher / Controller must inform the employee of all information affecting the movement of his train / vehicle.

When a Supplemental Bulletin Order is issued, a designated employee assigned to the Control Center must ensure that such information is distributed to the affected location. The Train Dispatcher / Controller must not consider these Supplemental Bulletin Orders in effect at a location until distribution is confirmed.

General Orders, Bulletin Orders and Supplemental Bulletin Orders will be numbered consecutively, prefixed by the last two digits of the calendar year, and will contain a subheading indicating the territory in which they apply. Example: 21-01..21-02.

RDR-5 G.O. 21-01

RDR-6. Rail Transportation Division Safety Notice

A Safety Rule of the Week is published in the summary Bulletin Order. All SEPTA employees performing transportation related duties must review the designated safety rule and be prepared to discuss its meaning if questioned by a supervisor.

# RDR-7. Rail Transportation Training Bulletins

Training Bulletins, part of a continuing education program serve as a review of information relevant to the duties of individuals involved in the operation of the SEPTA's Rail Division. They are:

- a. Issued once a month;
- b. Effective the first Sunday of each month;
- Prefixed by a code for the operating mode and the last two digits of the effective year;
- d. Numbered consecutively;
- e. Distributed at employee reporting locations.

Employees are responsible for their information but are not required to have them in their possession while on duty.

Supplemental Training Bulletins are issued on an as needed basis and are in effect upon distribution.

G.O. 21-01 RDR-6

# **Rules Governing Miscellaneous Signals**

# RDR-10. Proper Display of Signaling

Employees whose duties may require them to give signals must carry a hand-held white light (plastic flashlight or lantern). The light must be kept in good order and ready for immediate use

White light will be used for night signaling and inside the tunnel.

If hand signal cannot be plainly seen outside the tunnel due to poor visibility, white light must be displayed. White light must be displayed from sunset to sunrise and at all times in the tunnel.

# **RDR-11. Hand Signals**

Hand signals must be given from a point where they may be plainly seen, in a manner that they can be understood, and sufficiently ahead of time to permit compliance. The speed of the movement shall be proportionate to the manner in which the hand signal is conveyed.

Movement must be stopped immediately if:

 There is doubt concerning the meaning of a hand signal,

OR

b. There is doubt for whom the hand signal is intended,

OR

c. The hand signal disappears from view.

OR

 d. Any object is waved violently by anyone on or near the track.

Hand signals with or without a flag or a light, must be given as



### follows:

### A. Stop

Swung horizontally across the track Note: The stop must be made prior to the location where the hand signal is being given.

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#### B. Proceed

Raised and lowered vertically.

# RDR-12. Vehicle / Train Horn Signals

The following are required horn signals. The signals are illustrated by "o" for short sounds and by " —— " for long sounds. When horn signals are required, the sound must be distinct, with the intensity and duration proportionate to the distance the signal is to be conveyed.

The unnecessary or excessive use of the horn is prohibited.

When sounding the horn as required, the sounds must be conveyed as follows:

## a. oo:

- 1. Acknowledgement to any hand signal.
- 2. Acknowledgement of Stop Sign.
- Repeated as necessary as a warning when passing through work limits or a work group on adjacent tracks or near the tracks.
- 4. Warning prior to initial forward movement in yard and shop areas.

#### b. — o:

Warning when approaching persons on or about the tracks, including locations where workers may be on or about the tracks.

## c. — Warning when:

- 1. Approaching short radius curves in subway.
- 2. Entering or leaving portals.
- Passing standing trains or vehicles outside station limits.
- 4. Expressing through stations, prior to arrival at the station.
- 5. Approaching stations when operating against the normal direction of travel.

# d. ooo:

Warning prior to any reverse or back-up movement.

e. Succession of short sounds:

An emergency warning to persons or animals on or about the tracks. Short sounds may be followed by a continuous long blast as a final alarm.

If the vehicle / train horn fails en-route, the operator must notify Control Center as soon as practical

# RDR-13. Bell or Communication Signals

# A. Multiple Unit Operation

When operating LRV or NHSL equipment in Multiple Unit (MU), the trailing train must be connected with the lead train by a communication signal device. It must be tested prior to departure from the initial terminal. When it is inoperative and cannot be remedied without delaying the trains, the trains may proceed after the crew members have an understanding as to how the Multiple Unit is to be operated. Unnecessary use of the communicating devices is prohibited.

# **B.** Communicating Signals

The following are the communicating signals which will be used:

("o" Indicates a short sound)

o When moving, stop at next station

2. oo When standing, proceed

3. ooo Recharge cars4. oooo STOP (Continuous)

Operators must promptly acknowledge signals, "1" and "3" by repeating signal received.

# C. Inoperable Crew Signal Apparatus

If Crew Signal is inoperable, the intercom must be used. If the intercom is inoperable, the Public Address system must be used. If neither the Intercom nor Public Address systems are operable, contact Control Center for instructions.

# RDR-14. Protection of Workers: Blue Signals

A Blue Signal must be displayed in a clearly visible manner in accordance with location special instructions when one or more maintenance employees are on or around equipment to inspect, test, repair, or service rail vehicles. Such work may not begin until a Blue Signal is properly displayed.

The Blue Signal must be removed when the work is completed and after all workers are clear. Only a person of the same craft or work group that displayed the Blue Signal may remove it.

When a Blue Signal is displayed:

- a. The vehicle must not be moved or coupled to.
- b. Other vehicles must not be placed on the same track in such a manner that will reduce or block the view of a Blue Signal.

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c. Equipment must not pass a displayed Blue Signal on the track.

When multiple crafts or workers are working on equipment:

- a. Each craft or group of workers must display their own Blue Signal on the appropriate operating controls.
- b. Only one blue flag or cone is to be displayed in the track area.
  - The first craft or group must display the cone(s) or flag(s).
  - The cone(s) or flag(s) must remain displayed until the last craft or worker has completed working on the equipment.
  - The last craft or worker must remove the cone(s) or flag(s).

RDR-15. Identification of Defective Equipment: Red Tag A Red Tag Defect Signal must be displayed on a vehicle when it has a defect that prohibits its use in revenue service. The Red Tag Defect Signal may be placed by an operating or maintenance employee at the direction of a Shop Foreperson, but may only be removed by the Shop Foreperson. Once a vehicle has been tagged, it may be moved from one location to another only under authorization of the Shop Foreperson.

RDR-16. Testing or Training on Equipment: Red Cones A Test/Training Track Signal must be displayed in the gauge of a track when vehicles or other equipment are being moved on that track for testing or training purposes. When necessary, Test/Training Track Signals must be displayed at both ends of the testing/training area.

When a Red Cone(s) is displayed:

- a. Other equipment must not enter the track segment.
- b. Employees working on or immediately about the track segment must be informed of movements.
- c. Only a person of the same group or craft that displayed the Red Cone(s) may remove it.

## **Rules Governing Movement Of Vehicles**

# RDR-20. Regulation of Speed

The employee responsible for the movement of any train, vehicle or other on-track equipment must regulate speed to ensure safe operation.

Trains/vehicles must not exceed the maximum authorized speed. Where discrepancies exist concerning the maximum authorized speed, the lower speed will govern.

All diverting moves on main tracks must not exceed 15 MPH.

# RDR-21. Movement at Restricted Speed

Movements made at Restricted Speed must comply with the following requirements:

- a. The movement must be controlled to permit stopping within one half the range of vision short of:
  - Other vehicles or equipment occupying or fouling the track
  - 2. Obstructions on or fouling the track
  - 3. Switches not properly lined for movement
  - 4. Derails set in the derailing position
  - 5. The end of track
  - 6. Any signal requiring stop,

## AND

 Employees controlling or directing a movement at Restricted Speed must be on the lookout for broken rail and misaligned track,

### AND

c. Movement must not exceed 20 MPH outside interlocking limits, 15 MPH within interlocking limits and 5 MPH within yard limits and shop areas, unless otherwise specified or restricted.

This restriction applies to the entire movement.

#### RDR-22. Movements on Other Than Main Tracks

All movements on tracks other than main tracks, including yards, shops and other facilities must be made at Restricted Speed, unless otherwise specified.

## RDR-23. Sidings

All vehicles are required to obtain permission from the Control Center before entering or leaving any siding. When any vehicle clears a main track at a siding or turn-back point, it must be reported "clear" to the Control Center and all non-interlocked switches must be restored to their normal position.

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## **RDR-24. Vehicle Lights**

### A. Headlight

The headlight facing the direction of movement on every vehicle must be displayed at all times by day or night. When displayed on high beam, the headlight must be dimmed when:

- Passing trains or other light rail vehicles moving in the opposite direction where the bright headlight could adversely affect the operator of the opposing train / vehicle, and
- 2. During normal street operation.

## **B.** Interior Lights

Interior lights must be illuminated at all times when the vehicle is in revenue service.

# C. Roof Lights

Roof lights, when equipped, must be illuminated when the vehicle is moving in the subway.

# D. Marker Lights

Each vehicle which is dispatched into service must be identified by illuminated red marker light displayed at the rear of the vehicle. During operation, the marker must be displayed at all times.

If markers fail en route, the Control Center must be notified as soon as practical.

### RDR-25. Headlight/Roof Lights Failure

If both headlight and roof bulbs fail en route, the following actions must be taken:

- a. All other available external lights must be illuminated (including roof lights).
- b. The Control Center must be notified as soon as practical.
- c. The gong and/or horn must be sounded frequently.
- Speed must be reduced according to prevailing conditions.
- e. The proper defect form must be completed by the operator.

## RDR-26. Operation From Other Than Lead End of Train

If it becomes necessary to operate a train / vehicle from other than the lead end an employee qualified on the operating rules, signals and physical characteristics must be on the lead end of the movement to observe signals and objects in the track area. If movement is being made on a main track, the Train Dispatcher / Controller must authorize such movement. Movement must not commence until the employee on the lead end has:

a. Established communication with the operator,

#### AND

b. Tested the horn/whistle, if equipped.

#### AND

 Tested the emergency brake to ensure train brakes apply

The train may then proceed at Reduced Speed.

If the employee on the lead end does not have all three capabilities, the movement may proceed at Restricted Speed after an understanding is reached between both employees.

If the equipment is going to be shopped and the movement is beginning at a passenger station, passengers must be removed from the train before proceeding. If located between stations, passengers must be detrained at the next station.

## RDR-27. Back Up Movements

# A. Signal Systems or Private Right-of-Way

A train/vehicle may back up less than two car lengths without authorization from the Train Dispatcher / Controller to re-enter a passenger station, except:

- 1. Where prohibited by special instruction;
- Within interlocking limits.

Back-up movements in excess of two car lengths are prohibited without authorization of the Train Dispatcher / Controller. Before authorizing a back-up movement, the Train Dispatcher / Controller must take the following actions:

 Ascertain the standing location of the train requesting to reverse, and the limit of the location to which the train is requesting to reverse,

#### AND

Instruct the train to remain standing and to await further instructions,

## AND

 Ascertain the location of the next following train; if the train can be stopped without jeopardizing safety to the operation, it must be instructed to stop and remain standing until instructed to proceed.

# **B. Street Operations**

When necessary to back-up during street operations the operator must change ends or a qualified employee must protect the lead end.

# C. Subway Surface Tunnel

Back-up movement in the Subway-Surface Tunnel is prohibited except as authorized by the Control Center. When authorized, movement may be made in accordance with the CBTC rules when the CBTC system is operational. If the CBTC system is out-of-service, after receiving authorization, movement may be made at Restricted Speed using the back-up controller.

### **RDR-28. Reverse Movements**

A train must not make a reverse movement without verbal permission of the Train Dispatcher.

- Before permission is granted to make a reverse movement in territory where interlockings are in service, the Train Dispatcher / Controller must determine that:
  - Track between the train / vehicle and the interlocking to the rear is clear of opposing movements: and
  - 2. Such Interlocking signals governing movement to the affected track are in Stop position.
- Before permission is granted to make a reverse movement in territory where interlockings are not in service, the Train Dispatcher / Controller must determine that:
  - A verbal hold is placed on the train / vehicle to the rear of the affected track. Reverse movement must not be authorized until it is determined that following train / vehicle has been stopped; or
  - A qualified employee is in position and properly equipped to hold the following train / vehicle clear of the affected track: or
  - The Line is known to be clear of all trains / vehicles to the rear of the reversing movement.

Reverse movement must be made at Restricted Speed until governed by a more favorable signal.

# RDR-29. Station Stops

# A. Scheduled Stops

Unless otherwise directed, revenue trains / vehicles must stop at all stations where scheduled to receive or discharge passengers. For single car and two car operations, vehicles must approach all stations prepared to stop at the proper location. A stop is required unless the operator can determine no passengers wish to board or exit the train / vehicle.

At stations equipped with Passenger Advance Lights, when the light is lit, train / vehicle must stop at the station and the operator must extinguish the light and / or pick up or discharge passengers.

# B. Train / Vehicle Positioning at Stations

Operators are responsible for knowing the number of cars in their train / vehicle consist. The train / vehicle must be stopped with the front of the train / vehicle at proper location marker, if equipped, in accordance with length of the train. When a station is not equipped with car marker signs, the train / vehicle must be stopped at a location that is safe and convenient for passenger flow

Should the train stop short or overrun the station platform, and the Operator is not certain that all of the doors are on the platform, the doors must not be opened until the train is moved to its proper position on the platform or the operator has determined all the doors are on the platform.

# 1. Car Marker Signs



**Indication:** Where in use, stop the leading end of the train / vehicle at the Car Marker Sign that corresponds to the number of cars in the train at a station or turn-back location.

### 2. All Trains Stop Here Sign



Indication: Where in use, stop the leading end of the train / vehicle at the All Trains Stop Here Sign.

# 3. Left / Right Side Door Indicator Signs





**Indication:** Where in use, the sign indicates the side of the train / vehicle on which the doors are to be opened under normal operating conditions.

#### C. Train / Vehicle Passes a Station Platform

If the train/vehicle passes its proper berthing location but stops within two car lengths of the station platform, it may back up to its proper berthing location unless any part of the train or vehicle stops beyond an interlocking signal, regardless of whether the aspect is permissible. In this case, permission must be granted by the Train Dispatcher / Controller before movement in any direction in accordance with RDR-614. If a train / vehicle passes its proper berthing location and is more than two car lengths beyond a station platform, the train / vehicle must not back up to re-enter the platform without permission of the Train Dispatcher / Controller.

The operator must not open the doors until it is determined all doors are properly positioned on the station platform. If any part of the train or vehicle stops beyond an interlocking signal, regardless of whether the aspect is permissible, the operator must not open the doors until permission is granted by the Train Dispatcher / Controller to reverse and the train or vehicle has been positioned at its proper berthing location.

# D. Door Operations

Once opened, the doors must not be closed until all passengers have had the opportunity to board and exit the train / vehicle. Doors must not be closed until they have been fully opened for at least five seconds or until it is determined all passenger have boarded or exited. Operators of revenue trains/vehicles must ensure passenger doors are closed before moving the train / vehicle. Operators must follow the prescribed procedures to ensure safety if an en-route indication is received that door/s have opened.

### E. Unscheduled Stops

Scheduled trains / vehicles must not make unscheduled stops to receive or discharge passengers or employees without authorization of the Control Center.

### F. Checking Trains / Vehicles

Employees must check the train / vehicle for passengers before going out of service, in spurs, or into the yards. Passengers must be politely requested to leave the train. If the situation warrants, the Train Dispatcher / Controller must be notified.

RDR-30. Departure Times / Schedule Maintenance Operators are responsible for leaving terminals and time points on scheduled time unless directed to do otherwise by

the Train Dispatcher/Controller or other authorized personel. Trains / vehicles must not leave a station where it is scheduled to pick up passengers or a designated time point in advance of its scheduled time without authorization from the Train Dispatcher / Controller. The Train Dispatcher / Controller must be advised, in advance, of any known condition that will delay a train or prevent it from making Normal Speed. In case of a standing delay, the Operator must notify the Train Dispatcher / Controller.

## RDR-31. Unscheduled Vehicles

Unscheduled train / vehicles must not depart a District, yard or terminal location without authorization of the Train Dispatcher / Controller. The Train Dispatcher / Controller and the operator or employee in charge of such equipment must have a job briefing to ensure a proper understanding of the move and any conditions affecting the safe movement.

### RDR-32. Use of Pilots

A pilot must be used when the individual primarily assigned to operate a train, vehicle, or equipment does not possess the necessary operating rule or physical characteristics qualifications to perform the task safely.

Employees acting as a pilot are not required to be qualified on the equipment. They must assist the train operator, track car operator, or any of their assistant personnel with any duties relative to the prompt and safe movement of the equipment. They will promptly report any irregularities or failures which may occur.

Where movements to and from the established work locations require a pilot, the pilot must be positioned on the leading end of movement to observe conditions ahead.

Where pilot cannot be positioned safely on equipment, pilot must be stationed on ground and precede the movement.

Pilot must maintain a continual means of communication with the operator of the equipment.

# RDR-33. Operation Through High Water

In private right-of-way and 3rd rail operations, trains / vehicles must not be operated through water that covers the top of the rail without authorization of the Control Center. In street operations, trains / vehicles must not be operated through water deeper than six inches above the top of the rail without authorization of the Control Center.

After authorization is received from Control Center, movements must not exceed 5 MPH until the train / vehicle clears the high water.

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### RDR-34. En-Route Relief

When relieved en-route, employees responsible for the movement of a train, vehicle, or equipment must have a job briefing with the individual providing relief to convey all current information affecting the movement or operation of the equipment.

When taking charge of unmanned equipment at other than a terminal location, employees must communicate with Control Center for instructions affecting the movement of the train / vehicle before proceeding.

# RDR-35. Securing Trains / Vehicles / Equipment

When leaving the control stand or operating cab, storing or otherwise leaving a train, vehicle or equipment unattended, the equipment must be adequately secured in accordance with the applicable procedures to ensure against undesired movement.

# **RDR-36. Opposing Movement**

Opposing movements are only permitted in the event of an emergency rescue operation in accordance with authorization from the Control Center.

# RDR-37. Use of Emergency Braking System

Train / vehicle emergency braking systems must only be used in emergency situations when necessary to prevent an accident, injury or damage. Once the emergency brake system has been activated, the train / vehicle must come to a complete stop before attempting to recharge the system.

## RDR-38. Use of Snow Brakes

When operating trains / vehicles equipped with snow brakes, operators are responsible for their proper use. The snow brake should be used during periods of snow or ice accumulation.

# RDR-39. Sanding Responsibilities

On vehicles equipped with sanders, operators are responsible for ensuring their vehicle has enough sand for operation and visually observe that sanders are functioning properly.

When the vehicle does not have a sufficient supply of sand, operators must replenish the sand to ensure there is an adequate supply for safe operation. Sand must not be dropped on switches.

#### RDR-40. Use of Track Brakes

When operating trains / vehicles equipped with track brakes, operators are responsible for their proper use. Using track brakes for routine service braking is prohibited.

# **RDR-41. Transit Vehicle Bar Signals**

At certain locations, bar signals are in service to govern the movement of transit vehicles across public highway grade crossings or through intersections. The following illustrations identify properly displayed bar signals and their indications.





Name: Horizontal Bar

Indication: Stop before entering the crossing. Notify the Train Dispatcher / Controller if the bar doesn't change to vertical within three minutes. Transit vehicles may proceed if the bar signal remains horizontal:

- After three minutes, provided the route is safe to proceed and highway traffic receives a red traffic light; or
- Receiving a hand signal or verbal permission to proceed from a flagman or police officer; or
- When authorized by the Train Dispatcher / Controller.

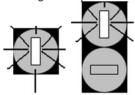




Name: Vertical Bar

Indication: Transit vehicles may proceed through the

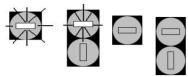
crossing at the prescribed speed



Name: Flashing Vertical Bar

Indication: Bar signal is about to change to horizontal.

- Transit vehicles that are stopped when the flashing begins must remain stopped.
- Transit vehicles that are already moving through the intersection when the flashing begins must be operated with caution.



Name: Flashing Horizontal Bar or Dark Signal Indication: Stop before entering the crossing. Proceed through the crossing at not exceeding 10 MPH after determining the crossing is clear of highway and pedestrian traffic and sounding the vehicle's gong/bell. Notify the Train Dispatcher / Controller as soon as practical without incurring additional delay to service.

# RDR-42. Fouling Point

A fouling point is the point beyond which movements on an adjacent track may strike equipment or other objects. Fouling points in yards may be indicated by:

- A yellow stripe painted on the inside and outside of the head, web and base of both rails.
- Or b. Yellow joint bars.
- Or c. A yellow sign with black letters "Foul Point."

Employees must ensure equipment left standing on any track does not extend beyond the fouling point and obstruct an adjacent track. The Train Dispatcher / Controller, Supervisor, or other designated employee must be informed immediately if circumstances prevent equipment from being left in the clear of adjacent main tracks.

# RDR-43. Accident/Incident Reporting Responsibilities

## A. Accident/Incident

Employees must immediately contact the Control Center in the event they are involved in any accident, blockade, or mishap, or they witness any such occurrences on or near Authority property. Employees are governed by the instructions of the Control Center concerning further movement. If the vehicle is camera equipped, Employees must "tag" the event to mark the occurrence.

Employees should communicate by using the on-board radio, or, if not possible, the first public telephone or emergency telephone available. They should exercise discretion to prevent passengers from overhearing such reports.

Employees are responsible for carrying a sealed packet of the pre-numbered Incident Cards, which are issued by the Authority.

Employees are responsible for turning in to the Dispatcher all completed cards presented to the employee by passengers, and all remaining blank cards once the package has been opened. Once a package has been opened, the employee must request a new issue. If a packet is lost or stolen, the employees must immediately notify the Control Center.

In the event of an accident or incident, the following instructions govern the actions of the employee:

 If witnessing or involved in an accident with persons or to property, however slight, the employee should immediately contact Control Center, then render all possible assistance and attempt to obtain the names of all witnesses as soon as practical.

The employee must attempt to have such persons complete an Incident Card, which must be used when practical to secure the names and addresses of witnesses who were occupying the vehicle or who may have been in such a position to have observed all or part of the occurrence.

Cards which have been completed by such persons may either be retrieved by the employee and turned in to the immediate supervisor, or the witness may be advised to mail the card to the SEPTA Claims Department.

- When police officers are present, the employee must obtain their badge and district numbers.
- When involved in automobile or other vehicular accident, the employee must attempt to obtain the names and addresses of all occupants regardless of whether they are injured or not.
- When involved in automobile or other vehicular accident, the employee must attempt to obtain all pertinent information, including name of driver, vehicle owner, license number, insurance information, make, model, and year of vehicle.
- 5. The employee must advise passengers of the cause and probable duration of the delay.
- Employees must remain with their vehicle during such situations unless directed otherwise by the Control Center or other supervisory personnel.
- 7. The employee must monitor radio transmissions continuously while occupying the vehicle.
- 8. Before completion of duty, the employee must prepare and submit a report to their supervisor.
- 9. Failure to properly report an accident or any

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attempt to conceal or to misrepresent the facts of an accident. (Dischargeable)

# B. Employees Involved In or Witnessing An Accident

Employees involved in an accident must not move the vehicle prior to contacting the Control Center unless:

- 1. instructed to do so by a police officer, or
- 2. an emergency condition exists which warrants that the vehicle be moved immediately.

Any employee involved in or witnessing an accident involving SEPTA equipment or property shall be cooperative and supportive in their dealings with police. Employees should render assistance as far as is practical and to the degree that will ensure the safety of injured persons until such time as competent medical assistance arrives.

Employees are required to supply the following information to police when requested:

- Driver's license.
- 2. Name and account number.
- Vehicle identification.
- District operations address and telephone number.
- 5. Home address and telephone number (optional).
- The names of all witnesses or persons involved in the accident.

The police may interview passengers who may have witnessed the accident.

In the absence of police or supervision the operator is required to provide the following information to the other motorist: name/account number, route/block, vehicle number, Claims Department phone number (215) 580-7460.

Employees shall not make any statement, verbal or written, about the accident to police or anyone other than a representative of SEPTA's Claims Department, Legal Department, System Safety Department, or to the authorized representative of the employee's own department. Employees must make certain individual identifies self by Authority Business Card and SEPTA Employee Pass.

If an unattended vehicle is involved you must first look for the owner, if owner cannot be found leave the following information under the vehicle's windshield

## wiper.

- 1. Name and Account number
- 2. Route and block
- 3. Vehicle number
- Address, 1234 Market St. Phila, Pa 19107
- C. Employees Coming Upon Scene of an Accident Other employees coming upon the scene of an accident, not otherwise involved, will assist in securing information and witnesses. Other employees should stop and render assistance as far as is practical and to the degree that will ensure the safety of injured persons until such time as competent medical assistance arrives.

# RDR-44 Movement With Flat Spots

If a flat spot on a wheel develops enroute the train / vehicle

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must not exceed 10 MPH, the Train Dispatcher / Controller notified, and the wheel inspected by a transportation manager as soon as possible. Upon completion of the inspection the Train Dispatcher / Controller must be notified of the results and movements governed as follows:

- a. Proceed at Normal Speed: The train / vehicle may continue at Normal Speed if no other defects affecting the movement are observed and:
  - The flat spot is less than 2 ½ inches in length, or
  - 2. There are two adjoining spots and each is less than 2 inches in length.
- b. Proceed at not exceeding 10 MPH: Speed must not exceed 10 MPH with a flat spot greater than or equal to 2 ½ inches but less than 4 inches in length and no other defect is observed.
- c. Proceed at not exceeding 5 MPH: Passengers must be discharged and the speed must not exceed 5 MPH to the first available location where the equipment can be stored for future handling by the Mechanical Department if a flat spot, or adjoining flat spots, of 4 inches or more are found, provided no other defect is observed. Acceptable storage areas for the equipment can include sidings, yards or station platforms where Mechanical Department personnel can perform adequate inspection and determine future handling.

determine ratare manaling.	
Condition (Total Length Includes Adjoining Flat Spots)	Action
Initial identification of flat spot / spots	Proceed at not exceeding 10 MPH     Notify Train Dispatcher / Controller     Inspection by Transportation Manager
Less than 2 ½ inches	Proceed at Normal Speed
2 ½ - 4 inches	Proceed at Not Exceeding 10 MPH
Greater than 4 inches	Discharge Passengers     Proceed at Not     Exceeding 5 MPH     Move to a storage     location for Mechanical     Dept.

**Rules Governing Yard Operations** 

# RDR-45. Yard and Shop Jurisdiction

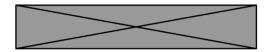
Yard and shop locations are under the jurisdiction of the Yard Foreperson, Maintenance Manager or other designated employee.

Movements in yard and shop areas must not be made without permission of the employee in charge of that location.

Roadway worker activities in a yard or shop facility must not be made without permission of the employee in charge of that location.

RDR-46. Maximum Authorized Speed Within Yards
Unless otherwise prescribed, the maximum authorized speed
within yards is Restricted Speed not exceeding 5 MPH.

RDR-47. Yard Limit Sign





**Indication:** Where in service, indicates the beginning or end of vard limits.

Rules Governing The Use Of Hand Operated Switches
And Derails

RDR-50. Employee's Responsibilities for Switches

Employees are responsible for knowing the position of switches which they are using or traversing. A switch found to be defective must be reported to the Control Center immediately.

Employees operating switches must visually examine the switch points and know they fit the rail properly before commencing any movement. If necessary, employees must remove any debris which may prevent the switch from being set. After using any manually operated switch, employees must restore the switch to its normal position, unless otherwise instructed.

When moving through a trailing point switch, the entire vehicle must clear the switch before reversing direction.

# RDR-51. Utilization of Hand-operated Switches and Derails

Employees are responsible for the proper utilization of hand operated switches and derails.

Before any hand-operated switch or derail is used, the employee must make certain that no rolling equipment is moving over the switch or derail, or that no equipment is approaching the switch or derail that will result in the equipment moving over the switch or derail as it is being thrown.

Employees must report any defects to immediate supervisor. If switch or derail cannot be operated as prescribed, employees must take precautions while utilizing these devices to avoid personal injury until device can be inspected by those who are charged with that duty.

# RDR-52. Hand-Operated Switches Connected With A Main Track

Hand-operated switches connected with a main track must not be operated without permission of the Train Dispatcher / Controller.

Hand-operated switches connected with a main track are in the normal position when aligned and locked for movement on the main tracks, unless otherwise specified. Hand-operated switches, when not in use, must be secured in a normal position. Operators finding switches not properly aligned or locked must secure them in normal position and report this to the Control Center.

Where operators are required to report clear of track, report must not be made until the switch has been secured in normal position.

Where a designated employee is in charge of hand-operated switches, vehicles must not proceed through those switches without authorization from the employee. The operator of the vehicle is also responsible to visibly inspect the switch points to ensure the proper alignment for direction of travel.

A switch connected with a main track must not be left open unless in charge of a qualified employee. Employees must keep away from main track switches while vehicles are approaching and passing.

## RDR-53. Spring Switches

When operating through spring switches, trains / vehicles must not make a reverse movement unless the switch is properly lined by hand.

## RDR-54. Switch Targets

Where switch targets are used, a green or white light or banner indicates the switch is in its normal position, or lined for the main track or ladder. A red or yellow light or banner indicates the switch is in its reverse position.

## Rules Governing Street Operation Of Light Rail Vehicles

### **General Information**

The following rules apply to the operation of trolleys (LRV

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and PCC II cars) operations on the public right-of-way. The rules do not apply to highway grade crossing procedures, Subway/Surface Tunnel, or private right-of-way operations.

# **RDR-60. Movement In Street Operations**

When operating light rail vehicles in street operations, in addition to all Authority bulletin orders, notices and instructions, Operators must comply with all traffic signals, signs, posted speed limits, and all standards established by the local municipality, and the Commonwealth of Pennsylvania Department of Transportation.

Operators must warn all passengers exiting onto a street to be alert for vehicular traffic. Operators are prohibited from passing hand signals to pedestrians or other users of streets or rights-of-way.

# RDR-61. Following Light Rail Vehicles

## A. Distance Spacing

Under normal conditions outside of subway, light rail vehicles must operate at Restricted Speed not exceeding 20 mph when following another light rail vehicle within a city block. When closer than 200 feet (1/2 city block), light rail vehicles must operate at Restricted Speed not exceeding 5 mph.

When conditions ahead require that a vehicle advance closer than the prescribed distance, Operators must exercise extreme caution and operate at a speed that will enable them to stop their vehicle at least 2 car lengths behind the vehicle ahead.

# B. Safe Following Distance After Stopping

When light rail vehicles which are following other light rail vehicles have stopped, extreme caution must be exercised upon restarting. When starting, the following vehicle must allow a minimum of 4 seconds for the vehicle in front to pull away before starting itself, thereby minimizing the possibility of a false start.

When the spacing gap widens between the following vehicle and the vehicle in advance, the Operator must exercise extreme caution, being on the lookout for vehicle motorists attempting to occupy the spacing gap.

#### D. Turns

Operators must activate their vehicle turn signals sufficiently in advance of their intention to turn. Vehicle

## RDR-62. Movement Through Other Restrictive Areas

#### A. Close Clearance: General Instructions

Operators must be constantly aware of close clearance along the right-of-way. When making right hand turns, Operators must ensure that the left front, left rear, and right center overhang does not come into contact with on-coming traffic. When making left hand turns, Operators must ensure that the right front, right rear, and left center overhang does not come into contact with oncoming traffic.

When a condition occurs in which the light rail vehicle cannot proceed due to non-clearance, the Operator must contact the Control Center immediately for instructions.

# B. Close Clearance: Other Vehicles Alongside

When passing other motor vehicles (including parked vehicles) on a straightaway, Operators must ensure that there is proper clearance. If in doubt, Operators are governed by the following:

- 1. Stop before the #2 door reaches the obstacle.
- Open the #1 front door and visually check the vertical clearance bar (outside if necessary).

Once the front doors have safely cleared the obstacle, coast slowly past it. To avoid rocking the car (which may result in contact), do not pump the power pedal.

Where areas are identified by a black and yellow checkerboard sign, if a person or obstacle is located between the sign and the rail, movement must stop until it is seen to be clear.

#### C. Non-clearance Curves

Non-clearance curves are identified in the Special Instructions. Operators of light rail vehicles are prohibited from passing on curves that are designated as non-clearance curves.

When approaching a non-clearance curve, Operators must determine if another vehicle has entered the curve from the opposite direction. If an opposing vehicle has entered the curve, the Operator must stop and wait until the curve has been cleared.

When opposing vehicles approach a non-clearance curve simultaneously, both vehicles must stop before entering the curve. Then providing the curve is clear, the eastbound vehicle will be permitted to proceed. The westbound vehicle must remain stopped until the eastbound vehicle cleared and then proceed.

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turn signals must not be turned off until the turn has been fully completed.

Light rail vehicles are prohibited from making a right turn on a red traffic signal.

# E. Underpasses

Unless otherwise specified in the Special Instructions, vehicles must not exceed 10 MPH when operated through an underpass.

#### F. Grades

Prior to descending a grade, Operators must test the brakes for effectiveness. When descending a grade, Operators must maintain continuous control over the speed of their vehicle. Braking must begin well in advance using sand as required. Wheel locking and sliding must be avoided whenever possible. Vehicles should not be stopped on an upgrade whenever possible. If a stop must be made on an upgrade, sand must be dropped before the stop is made, thereby minimizing the possibility of the vehicle sliding backward upon restart. If deemed necessary, the track brake may also be utilized

## G. Railroad Crossings

When approaching an unfenced railroad crossing at grade, Operators must come to a full stop within 50 feet, but not less than 15 feet from the nearest rail.

They must not proceed over the crossing unless there is sufficient room for the entire vehicle to clear the crossing.

Before proceeding, the Operator must open the side window and the front door to look and listen for approaching trains. The door must be closed before movement is commenced.

If the crossing is controlled by automatic highway crossing protection, and warning lights and/or gates are activated, vehicle must remain stopped until all protection devices are deactivated.

In the event vehicle becomes stalled on a crossing, the Operator shall instruct passengers to disembark and move clear of the track area. The Operator must provide flagging protection against approaching trains by using the white light to pass a hand signal to stop. The Operator shall notify the Control Center as soon as practical.

# H. Movement Through Section Insulators

Operators of light rail vehicles are prohibited from taking

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power through section insulators. Such locations are designated by power off "O" signs hanging from the overhead.

## Movement Through Overhead Special Work Areas

Light rail vehicles equipped with trolley poles must not exceed 5 MPH through all areas of overhead wire special work.

### RDR-63. Pedestrian Traffic

Operators of light rail vehicles must always be alert to pedestrian traffic. When operating on public highways, Operators must always control the movement of their vehicle to ensure the safety to pedestrians who are occupying crosswalks (marked or unmarked).

## RDR-64. Wyeing Vehicles

When wyeing a vehicle (i.e. turning vehicles at a location other than a loop), on-ground personnel must be present to protect the back-up movement of the vehicle, unless the Operator is authorized by the Control Center to accomplish the movement without assistance.

When authorized to wye a vehicle, hazard lights must be turned on and the back-up controller must be used.

# RDR-65. Movement Over Facing Point Switches

Movement must come to a complete stop before passing over any facing point switch. Before proceeding, the Operator must ensure that the switch is properly lined for the route to be taken and it is safe for movement.

If an opposing vehicle is seen approaching and has entered the intersection, movement must not begin until after the opposing vehicle has cleared the switch location.

If opposing vehicles are approaching the facing point switch simultaneously, the eastbound movement will take priority.

Movement over facing point switches must not exceed 5 MPH.

## **RDR-67. Electric Switches**

Electric switches are opened or closed when the under-car transponder transmits a code from the wire loop in the street to the wayside controls.

The position of these types of switches can be changed remotely from the vehicle through use of the VETAG System

by either automatic routing or toggle operation.

# A. Automatic Routing Electric Switches

Locations of automatic routing electric switches are indicated in the Special Instructions.

Employees are responsible for the proper use of the VETAG System, and entering the correct code settings as prescribed in the Special Instructions.

# B. Directionally Operated Electric Switches

Locations of switches are indicated in the Special Instructions and are identified by black and yellow signs hanging from the overhead with the letters L and R.

Employees are responsible for the proper use of the Turn Signal.

Operators must approach directionally operated electric switches at not exceeding 5 MPH, and make a complete stop before passing over the switch. If the switch is in the proper position, the Operator must not touch the toggle. If the switch is not in the proper position, movement may proceed to the point where the loop is activated to set the switch.

Operators must then inspect the switch to ensure it is free of debris and closed completely in the proper position. Operation is then governed by the applicable rules for movement over switches.

### C. Prohibitions on Operating Electric Switches

Operators are prohibited from activating or operating any type of electric switch if a pedestrian is standing on the switch, or a vehicle wheel is on the switch.

#### RDR-68. Manual Switches

Locations of manual switches are indicated in the Special Instructions.

Manual switches must be operated with a switch iron. These switches may be set for straight or diverting movements. If the switch is not set for the intended route, The Operator must stop and properly position the switch. Operation is then governed by the applicable rules for movement over switches.

If the manual switch is located on a revenue route, the switch must be restored to its normal position after the vehicle has

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cleared the switch, unless otherwise instructed.

# RDR-69. Plugged or Welded Switches

Operation over switches which have been plugged or welded is governed by the same applicable rules for movement over switches continually in service. In the event that the weld breaks or a plug has been removed, the Control Center must be notified immediately.

### RDR-70. Use of Switch Iron

Employees are responsible for the proper and safe use of switch irons. When a switch iron is used, employee is governed by the following procedure:

- a. Straddle the rail, facing the front of the vehicle (where applicable).
- b. Insert the switch iron in the notch between the tongue of the switch and the rail.
- c. With switch iron directly in front, place feet shoulder width apart with one foot slightly farther forward than the other to maximize balance.
- d. Move switch tongue to desired position by using the switch iron as a lever to move the tongue.

If the switch iron repeatedly slips and does not move the switch tongue, employee must take the following steps:

- a. Remove the chock from the vehicle if available.
- Move switch tongue as much as possible with switch iron.
- c. Place chock into opening.
- d. Move switch iron to another point along the tongue and repeat procedure.

Note: If there is no chock available on the vehicle, employee must wait for another trolley and use their switch iron or their chock if available.

Bent or blunt switch irons must be reported on the Vehicle Condition Report.

# Signal System Rules

### **General Information**

Signaled System rules apply only where designated by Special Instruction or Bulletin Order. Their purpose is to

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control the movement of trains or vehicles on specified, private right-of-way track segments where a wayside signal system and/or Automatic Train Control system is in effect. Wayside signals convey the occupancy and / or condition of the track ahead. Under normal conditions train / vehicle movements are authorized by these signals.

# RDR-101. Occupying or Fouling Signal System Territory

### A. Trains / Vehicles

Trains / vehicles must not occupy or foul main tracks in Signal System Territory without proper signal indication or permission of the Train Dispatcher / Controller.

# B. Persons Entering Main Track Area

Except for locations equipped with crosswalks, all employees whose duties require them to walk on or about the track, including catwalks, trestles and bridges, must be qualified on the applicable rules.

Except when crossing tracks at crosswalks, employees must notify the Train Dispatcher / Controller prior to entering the track area, giving name, title, location and purpose for entering the track area. When the task involves escorting non-qualified personnel, a sufficient number of qualified employees must be present to control the group and ensure safety. They must report clear when they have left the track area.

Upon notification, the Train Dispatcher / Controller must, when possible, immediately broadcast a safety alert over the appropriate radio channel announcing the location of the people in the track area.

# RDR-102. Failure of Wayside Signal System

When a failure of the wayside signal system occurs, train / vehicle movements will be governed by NSS rules, Bulletin Order, Form W or verbal instructions of the Train Dispatcher / Controller.

#### RDR-103. Main Track Switches

Hand operated main track switches in Signal System Territory are in their normal position when lined from main track to main track. When a train / vehicle clears or enters a main track at a hand operated switch or crossover, the

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switches must be restored to their normal position.

The operator must report to the Train Dispatcher / Controller when a train / vehicle clears a main track at a hand-operated switch. The position of the switch must not be changed after it was restored to normal position without permission of the Train Dispatcher / Controller even if the movement was not reported clear.

# RDR-104. Highway Grade Crossing Warning Device

# A. Avoiding Unnecessary Operation

Automatic highway crossing protection should not be activated longer than is required for normal operation. Vehicles must not stand within the activation circuit longer than necessary. If crossing circuit is occupied for an extended period of time, proper procedure must be followed to raise the gates.

#### B. Malfunction

Employees must immediately notify Control Center if automatic highway crossing warning devices are not functioning properly. When the Control Center is notified of a warning device malfunction, the Controller must immediately notify vehicles that will operate over the affected crossing. Notification may be made verbally, by text message, or by issuance of Form W.

#### 1. Malfunction Information

The following information must be conveyed by the Train Dispatcher / Controller to operators:

 The name of the crossing that is malfunctioning

# AND

b. The nature of the malfunction, if known.

### 2. Vehicle Operation Over the Crossing

The operation of the vehicle over the crossing must follow this procedure:

a. Approach the crossing prepared to stop,

## AND

 Stop no further than one vehicle length short of the crossing (if the crossing protection is found to be malfunctioning),

#### AND

 Determine no vehicular traffic is occupying or immediately approaching the crossing before occupying the crossing,

#### AND

d. Operate not exceeding 10 mph until the front

of the vehicle clears the crossing.

## 3. Vehicle Operation Exception

A full stop is not required when any of the following conditions occur:

 Personnel are on-ground providing protection and convey a hand signal or verbal instructions to proceed over the crossing without stopping.

OR

 The crossing is equipped with gates and the operator sees that: a) all gates are in the horizontal position, and b) that crossing lights are flashing.

### 4. On-Ground Protection Personnel

Only the following categories of personnel may be considered to be reliable on-ground protection:

- a. Person recognized as a SEPTA supervisor.
   OR
- b. A uniformed law enforcement officer.  $\ensuremath{\mathsf{OR}}$

c. A SEPTA employee who is equipped by day with a reflective vest and red flag, and by night with a reflective vest and white light or flare.

# C. On-ground Protection by Employees

When an employee is required to provide on-ground warning at a highway grade crossing, he or she must give stop signals to pedestrian and vehicular traffic until the rail vehicle is through the crossing. Signals to stop must be given with a red flag by day, and a white light or flares at night.

# D. Conditions That Require Special Procedure

Under the following conditions, a vehicle must not occupy a crossing until it is known that the warning devices have been activated for at least twenty seconds, or the gates are in the horizontal position.

These conditions are:

- Making a Reverse Movement: When a vehicle passes entirely over a crossing and must reverse back over the crossing.
- Approaching at Reduced Speed: Approaching at a speed that is less than half the maximum authorized speed at the activation point.
- 3. Performing Crossover Movements: When a vehicle has performed a crossover movement within the approach circuit of the crossing.

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# E. Manual Override of Warning Device

Locations are provided with apparatus to manually override the operation of automatic highway crossing warning devices. "Raise" and "Lower" gate control pushbuttons are marked for each track.

When the apparatus is operated manually, the Control Center must be advised. No movement over the crossing may be made until the warning device has been reestablished and gates are in the horizontal position.

Whenever the apparatus is operated manually, it must be restored to normal automatic operation after movement has been completed. Control boxes must be locked when not attended.

## RDR-105. Movements That Might Not Shunt

Vehicles which may not operate signals or shunt the track circuits must not be permitted to operate in the Automatic Block System Area without permission of the Control Center. Other vehicles must not be permitted to follow non-shunting equipment unless authorized by the Control Center. Such movements, when authorized, must operate at Restricted Speed according to conditions.

When the condition of the track is such that track circuits may not be shunted properly, not more than one vehicle at a time will be permitted to operate between Temporary Block Stations, interlockings ,or controlled signals unless directed by the Control Center. Such movements, when authorized, must operate at Restricted Speed according to conditions.

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# **General Signal Rules**

# RDR-200. Tracks Designated in the Special Instructions

The following rules will be in effect on tracks designated in the Special Instructions: Signal Rules, NSS Rules, Automatic Block Signal System Rules, Automatic Train Control System Rules, and Yard Rules.

# RDR-201. Operator's Responsibility for Compliance With Signals

Operators are responsible for observing all signals and for controlling movements accordingly. To prevent injury to persons or damage to property, to avoid collisions and derailments, and to ensure a safe, comfortable ride they must:

- a. regulate the speed of their trains/vehicles,
- AND
  - exercise discretion, care and vigilance in moving their train/vehicle,

AND

c. operate according to the indication of any signal.

## RDR-202. Location of Signals and Signs

Unless otherwise noted in the Special Instructions, signals and operating signs are located:

 To the right and adjacent to the track for which they govern,

OR

b. In the gauge of the track they govern.

# RDR-203. Tracks Signaled in One Direction

Signal indication will be the authority for trains to operate with the current of traffic. The current of traffic for main tracks is designated in the Special Instructions.

Movements against the current of traffic must be authorized by Bulletin Order or the Control Center, and will be governed by special instructions, operating rules or procedures.

# RDR-204. Tracks Signaled in Both Directions

Main tracks equipped with signals for movements in both directions are designated in the Special Instructions. Signal indication will be the authority for train / vehicle movements in either direction on the same track.

## RDR-205. Signals Indicating Stop

A train must not pass any signal indicating Stop without following the procedures outlined below.

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#### A. Observing Signals as Stop Signals

A signal must be observed as a Stop Signal when any wayside signal, hand signal, or sign indicates Stop.

In addition, the following conditions require a signal to be observed as a Stop Signal.

- 1. a signal is dark, or
- an interlocking signal that is imperfectly displayed or changing aspects to a more restrictive indication, or
- 3. a fixed signal is absent from the place where one is normally displayed, or

In these situations, Operators must contact the Control Center by the quickest means available, report the situation, and be governed by the instructions received.

#### B. Signal Violations

A Signal violation occurs if:

 Any part of a vehicle travels beyond any portion of a signal indicating Stop, a Stop Sign, a Portable Train Stop or an absent or imperfectly displayed signal, before the vehicle comes to a complete stop,

OR

2. the Operator fails to follow the proper procedures for passing a signal indicating Stop,

OR

 A vehicle fails to stop at a hand signal indicating Stop,

Stop signal violations must be reported to the Control Center by the quickest means available.

#### C. Passing An Interlocking Signal Indicating Stop

A train or vehicle must not pass an interlocking signal indicating Stop without permission of the Train Dispatcher / Controller. The Operator must come to a complete stop before contacting the Control Center to request permission.

The following procedures must be followed when a train or vehicle is authorized to pass a signal indicating Stop.

Communication with Control Center
Operators must contact the Control Center and
report:

- a) route,
- b) block,
- c) direction,
- d) location, and
- e) signal number that the train is stopped at and be governed by the instructions received.

#### 2. Train Dispatcher / Controller Responsibility Before Giving Permission To Pass a Signal Indicating Stop

Before giving permission to pass, the Train Dispatcher / Controller must ensure:

 Affected switches and derails are properly positioned and secured; if the position of a switch cannot be determined, the route must be inspected.

#### AND

 No opposing or conflicting movements have been authorized.

#### AND

 Blocking devices have been applied to control levers, where possible.

## **3.** Communicating and Confirming Permission Permission from the Train Dispatcher / Controller must be given in the following manner:

**Train Dispatcher / Controller:** "(Train / Vehicle Identification), proceed past Stop Signal at (location)."

Operator: (Repeat instructions)

**Train Dispatcher / Controller:** "Repeated correctly, (Train / Vehicle Identification); proceed as instructed at (time)."

**Operator:** "(Repeat Train / Vehicle Identification), check."

The Train Dispatcher / Controller may grant authority to other Authority personnel in the field to convey permission to pass a Stop Signal.

#### 4. Movement After Permission Has Been Confirmed

After permission has been confirmed, the train must operate at Restricted Speed until:

 a) The entire train / vehicle passes a more favorable signal,

#### OR

The entire train / vehicle enters non-signaled territory,

OR

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c) Entered territory governed by Form W.

In Automatic Train Control territory, trains equipped with operative cab signals may proceed in accordance with cab signal indication.

In CBTC territory, vehicles with the ATC system in Normal may proceed in accordance with the Permitted Speed Indicator display.

#### D. Passing Non-Interlocking Signals indicating Stop

The following procedures must be followed when a train or vehicle encounters a non-interlocking signal indicating Stop.

- 1. Stop before any part of the train or vehicle passes the signal.
- Operate at Restricted Speed until the entire train or vehicle passes a more favorable signal.
  - In territory equipped with Train Stop Arms, operators must activate the Train Stop Arm Release Switch before proceeding past the signal.
  - In CBTC territory, vehicles with the ATC system in Normal may proceed in accordance with the Permitted Speed Indicator display.
- Immediately contact the Train Dispatcher / Controller and report the location and condition. Exceptions: An immediate report is not required if:
  - a. The condition may be caused by a known occupied block in advance of the train / vehicle.
  - On-board communication equipment does not provide for prompt, two-way communication.
  - The operator is relieved of the reporting responsibility by the Train Dispatcher / Controller, Signal Department representative, or other supervisory employee.
- 4. When communication cannot be immediately established, Operators must report the situation to the Train Dispatcher / Controller as soon as possible, without delay. Attempts to make this report must begin no later than the next station stop after the signal.

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#### E. Stop Signal Disregarded

If a Stop Signal is disregarded, Control Center, or other qualified personnel on site must attempt to stop the train and other trains involved.

RDR-206. Absent or Imperfectly Displayed Signals If a fixed signal or sign is absent from the location where one is normally shown, or the signal or sign is imperfectly displayed, it must be regarded as displaying the most restrictive aspect that can be shown on that signal or sign.

Imperfectly displayed or absent signals or signs must be reported to the Train Dispatcher / Controller by the quickest mean available.

#### RDR-207. Next Governing Signal

Vehicles may operate according to the indication of the next signal when:

- a. The next signal can be plainly seen,  $\ensuremath{\mathsf{AND}}$ 
  - The train / vehicle is not required by rule or the previous signal to operate at Restricted Speed

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#### RDR-230. Placement of Signs

Wayside signs must be placed to the right of track requiring protection. In-gauge signs, when used, must be placed between the running rails. All signs must be in a location where they can be clearly visible to an operator of an approaching train/vehicle or other on-track equipment. Consideration must be given to track curvature, obstructions, and other issues that could limit visibility. Stop Signs and portable train stops must not be placed within the limits of a passenger station.

The following signs must be placed at braking distance from the restriction to which they apply:

- a. Approach Speed Limit Sign
- b. Approach Sign
- c. Diverting Approach Sign
- d. Diverting Approach Speed Limit Sign

The following signs must be placed in both directions, unless otherwise directed by special Instruction:

- a. Approach Speed Limit Sign
- b. Diverting Approach Sign
- c. Speed Limit Sign
- d. Resume Speed Sign
- e. Approach Sign
- f. Diverting Approach Speed Limit Sign
- q. Stop Sian
- h. Work Area Speed Limit Sign
- i. Work Area Resume Speed Sign
- j. Worker's Portable Warning Signal

The Speed Limit Sign must be placed at the start of the speed restriction.

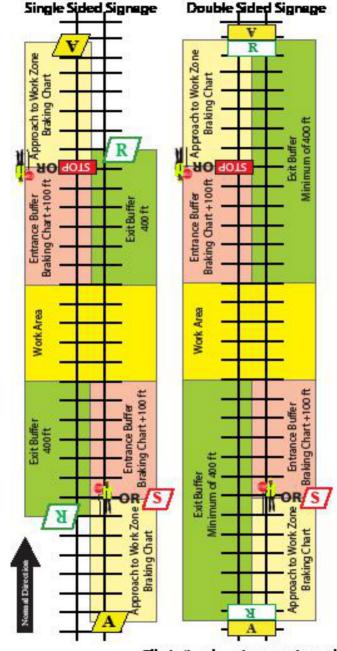
If a Work Zone is in effect on a track with active bi-directional /single-track operation both sides must make use of the Work Area Speed limit signs for inactive Work Zones or Portable Train Stops for active Work Zones.

The Work Area Resume Speed Limit Sign / Resume Speed Sign must be placed not less than 400 feet beyond the actual point where the Work Area / Speed Restriction ends, unless otherwise directed by special Instruction:

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#### RDR-230A. Work Zone Sign Placement

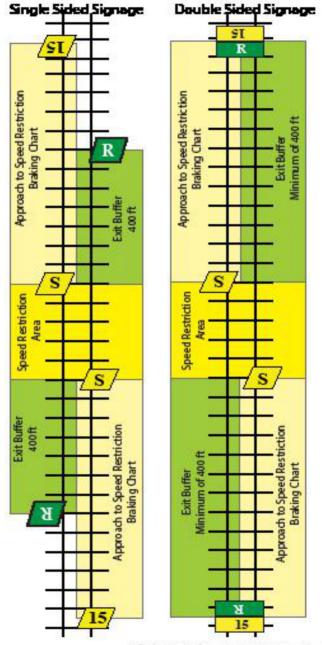
Work zone signage must be arranged in accordance with the diagram below.



This traction shows in gauge signs only

## RDR-230B Temporary Speed Restriction Placement of Signs

Temporary speed restrictions sign placement must be arranged in accordance with the diagram below.



\*Bustnetton shows in gauge signs unly RDR-45 G.O. 20-01

RDR-231. Braking Chart

Placement of temporary signs is based on the maximum authorized speed of the territory, in accordance with the following chart.

From (mph)	To (mph)	Distance (ft.)
70.0	60.0	l .
	50.0	370
ii	40.0	680 930
ii ii	30.0	1130
" 	20.0	1270
ii ii	15.0	
i i	10.0	1320 1350
"	0.0	1380
60.0	50.0	
	40.0	310
ii ii	30.0	560
ii	20.0	760
" 	15.0	900
	10.0	950
"	0.0	990 1010
55.0	50.0	
35.0	40.0	150
"	30.0	400
	20.0	600
	15.0	740
	10.0	790
II	0.0	820
 50.0	40.0	850
50.0	30.0	250
	20.0	450
	15.0	590
	10.0	640
	0.0	680
 	30.0	700 200
40.0 	20.0	340
	20.0 15.0	340 390
	10.0	420
	0.0	450
30.0	20.0	140
	15.0	190
ii	10.0	230
ii	0.0	250
20.0	15.0	50
	10.0	80
	0.0	110
15.0	10.0	40
	0.0	60
10.0	0.0	30

Distances have been rounded to the nearest 10 MPH increment.

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#### RDR-232. Approach Sign



Wayside In-Gauge

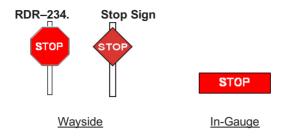
#### Indication:

- a. Sound one long on the horn as soon as the front of the train / vehicle passes the Approach Sign.
- b. Trains / vehicles exceeding 30 MPH must reduce to that speed as soon as the train / vehicle passes the Approach Sign.
- c. Proceed prepared to stop at the Stop Sign.

#### RDR-233. Diverting Approach Sign



**Indication:** Work zone established on an adjacent track. When diverting into the work zone, proceed at not exceeding 30 MPH prepared to stop at the Stop Sign. One long on the horn must be sounded as the front of the train / vehicle passes the Diverting Approach Sign.



#### Indication:

#### Indication:

- a. Sound two short sounds on the train / vehicle horn.
- b. Stop, unless permission to proceed is received before a stop occurs.
- Remain standing until permission to proceed is received.
- d. Acknowledge permission to proceed with two short sounds on the horn prior to moving.
- e. Proceed not exceeding 30 MPH unless otherwise directed by Bulletin Order, Form W, the flagperson or QPE. Resume speed when the front of the train/vehicle reaches the Work Area Resume Speed Sign.

Placement: The Stop Sign must be placed in advance of the Work Area according to the Braking Chart (RDR-231). The maximum authorized speed must be used plus 100 feet when making the calculations, except when used for diverting movements directly into the Work Area.

**Note:** Portable train stops must be used for movements in the normal direction of travel

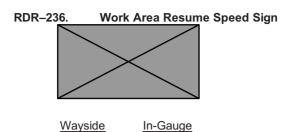
#### RDR-235. Work Area Speed Limit Sign



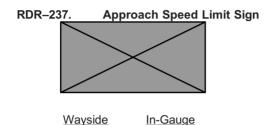
Wayside In-Gauge

**Indication:** Proceed not exceeding 30 MPH until the front of the train/vehicle reaches the Work Area Resume Speed Sign

G.O. 18-02 RDR-48

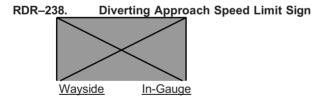


**Indication:** Resume normal speed when the front of the train/vehicle reaches the Work Area Resume Speed Sign.



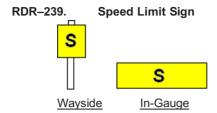
**Indication:** Proceed approaching the Speed Limit Sign at not exceeding the speed posted on the Approach Speed Limit Sign.

**Note:** Numbers shown are for illustrative purposes only. Actual numbers will vary according to the prevailing conditions.

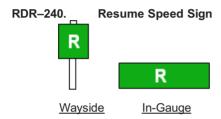


**Indication:** Temporary speed restriction in effect on adjacent track. When diverting onto the track with the temporary speed restriction, approach the Speed Limit Sign not exceeding the speed posted on the Diverting Approach Speed Limit Sign.

**Note:** Numbers shown are for illustrative purposes only. Actual numbers will vary according to the prevailing conditions.



**Indication:** Proceed at not exceeding the speed posted on the Approach Speed Limit or Diverting Approach Speed Limit Sign until the front of the train/vehicle reaches the Resume Speed Sign.



**Indication:** Resume normal speed when the front of the train/vehicle reaches the Resume Speed Sign.

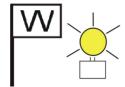




Indication: Sound one long on the horn.

G.O. 18-02 RDR-50

#### RDR-242. Worker's Portable Warning Signal





#### Wayside

#### In-Gauge

#### Indication:

- a. Upon viewing the Worker's Portable Warning Signal, trains/vehicles must reduce speed and proceed at a speed not exceeding 15MPH upon the front of the train reaching the signal.
- b. The operator of the train/vehicle shall sound one long on the horn upon first sight of the Worker's Portable Warning Signal.
- c. Trains/vehicles must maintain a speed of 15MPH from the time the rear of the train/vehicle passes the signal. The maximum authorized speed may be resumed when the rear of the train/vehicle passes the signal, or in the case of use for work on station platforms, when the rear of the train/vehicle has cleared the entire station limits.

#### Placement:

- a. The signal must be displayed any time Individual Train Detection (ITD) or Train Approach Warning (TAW) is being used, and when working on station platforms in accordance with OTS-507. When used for ITD and TAW, signal must be placed to allow for visibility by the operator of a train/vehicle on approach, according to the "Feet per 15 Seconds" column of the OTS-508 Speed Distance Table for the Maximum Authorized Speed of the track.
- b. The Signal must be positioned to the right of (for the normal direction of travel) and adjacent to the affected track (unless using the in-gauge sign). This signal may be placed on the left at island platforms, when necessary.

#### Note:

Horn must be sounded prior to entering the station platform when the signal is on a station platform.

**Day Signal Outside Tunnel:** Sign/flag with black "W" on white background or an in-gauge sign with black "W" on white background.

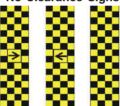
**Night Signal And Inside Tunnel:** Flashing Yellow Lantern or in-gauge sign.

RDR-243. Information Lights



Indication: Information lights consist of yellow or white flashing or strobe lights. When illuminated, indicates an unusual operating condition exists; Operators and all other affected employees in charge of trains / vehicles originating at this location must not depart without contacting the Train Dispatcher / Controller, Supervisor or other designated employee for instructions, or follow the appropriate procedures for receiving Form W's.

RDR-244. No-Clearance Signs



**Indication:** No clearance between signs. When train is approaching, do not position self between sign and train. **Note:** Where arrows are indicated, non-clearance area exists.

RDR-246. Permanent Speed Limit Sign



15 MPH



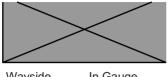
**Indication:** Proceed at not exceeding the speed posted on the Permanent Speed Limit Sign.

**Note:** Numbers shown are for illustrative purposes only. Actual numbers will vary according to the prevailing conditions.

If a sign represents an increase in speed from the previous sign/speed restriction, the leading end of the train/vehicle must reach the sign before an operator may begin to increase speed.

G.O. 22-01 RDR-52

RDR-247. **Temporary Block Station Open Sign** 



Wayside In Gauge

Indication: Temporary Block Station Open. Train must not pass the Temporary Block Station in either direction without permission of the Temporary Block Operator.

Note: TBS Open Sign is to be displayed by the TBO as soon as the TBS is open. TBS Open sign must be displayed in advance of the switch points, if applicable. TBS Open Signs must be removed when the TBS is closed.

#### Rail Transit Form W Rules

#### **General Information**

The Train Dispatcher / Controller issues Rail Transit Form W's to establish working limits, to authorize or restrict movements, and to convey instructions not otherwise covered in operating rules.

#### RDR-301. Issuing a Form W

The Train Dispatcher / Controller must issue Form W's. Form W's must be numbered consecutively each month beginning at midnight on the first day of the month, and be prefixed with BL, OL, GL, MSH, or NHSL to indicate the rail line to which they apply.

#### RDR-302. Completing Form W Properly

Information shown on the Form W must be legible and without erasure, or alteration. Applicable Form W line numbers must be circled. Only authorized abbreviations may be used in Form W's. Dates must be recorded in numerical format only, such as 07/11/06.

The Train Dispatcher / Controller must keep an office copy of each Form W issued.

#### RDR-303. Addresses

#### A. Form W addresses to an Individual

Form W's must be addressed to those who are to execute them, indicate the individual's craft, first and last name. For example: Trk Frm John Smith, Trk Maint William Jones. TM Alan Johnson.

#### B. Form W addressed to a Train

Form W's must be addressed to the Line to which they apply, such as "MSH - all operators."

#### C. Form W addressed to a Track Car

Form W's addressed to a track car must be addressed to the Track Car Operator, or Pilot including their last name. Track cars must be identified by the abbreviation "TC" plus the letters and/or numerals of the equipment, for example: "Operator Jones TC SEO 123." If more than one track car is to operate on the same Form W authority, the number of additional pieces must be specified, for example: "Pilot Smith TC SEO 123 plus 2".

G.O. 21-01 RDR-54

#### RDR-304. Form W Delivery

The Train Dispatcher / Controller may deliver a Form W by radio, telephone, line phone, in person, or may deliver a prepared Form W via electronic transmission.

## A. Dictation of Form W by radio, telephone, line phone, or in person

Form W's may be dictated only to employees who are certified on the operating rules. Form W's must not be dictated or copied by an employee at the controls of moving equipment.

When dictating and repeating Form W's, employees must read aloud and plainly pronounce all applicable preprinted and written portions. Numerals must be repeated digit by digit, for example: "one-zero-five."

The Train Dispatcher / Controller must not give the time effective until the Form W has been repeated back correctly. Once the Train Dispatcher / Controller has given his or her name, employees must repeat immediately from their copy in the order they were addressed, unless otherwise directed. Once all addressee's have repeated correctly, The Train Dispatcher / Controller will give the time effective, which then must be repeated by each addressee

#### B. Electronic Transmission of Form W

Employees receiving electronic transmission of a Form W must examine each copy for completeness and legibility. They must communicate with the Train Dispatcher / Controller to verify the number and date of each Form W received.

RDR-305. Reading and Complying with Form W
Employees addressed must immediately read the Form W
and are responsible for its requirements. When practical, the
Form W must be shown or read to other affected employees.
These employees must read the Form W and remind those
addressed employees of the requirements, when necessary.

#### RDR-306. Communication Failure

If communication fails before the Train Dispatcher / Controller has given the time effective, the Form W must not be acted upon until communication has been re-established.

RDR-55 G.O. 21-01

#### RDR-307. Errors Discovered

If an error is discovered in a Form W before the time effective is given, the Train Dispatcher / Controller must direct the employees receiving the Form W to destroy their copies. The Train Dispatcher / Controller must mark "Void" on his copy and begin with a new issue, using the same number.

#### RDR-308. Additions to Form W

Once a Form W has been given a time effective, only the following information may be added to the form:

- a. Form W cancellation information
- b. Transfer information

#### RDR-309. Effective Period of a Form W

Form W's are in effect until the Train Dispatcher / Controller cancels them.

Form W's, when cancelled, must be immediately marked with an "X", then retained and held available for inspection. Addressees must retain their copies for a period of 7 days after the cancellation date.

#### RDR-310. Transferring Form W's

Form W's may be transferred to alternate addressees, but only when so authorized by the Train Dispatcher / Controller.

When transferring a Form W, the following applies

- a. The Train Dispatcher / Controller must communicate with the original addressee and the new addressee to whom the Form W is to be transferred, verifying the intent to transfer.
- b. The Train Dispatcher / Controller must state the Form W number and effective date.
- c. The Train Dispatcher / Controller must state the new addressee whose name is to be added to the appropriate line, indicating the Train Dispatcher / Controller confirming the transfer and the time.
- d. The Train Dispatcher / Controller and addressee must record all transfer information on the appropriate section(s) of their Form W.
- e. The addressees must repeat back all information to the Train Dispatcher / Controller.
- f. The Train Dispatcher / Controller must ensure that all repeated information is correct.

G.O. 21-01 RDR-56

#### RDR-311. Canceling Form W's

Form W's will be cancelled on the same form.

Employees who have received a copy of the original Form W may be directed by the Train Dispatcher / Controller to relay cancelled information to other employees.

The Train Dispatcher / Controller must not mark an "X" on his or her copy of the Form W until it has been cancelled to all affected addressees.

A Form W will be cancelled on the same form as follows:

- a. The Train Dispatcher / Controller and addressees must communicate the intent to cancel the Form W.
- b. The Train Dispatcher / Controller must state the Form W number and effective date.
- c. The Train Dispatcher / Controller must state the cancellation time and date, and his or her name.
- d. The Train Dispatcher / Controller and addressees must record all cancellation information on the appropriate section(s) of their Form W.
- e. The addressees must repeat back all information to the Train Dispatcher / Controller.
- f. The Train Dispatcher / Controller must ensure that all repeated information is correct.

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G.O. 21-01 RDR-58

#### **Automatic Train Control System Rules**

#### **General Information**

Automatic Train Control System (ATCS) Rules apply only where designated by Special Instruction or Bulletin Order. This section presents rules governing the use of the ATCS, including: testing the automatic train control apparatus; movement with and without an operative automatic train control apparatus; failure, flip, and other occurrences of the automatic train control apparatus.

## RDR-350. Equipment Not Equipped With Automatic Train Control Apparatus

The movement of any train or equipment that is not equipped with automatic train control apparatus in ATCS territory is prohibited, except when authorized by the Train Dispatcher / Controller. When such movements are authorized, an absolute block must be maintained in advance of the non-equipped movement. Such movements must not exceed 30 MPH prepared to stop at the next fixed signal or a point designated by the Train Dispatcher / Controller.

RDR-351. Automatic Train Control Apparatus Test
The automatic train control apparatus on both ends of each
train must be tested in accordance with the prescribed
procedure and found to be fully operational prior to leaving
the yard.

## RDR-352. Operating En Route From Equipped Unit Without Departure Test

If necessary en route to operate from a unit that has not been given a departure test, the automatic train control apparatus must be considered to be inoperative until properly tested. If the unit cannot be given the proper test, movement must proceed in accordance with Rule RDR-350, "Equipment not Equipped With Automatic Train Control Apparatus."

## RDR-353. Movement With Operative Automatic Train Control Apparatus

#### A. Speed Authorization

The speedometer/speed display unit indicates the speed at which an overspeed penalty will occur. The speed of the train / vehicle must be controlled so as not to achieve the overspeed condition, while at the same time avoiding unnecessary delay.

Operators must report any condition that prevents a train / vehicle from being operated at less than the maximum authorized speed.

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#### **B.** Overspeed Activation

In the event the train speed achieves any of the illuminated speed aspects, the overspeed light will illuminate and the audible alarm will sound. To avoid a penalty stop, the control handle must be placed in the appropriate brake position within the prescribed time.

The audible overspeed alarm and overspeed light will deactivate when the Train Operator:

1. Responds within the required time,

#### AND

Maintains application of the appropriate brake position until speed has been reduced below the maximum illuminated speed aspect.

#### C. Display of "No Code"

In the event the system conveys a "No Code", an audible alarm will sound and the overspeed light will illuminate when the train is moving; when the train is stopped, all Speedometer / Speed Display Unit lights will become dark. Upon receipt of a "No Code" the operator must:

- Bring the train / vehicle to a complete stop,

  AND
  - Unless otherwise specified by Special Instruction, contact the Train Dispatcher / Controller for instructions prior to moving the train / vehicle.
  - After permission has been granted to proceed, activate the "Stop / Proceed" button. The 15 MPH aspect will flash and an audible tone will sound. The movement must be made at Restricted Speed until receiving a more favorable speed display or passing a more favorable interlocking signal. Speed must not be increased until the train has run its entire length.

When communication cannot be immediately established, operators must activate the "Stop / Proceed" button and proceed at Restricted Speed. A report of the situation must be made to the Train Dispatcher / Controller as soon as possible without delay. Attempts to make this report must begin no later than the next station after receipt of the "No Code."

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## RDR-354. Movement With Automatic Train Control Apparatus Failure En Route

#### A. Train Operator Responsibility

When automatic train control apparatus failure occurs en route, the Train Operator must take the following actions:

1. Immediately stop the train,

AND

Contact the Train Dispatcher / Controller for instructions prior to moving the train,

AND

 When authorized to proceed, operate in accordance with "Clear Block" indication, not exceeding 30 MPH, being prepared to stop at the next interlocking signal or a point designated by the Train Dispatcher / Controller.

Once a failure has occurred for the direction being traveled, the automatic train control apparatus system is considered to be inoperative until the unit has been inspected, repaired, and tested at a dedicated terminal facility.

#### B. Train Dispatcher / Controller Responsibility

When advised that an automatic train control apparatus failure has occurred en route, the Train Dispatcher / Controller must take the following actions:

 Prior to authorizing further movement, determine that the track ahead to each interlocking signal or the point designated by the Train Dispatcher / Controller is clear of any other movements, then maintain an absolute block in advance of the train until the train arrives at a terminal or yard facility.

AND

Instruct the Train Operator to operate to the next interlocking signal in accordance with "Clear Block" indication.

AND

 Immediately inform the Mechanical Department that the failure has occurred.

In an emergency, the Train Dispatcher / Controller may authorize a train with failed ATC apparatus to enter an occupied block at Restricted Speed.

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#### RDR-355. Criteria For Determining Automatic Train Control Apparatus Failure

The automatic train control apparatus will be considered as having failed if any of the following conditions occur:

- a. The audible indicator fails to sound when the speedometer / speed display unit changes to a more restrictive aspect.
- b. The audible indicator continues to sound even though the automatic train control apparatus change was acknowledged and the speed of the train was reduced to the speed required by the speedometer / speed display unit.
- The speedometer / speed display unit fails to give indication of actual occurrences or normal known conditions.
- d. Damage or fault occurs to any part of the automatic train control apparatus.

#### RDR-356. Reverse Movements

All reverse movements in ATCS territory are governed by the applicable rules and instructions for reversing direction.

# RDR-357. Automatic Train Control Portion of Wayside Signaling Apparatus Not Functioning If the automatic train control portion of the wayside signaling equipment is inoperative, the Train Dispatcher / Controller must advise Train Operators of the limits of the affected area.

Train Operators must be instructed to operate in accordance with "Clear Block" to the next fixed signal or the point specified by the Train Dispatcher / Controller. The Train Dispatcher / Controller is governed by Rule RDR-354, "Movement With Automatic train control Apparatus Failure En route", paragraph "B".

In such instances, the on-board automatic train control apparatus will not be considered as having failed while operating through those specified limits.

# RDR-358. Automatic Train Control Apparatus Flips When the automatic train control apparatus aspect "flips", momentarily changing the aspect and then returning to the original aspect, the Train Operator must notify the Train Dispatcher / Controller as soon as possible without delaying the train.

The Train Dispatcher / Controller must be given the following information:

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- a. The speed aspect the apparatus flipped from and to;
- The location, including the track designation, indicating where the flipped occurred, or the points between which the flip occurred;

When the "flip" holds for a duration, which requires action or acknowledgments by the Train Operator, this information must also be stated.

### RDR-359. Train Operator's Responsibility to Report Occurrences

Train Operators are responsible for reporting as soon as possible any occurrences of flips, failures, non-conformities, or damage to the automatic train control apparatus system. This requirement applies on all main tracks, and in terminal or yard facilities.

#### RDR-360. Circumstances in Which Automatic Train Control Apparatus Gives No Indication

Automatic train control apparatus will not indicate conditions ahead when the controlling unit is:

a. Pushing other units.

OR

b. Reversing direction by backing up.

#### RDR-361. Operation of the Automatic Train Control Cut-out Switch

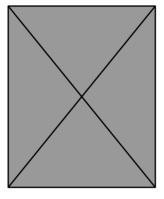
The automatic train control apparatus must not be cut-out, except:

- a. In the event of an on-board automatic train control apparatus failure which prevents a release of the brakes.
- b. In the event of continuous flips of the speed display unit.
- c. When pushing another train / vehicle.

The ATC cut-out switch may be utilized to override the system when authorized by the Control Center.

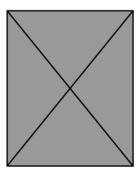
RDR-63 G.O. 20-01

RDR-362. Proceed Cab



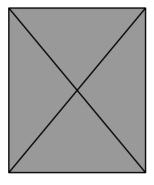
**Indication:** Trains with operative cab signals proceed straight on main line route at speed governed by cab signals. Trains without operative cab signals must stop and call Control Center for instructions.

RDR-363. Proceed Cab Divert



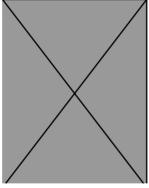
**Indication:** Trains with operative cab signals, proceed on diverging route at speed governed by cab signals. Trains without operative cab signals must stop and call Control Center for instructions

RDR-364. Stop Signal



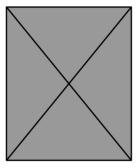
**Indication:** Stop and Stay; call Control Center for instructions. (Refer to Rule RDR-205, "Passing a Stop Signal".)

RDR-365. Clear Block



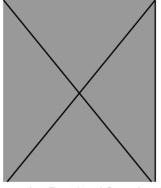
**Indication:** Trains without operative cab signal, proceed at maximum authorized speed not exceeding 30 MPH, being prepared to stop at the next signal; trains with operative cab signals, proceed at speed governed by cab signals.

RDR-366. Clear Block Divert



Indication: Trains without operative cab signals, proceed on diverging route at speed not exceeding 15 MPH until diverging movement is complete. Then proceed at maximum authorized speed not exceeding 30 MPH, being prepared to stop at the next signal; trains with operative cab signals, proceed at speed governed by cab signals.

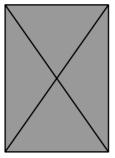
RDR-367. Restricting



**Indication:** Proceed at Restricted Speed until the train passes a more favorable wayside signal or receives a more favorable cab signal. Trains without operable cab signals must not proceed without permission of the Control Center.

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RDR-368. Restricting Divert



**Indication:** Proceed on diverting route at Restricted Speed until the train passes a more favorable wayside signal or receives a more favorable cab signal. Trains without operable cab signals must not proceed without permission of the Control Center.

#### **Non-Signaled System Rules**

#### **General Information**

Non-Signaled System (NSS) rules apply only where designated by Special Instruction, the Train Dispatcher / Controller, operating against the assigned direction of traffic, or Bulletin Order. Their purpose is to control the movement of trains or vehicles on specified track segments where wayside signal system or Automatic Train Control System have failed, are removed from service, or are otherwise not in effect. The limits of Non-Signaled Territory must be identified by a known physical characteristics location.

#### RDR-400. Non-Signaled Territory

#### A. Authority to Enter at Interlocking Locations

At interlocking locations, a train must not enter Non-Signaled Territory without:

- Verbal permission of the Train Dispatcher / Controller, or
- 2. Verbal permission of an employee so authorized by the Train Dispatcher / Controller, or
- 3. Proper signal indication.

When entrance will occur at an interlocking and a proper interlocking signal cannot be displayed, verbal permission to pass Stop Signal is also required.

#### B. Authority to Enter at Non-Interlocking Locations

A train must not enter Non-Signaled Territory at noninterlocking locations, or pass a Temporary Block Station without permission of the Train Dispatcher / Controller, or employee authorized by the Train Dispatcher / Controller. Authorization may be given verbally or by hand signal.

#### C. Operating Authority

The limits of the operating authority must be specified by the Train Dispatcher / Controller or employee(s) authorized by the Train Dispatcher / Controller, or Form W.

When the authority is issued verbally, the limits must be confirmed by the operator before proceeding. Verbal confirmation is not required when:

- 1. The limits are specified by Form W.
- The movement is against-the-current-of-traffic because an adjacent track is removed from service by Bulletin Order.

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#### RDR-401. Protection Responsibilities

Except in an emergency, the Train Dispatcher / Controller must ensure the territory to be used is clear before authorizing any movement into Non-Signaled territory or a Non-Signaled track segment.

#### A. Interlocking Locations

The Train Dispatcher / Controller, or employee(s) authorized by the Train Dispatcher / Controller, who control interlocking signals governing opposing movements into Non-Signaled Territory, must, where possible:

- Position traffic lever for movement against the normal current of traffic; or
- 2. Place signals in the Stop position.

Where possible, blocking devices must be applied to switch and/or signal control mechanisms leading to the affected track segment.

When controlled by other than the Train Dispatcher / Controller, interlocking signals may be displayed into the Non-Signaled Territory after control of the territory has been established and it is determined that no opposing movements have been authorized.

#### B. Non-Interlocking Locations

Prior to allowing a train or other equipment to enter Non-Signaled Territory at a non-interlocking location, the Train Dispatcher / Controller, or other employee designated by the Train Dispatcher / Controller, must obtain control of the track and ensure no opposing movements have been authorized.

If the limits of Non-Signaled Territory are defined by Temporary Block Stations the individuals in charge of those stations must establish communication and ensure no opposing movements have been authorized before allowing a movement into the block.

The Temporary Block Operator must protect nonsignaled track segments. When practical, a sign that indicates Stop or TBS Open must be displayed. The sign may be removed or permission granted to pass sign for movement to occupy the track segment after it is determined it is safe to do so. Once the track segment has been occupied, a sign that has been removed must be immediately replaced.

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#### RDR-402. Operating in Non-Signaled Territory

#### A. Movement Information

When a train / vehicle enters a block, the Train Dispatcher / Controller, or employee authorized by the Train Dispatcher / Controller, must give the block number, lead car number, and time to the next tower or station. When a train / vehicle clears a block, the Train Dispatcher / Controller, or employee authorized by the Train Dispatcher / Controller, receiving the information must give the block number, lead car number and time to the affected tower or station.

Operators must report clear of unmanned block stations when directed by the Train Dispatcher / Controller.

#### B. Maximum Authorized Speed

Unless otherwise restricted, movements in Non-Signaled Territory may operate at Normal Speed after entire movement has cleared all interlocking switches. At interlocking locations, movements are governed by signal indication until clear of interlocking limits. At non-interlocking locations where hand-operated crossover switches are in service, movements are governed by applicable operating rule.

#### C. Approaching Interlocking Signals and Temporary Block Stations

Trains must approach interlocking signals and Temporary Block Stations prepared to stop and must not proceed without proper authority.

#### RDR-403. Reverse Movements

Trains must not make reverse movements in non-signaled territory without permission of the Train Dispatcher / Controller. Prior to issuing permission, the Train Dispatcher / Controller must ensure the track to be used is clear.

#### RDR-404. Following Movements

In an emergency, following movements in Non-Signaled Territory may be made as follows:

- a. The following movement must be authorized by the Train Dispatcher / Controller.
- b. Following movements must operate at Restricted Speed through the entire block.
- All Operators controlling following movements must be notified of the train or vehicle ahead prior to the movement(s) being authorized.

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#### RDR-405. Temporary Block Stations

Temporary Block Stations may be opened when necessary to control the movements of trains at other than an interlocking location. When opened, the Temporary Block Station establishes the limits of a block.

#### A. Opening and Closing

Temporary Block Stations may be opened and closed by Bulletin Order, Form W, or verbally by the Train Dispatcher / Controller. When opened verbally, each train must confirm notification prior to the train's departure from the last holding point in advance of the Temporary Block Station.

The Temporary Block Station must not be closed until the block in each direction is clear. The Train Dispatcher / Controller must not authorize a Temporary Block Station to be closed with a train in the block until it can be determined there are no following movements on the same track.

#### **B.** Unmanned Temporary Block Stations

Trains must not pass an unmanned Temporary Block Station without permission of the Train Dispatcher / Controller.

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#### Communication Based Train Control (CBTC) Rules

#### **General Information**

The following Signal Rules apply to trolley operations in the Subway Surface Tunnel System when Communication Based Train Control System (CBTC) is in service or the ATC Bypass switch is in the "normal" position.

## RDR-450. Testing the Automatic Train Control System Apparatus

#### A. Departure Test - General Requirement

The Automatic Train Control System apparatus must be tested and found to be operational on each vehicle prior to entering ATC territory.

Operators must inspect the "by-pass switch" before departing the District and verify that it is sealed and in the "normal" position. The operator must report to the Control Center using "request to talk" and follow the instructions of the Train Dispatcher/controller if the seal is broken or missing and/or the By-pass switch in "by-pass." Such a report must be done as soon as practical without delaying departure from the yard. Missing/broken seals and switches found in "by-pass"

must be recorded on the VCR card.

#### B. Initialization of ATC System in the Yard

- When taking charge of a running vehicle in the yard, the Operator must verify the following:
  - a) The "Free" indicator is on, AND
  - b) The "ATC O.K." light is activated.
- When taking charge of a vehicle that is shut down in the yard, the Operator must start up the vehicle to initialize the ATC system ensuring the following occurs:
  - The ATC executes a self-test, observing all indicator lights turn on and off and speedometer and permitted speed indicator move to 60 mph and then to zero. AND
  - b) When complete, the "ATC O.K." light activates when test is successful, AND
  - c) The "Free" indicator turns on.

#### C. Yard Departure Test Procedure

After the ATC system initialization has been successfully completed, the operator must perform a yard departure test as follows:

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- Operate the vehicle through the marked test area between 3 mph and 5 mph, AND
  - 2. Ensure the "Go ATC" indicator light comes on, AND
- 3. Ensure the "Go ATC" indicator light goes out when the vehicle departs the marked test area.

When the above has been satisfied, the vehicle may enter service operating in the Free Mode. If the "Go ATC" fails to light or stays on after departing the test area, the vehicle has failed the test. The Operator must immediately contact the Control Center for further instructions prior to departing the yard.

## RDR-451. Initialization Process: Procedures for Entering the Subway Surface Tunnel with CBTC-Equipped Vehicles

CBTC-equipped vehicles must be initialized before entering the Subway/Surface Tunnel at 36th or 40th St. The initialization points are identified by a yellow line and an adjacent sign reading, "Stop Wait Until Your Leader Clears the Lunar." Operators of CBTC-equipped vehicles must comply with the following procedures before entering the Subway Surface Tunnel.

- a. Turn on interior lights.
- b. Switch on roof light.
- Bring the vehicle to a complete stop before passing the initialization point, then proceed at not exceeding 10 MPH.
- d. Ensure the vehicle initializes by observing the following:
  - 1. The ATC O.K. indicator light remains on,

AND

2. The Go ATC indicator light turns on,

AND

3. The initialization wayside signal changes from "red" to "lunar,"

AND

4. The operating mode indicator light changes from "Free" to "Restricted" and then to "Cabs" Mode after passing,

AND

The permitted speed indicator moves above "zero".

If the vehicle fails to initialize, or the initialization signal fails to change from `red' to `lunar', the vehicle must stop and the Operator immediately contact the Control Center for further instructions.

## RDR-452. Requirement to Operate According to Indications

Operators must regulate the speed of their vehicle and operate in accordance with wayside signals and ATC system indications.

## RDR-453. Passing Interlocking Signal Displaying Stop Signal

A train or vehicle must not pass an interlocking signal displaying a Stop Signal without permission of the Control Center. The vehicle must be stopped at the signal before contacting the Control Center to request permission.

The following procedure must be followed to authorize a train or vehicle to pass an interlocking signal displaying a Stop Signal other than the initialization signal.

#### A. Control Center Procedures

Before giving permission to pass, the Control Center must determine that:

 Affected switches are properly positioned and secured; if the position of a switch cannot be determined, the route must be inspected.

AND

No opposing or conflicting movements have been authorized.

#### B. Giving Permission To Pass

Permission from the Control Center must be given in the following manner:

Control Center: "(Vehicle Number) has permission to proceed past Stop Signal at (location)."

Operator: (Repeat instructions)

Control Center: "Repeated correctly, (Vehicle Number); proceed as instructed at (time)."

Operator: "(Repeat Vehicle Number), check."

#### C. Receiving Permission from On-ground Personnel

The Controller may grant authority to a qualified onground qualified employee to grant permission to pass Stop Signal after ensuring the provisions of paragraph "a" have been met. The Operator must be advised by the Control Center that authority to pass the Stop Signal will be issued by the on-ground person, and not directly through Control Center.

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### D. Movement After Permission Has Been Confirmed

After permission has been confirmed, the vehicle's ATC Bypass switch must be placed into the 'bypass" position and operate at Restricted Speed until clearing the interlocking. After clearing the interlocking, return the ATC Bypass switch into the "normal" position and proceed in accordance with the wayside signals and the speed permitted by the ATC System.

#### E. Stop Signal Disregarded

If an interlocking signal displaying a Stop Signal is disregarded, an attempt must be made to stop the train and other trains involved

# RDR-454. Passing Initialization Signal Displaying Stop Signal

A train or vehicle must not pass an initialization signal displaying a Stop Signal without permission of the Control Center. The vehicle must be stopped at the signal before contacting the Control Center to request permission.

When contacted by the Operator that the signal has failed to initialize (i.e. remains "red" without changing to "lunar"), the Control Center must acknowledge that the signal has failed to initialize and that the vehicle is stopped. Once the Dispatcher / Controller has determined that conditions ahead are safe for movement, he may then grant verbal permission for the Operator to proceed past the signal and operate at restricted speed, obeying any governing wayside stop signals.

If the Control Center cannot be contacted by radio, the Operator must attempt to establish contact through an alternate means. Movement must remain stopped at the signal until contact can be established.

Operators must not accept permission to pass an initialization signal displaying Stop from on-ground personnel unless they have been informed by the Control Center that such person has been authorized to do so.

#### RDR-455. Stop Signal Violations

Stop Signals which have been violated must be reported to the Control Center. A violation occurs if:

 Any part of a vehicle travels beyond a Stop signal, Stop Sign or portable stop sign without proper authority.

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OR

 Any part of a vehicle travels beyond an imperfectly displayed or absent signal whose most restrictive indication is Stop Signal without proper authority.

OR

c. Any part of a vehicle travels beyond a hand signal to stop, or blue flag / cone.

## RDR-456. Passing a Stop Signal At Other Than an Interlocking

The following procedures must be followed when a train or vehicle encounters a non-interlocking signal indicating Stop.

- a. Stop before any part of the train or vehicle passes the signal, then operate at Restricted Speed until the entire train or vehicle passes a more favorable signal.
- b. In CBTC territory, vehicles with the ATC system in Normal may proceed in accordance with the Permitted Speed Indicator display.
- c. Immediately contact the Train Dispatcher / Controller and report the location and condition.

Exceptions: An immediate report is not required if:

- 1. The condition may be caused by a known occupied block in advance of the train / vehicle.
- On-board communication equipment does not provide for prompt, two-way communication.
- The operator is relieved of the reporting responsibility by the Train Dispatcher / Controller, Signal Department representative, or other supervisory employee.
- d. When communication cannot be immediately established, Operators must report the situation to the Train Dispatcher / Controller as soon as possible without delay. Attempts to make this report must begin no later than the next station stop after the signal.

# RDR-457. Absent or Imperfectly Displayed Signals or Signs

If a fixed signal or sign is absent from where it is usually shown, or is imperfectly displayed, it must be regarded as displaying the most restrictive aspect that can be shown on that signal or sign.

Imperfectly displayed or absent signals or signs must be reported to the Control Center as soon as practical.

#### RDR-458. Proceeding at Call-On Signals

After a complete stop is made, vehicle may proceed at Restricted Speed until authorized to proceed in accordance with the speed permitted by the ATC System.

#### RDR-459. Next Governing Signal

Vehicles may operate according to the indication of the next signal when:

- a. The next signal can be plainly seen, AND
  - b. The vehicle is not required by rule or the previous signal to operate at Restricted Speed.

# RDR-460. Movement With the Current of Traffic Block Signals and Automatic Train Control will govern vehicles operating with the established current of traffic.

#### RDR-461. Movement With Operative ATC System

#### A. Speed Authorization

Operators must not operate in excess of the maximum authorized speed

#### **B.** Overspeed Authorization

The Operator must do the following after receiving an overspeed warning.

 Apply the brakes to reduce speed below the maximum authorized speed within five seconds,

#### THEN

Continue the braking effort until overspeed light goes out and the audible warning stops.

If a penalty application occurs as a result of an unknown condition, the Operator must immediately notify Control Center, giving the vehicle number and the location where the overspeed occurred.

#### RDR-462. Movement With Inoperative ATC System

The movement of a vehicle equipped with ATC System not in operative condition is prohibited in ATC territory, unless authorized by Control Center. When failure occurs after the vehicle has entered ATC territory, the on-board system must be considered as inoperative until it has been returned to the dedicated facility and has been repaired, tested, and found to be fully functioning.

Operators must not "shut off" the ATC low voltage circuit breaker located in the low voltage cabinet behind the operator without specific instruction from the Control Center a Transportation Manager or their designee in the field.\

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#### A. Street Operation En Route to ATC Territory

After departing the yard, if the ATC system fails en route prior to arriving at the entrance to ATC Territory, the Operator must immediately contact the Control Center for instructions. The Operator must report the vehicle number, the nature of the failure, and any other pertinent information. Further movement is then governed by the instructions of the Control Center.

#### B. Operation Inside ATC Territory

Operator's Responsibility
 If the ATC apparatus fails with operating in ATC territory the Operator must take the following actions:

 Operate in Restricted Mode governed by wayside signals.

#### THEN

- Contact Control Center for further instructions as soon as practical, reporting the vehicle number, the location of the failure, and any other pertinent information.
- 2. Controller's Responsibility
  If a failure of the ATC has been determined, the
  Control Center must take the following actions:
  - Determine the current operating mode of the vehicle. If the vehicle is in the Restricted Mode and unable to proceed, instruct the Operator to depress the

Push-to-Start button. If depressing button does not work, instruct the Operator to place the ATC Bypass Switch into the "ByPass" position,

#### THEN

b. Instruct the Operator of the failed vehicle to proceed in accordance with wayside signals,

#### THEN

 Notify the appropriate personnel of the en route failure.

# RDR-463. Criteria For Determining ATC Apparatus Failure

The ATC apparatus will be considered as having failed if any of the following conditions occur:

- a. The "Go ATC" indicator light drops out and the "Cabs Mode" automatically changes to "Restricted Mode."
- b. Indicator lights go dark.
- vehicle departs ATC territory and the system does not change to Free Mode.
- d. Damage or fault occurs to any part of the ATC system apparatus

#### RDR-464. ATC System Loss of Communication

If a loss of ATC system communication causes the operating mode to drop to "Restricted Mode" ("Go ATC" light is out), the operator must contact Control Center as soon as practical. The vehicle may proceed in accordance with wayside signals and ATC system unless otherwise instructed by the Control Center

# RDR-465. Assisting a Disabled Attended Vehicle In Automatic Train Control System Territory

To assist a disabled attended vehicle in Automatic Train Control System territory, the Control Center may permit following movements. Before such authorization is given, the Control Center must ensure that the Operators of both vehicles have an understanding of the movement to be made.

Once authorization has been given, the following procedure applies:

 a. Control Center must instruct the Operator of the disabled vehicle to remain standing and prepare for MU operation.

#### AND

b. The Operator of the disabled vehicle must place the ATC Bypass Switch into the "ByPass" position and then cut out the ATC low voltage circuit breaker.

#### AND

c. The Operator of the rescue vehicle must couple to the disabled vehicle following proper procedures for towing and pushing another vehicle. The controlling vehicle Operator must place the ATC Bypass switch into the "ByPass" position and contact Control Center when ready to proceed.

#### AND

 Movement must proceed in accordance with the wayside signals.

# RDR-466. Procedures for Movement of Vehicles Entering or Departing Juniper Station Spur

When vehicle(s) is to be placed onto Juniper Station Spur, the next vehicle must be held at 13th Street Station, positioned no further than the Supervisor's Booth, until the movement has been completed.

When authorization to enter or depart the Spur track has been received from the Control Center, Operators must follow the procedure that applies to the situation.

## A. Placement of single vehicle onto spur track to remain clear of main track

Align the switch leading onto the spur,

THEN

2. Position the vehicle onto the spur in accordance with proper procedure,

THEN

3. Restore the switch to normal position,

THEN

4. Notify the Control Center that movement is clear.

#### B. Placement of vehicle(s) onto the spur track with another vehicle, movement to re-occupy main track

 Place the disabled vehicle's ATC Bypass Switch into the "ByPass" position.

THEN

2. Align the switch leading onto the spur,

THEN

Position the vehicle onto the spur in accordance with the proper procedure,

THEN

4. Follow proper procedures for uncoupling and backing off the track,

THEN

5. Restore the switch to the normal position,

THEN

6. Notify the Control Center that movement is clear, THEN

7. Proceed in accordance with wayside signals.

## C. Moving vehicle(s) off spur track, movement to initially occupy main track

1. Align the switch leading onto the main track, THFN

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2. Follow proper vehicle preparation procedure,

THEN

 Place the ATC Bypass Switch into the "ByPass" position (on each vehicle, if multiple.) Follow proper procedures for backing off the track,

THEN

4. After movement is clear of spur, restore track switch to normal position,

THEN

Notify the Control Center that the movement is clear,

THEN

6. Proceed in accordance with wayside signals

RDR-467. Reverse Movements in ATC Territory
Reverse movements in Automatic Train Control Territory
(ATC) are prohibited except as authorized by the Control
Center. Before giving authorization, it must be determined
that no opposing movements have been authorized.

Vehicles when authorized to operate in a reverse direction must place the ATC ByPass switch into the "ByPass" position and cut-out the ATC low voltage circuit breaker, then operate at restricted Speed, unless otherwise authorized by the Control Center.

RDR-468. Speed Restrictions in CBTC Territory
The Control Center must be advised of any speed restriction
that is to be established in Communication Based Train
Control Territory.

The employee who is responsible for determining the speed restriction must contact the Control Center providing:

a. the limits of the speed restriction using Bent Numbers to define the limit,

#### AND

b. the speed limit expressed in the exact miles-per-hour of the restriction.

The Control Center, when receiving such information from the employee responsible for determining the speed restriction, must set the expressed speed number in the CBTC Control Computer to enforce the speed limit.

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#### Rules For Establishing On-Track Protection Of Roadway Workers

#### General Information

The following requirements apply to SEPTA employees and employees of private contractors who perform work that requires on-track protection while performing duties involving the maintenance, construction, inspection or repair of rail facilities

#### RDR-500. General Requirements

#### A. Qualification Requirements

All roadway workers must be qualified on the on-track protection procedures and re-certified annually.

All roadway workers must be afforded on-track protection whenever their duties involve fouling or the potential to foul.

#### B. Qualified Protection Employee Requirement

All work groups must include a Qualified Protection Employee who is responsible for ensuring on-track protection and compliance with the applicable on-track protection procedures.

Lone Workers must be Qualified Protection Employees.

#### C. Authorization to Perform Work

The employee in charge of a track must be notified before any roadway worker fouls the track. No work may begin without authorization of the employee in charge of the track. Upon receiving notification of the intended work, the employee in charge of the track must advise the QPE of any condition that could affect the QPE's duties, such as other work not published in the Bulletin Order, the presence of other roadway work groups, traction power outages, etc.

#### The QPE must:

- Ensure all work is performed in accordance with the rules for establishing on-track protection.
   AND
- Check the Bulletin Order for scheduled outages within the area where work is to be performed. AND
- Contact the QPE in charge of any work zone, foul time or out-of-service track before entering that area. AND

 On other than main tracks, notify the employee in charge of the track which method of on-track protection will be used.

#### D. Personal Protective Equipment

All personnel engaged in the work activity in any capacity must wear the approved reflective safety vest, safety shoes, and full cover clothing. Additional personal protective equipment, such as hard hats, eye protection, ear protection, etc., must be worn as required by Authority policy or as specified by contract.

#### E. Protection Requirements

No work that fouls, or has the potential to foul, a track may be performed without an appropriate level of ontrack protection. On-track protection must be established by applying one of the following methods:

- 1. Individual Train Detection (ITD, RDR-502)
- 2. Train Approach Warning (TAW, RDR-503)
- 3. Working on Station Platforms (RDR-507)
- Protection on Other Than Main Tracks (RDR-511)

Levels that Provide Exclusive Track Occupancy

- 5. Foul Time (RDR-504)
- Protection by Establishing a Work Zone (RDR-505)
- 7. Removing Tracks From Service (RDR-506)
- 8. Protection by Location Control (RDR-510)

#### F. Establishing Limits

In establishing limits for on-track protection as specified on written documents such as a Job Briefing Form, Foul Time Authority Record, Form W, etc., each end of the limits must be defined by one of the following physical features:

- 1. Station or Station Limit(s)
- 2. Interlocking Signal
- 3. Interlocking Limit(s)
- 4. Whole or tenth mile marker (e.g. 3.0 or 4.4)
- 5. Bent Number marked with identifying signage
- 6. Temporary Block Station
- Hand-operated switch or crossover
- 8. Numbered signal
- 9. Highway Grade Crossing
- 10. Authorized track barricade or train stop device
- 11. Any other recognizable physical characteristic location

The selected limits must fully include the work area of the group(s) protected and accommodate the required placement footages for all necessary signage when setting

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up a Work Zone. A limit in doubt for appropriate use should be substituted for the next further allowable limit as prescribed by the list above.

Examples of station limits; such as "Northern Limit of X Station" would mean the northernmost end of the platform including sections closed to the public; "Within the Limits of X Station" would mean the territory limited by the extreme ends of the platform(s) only.

Examples of interlocking limits; such "Eastern Limit(s) of Spring Garden Interlocking" would be the easternmost interlocking signal(s) on one or more tracks; in this case SG12 for Track #1 and SG10 for Track #2. "Within the Limits of X Interlocking" would mean the entire territory within the interlocking's outermost signals in both directions).

Track barricades and/or train stop devices must be listed with footage from a permanent physical characteristic (e.g. "A barricade 200' west of 30th Street Interlocking Signal TH2").

In instances where physical characteristics such as interlockings, stations, and/or grade crossings share names (as in Erie Station and Erie Interlocking or Lansdowne Ave Station and Lansdowne Ave Xing), that physical characteristic type (Interlocking, Station, Xing) MUST be specified.

# RDR-501. Protection When Fouling or Working On Any Track

Trains, vehicles, or other equipment must be protected against any known condition that may interfere with their safe passage.

The Train Dispatcher / Controller must be advised if the work will disturb the track or electrical structure.

#### A. Work That Doesn't Involve Occupancy or Disturbing the Track or Electrical Structure

For work that does not disturb the track or electrical structure, the Train Dispatcher / Controller may verbally authorize Foul Time, or the Qualified Protection Employee can decide to use ITD, TAW, or perform a casual inspection. The Train Dispatcher / Controller must be advised if ITD or TAW is used, or if a casual inspection is to be performed. Individuals performing casual inspections must be briefed by a QPE before performing inspection tasks.

#### B. Work Involving Occupancy or Disturbance of the Track or Electrical Structure

For work that involves on-track equipment, or will disturb the track or catenary structure so that movement would be unsafe for Normal Speed, the Train Dispatcher / Controller must issue a Form W.

If an event occurs or conditions are found that may interfere with the safe passage of trains, vehicles, or other equipment, and no protection has been provided, employees must immediately attempt to stop all movements and communicate the condition to the Train Dispatcher / Controller.

## RDR-502. Protection By Individual Train Detection (ITD)

Individual Train Detection may be used by lone workers who are qualified on track safety, the operating rules, and physical characteristics of the territory.

ITD may only be used when:

 a. The work to be performed is routine inspection or minor repair work,

#### AND

- b. The Lone Worker is able to detect approaching trains, vehicles, or other equipment operating at maximum authorized speed and is able to move to the previously determined point of safety not less than 15 seconds prior to arrival of equipment at that location. The place of safety may not be a track unless:
  - 1) a work area has been established on that track, or
  - 2) the track is previewed to be safe to occupy AND provides sufficient time to clear for each direction of an approaching train, vehicle or equipment operating at maximum authorized speed.

#### AND

c. The ability to hear and see approaching trains, vehicles, and other equipment is not impaired by background noise, lights, precipitation, fog, passing trains, vehicles, or other equipment, nearby poweroperated tools or roadway maintenance machines, or other loud physical conditions.

#### AND

d. The Train Dispatcher / Controller has been notified of the intent to use ITD.

#### AND

 e. The Lone Worker has participated in a job briefing with their designated supervisor, or the Train Dispatcher / Controller when a supervisor is not available.

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Lone Workers using Individual Train Detection may not occupy a position or engage in any activity that would interfere with that worker's ability to maintain a vigilant lookout for, and detect the approach of a train, vehicle, or other equipment moving in either direction.

Lone Workers must use a Worker's Portable Warning Signal in combination with ITD.

**RDR-503. Protection by Train Approach Warning** Train Approach Warning may be used to protect a work group.

Before any work activity commences, the Qualified Protection Employee must ensure that a sufficient number of Watchpersons (and Advance Watchpersons, when necessary) are assigned to provide proper protection for all roadway workers. Persons assigned as Watchpersons must be equipped with an approved audible warning device (e.g. portable horn or whistle) and an approved visual warning device (e.g. disc/mitt, sign.). The visual warning device is only required in areas where clearance does not present a safety hazard.

Watchpersons and Advance Watchpersons must position themselves to provide sufficient warning to roadway workers whenever a train, vehicle, or other equipment approaches at the maximum authorized speed from either direction. Warning must be given so that all Roadway Workers can sufficiently clear the work area at least 15 seconds before a train, vehicle, or other equipment passes the location.

When Roadway Workers must be warned of an approaching train, vehicle, or other equipment, Watchpersons and Advance Watchpersons must provide warning as follows:

Audible Warning: By verbalizing the warning, or by sounding the warning horn or whistle.

Visual Warning: Raising and holding the white disc/mitt at arm's length above your head; when it is safe to return to the work area, by holding the white disc/mitt horizontally at arm's length toward the track area.

A Worker's Portable Warning Signal must be used in combination with Train Approach Warning.

Watchpersons and Advance Watchpersons must not allow anything to distract them from their duty of watching for the approach of trains, vehicles, or other equipment. They must not leave their assigned position unless relieved by another assigned person or the designated employee in charge.

#### RDR-504. Protection By Foul Time

Foul Time may be used to establish protection by the Train Dispatcher / Controller, and only directly to the Qualified Protection Employee requesting the Foul Time.

#### A. Action Required Before Issuance

Before authorizing Foul Time, the Train Dispatcher / Controller must:

 Determine the exact limits of the track segment to be fouled.

#### AND

Determine that no other trains, vehicles or other equipment have been authorized to occupy or are currently occupying the track segment to be fouled.

#### AND

- 3. Ensure the next on-track movement approaching the Work Area is held as follows:
  - a. Where signals are to be used, that Stop Signals have been displayed and blocking devices (where applicable) have been applied to the controls of switches and signals leading to the affected track, or
  - Implement a verbal hold. The Train
     Dispatcher / Controller must ensure the next approaching on-track movement is stopped at the hold point before authorizing roadway workers to foul the affected track area.

#### **B. Foul Time Authority Record**

When authorized, foul time information must be recorded electronically in the train dispatching system by the Train Dispatcher / Controller issuing the foul time and on the SFT-2 "Employee Record of Foul Time Authority" by the QPE being granted the foul time. The QPE must state the following when requesting foul time:

- 1. Title, first name and last name;
- 2. Track designation;
- 3. Track limits:
- 4. Time limits.

Foul time must be requested in the following manner:

"Track Foreman John Doe to train dispatcher." "Train dispatcher to Foreman Doe." "Dispatcher, I'm requesting foul time on No. 'X' track between 'Able' and 'Baker' for x minutes." Train Dispatcher/Controller must not grant foul time if the request does not include the name of the person making the request, the track designation, the physical limits of the territory, and the duration foul time is needed.

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After applying adequate blocking device protection, the Train Dispatcher/Controller must authorize foul time in the following manner:

"Track Foreman John Doe authorized foul time on No. 'X' track between 'Able' and 'Baker' from 10:15 AM to 10:30 AM." The QPE must not accept foul time that is not authorized in the proper manner.

The QPE making the request must have his / her name, account number, date and columns 1 and 2 of the Employee Record of Foul Time Authority filled in before making the request, and fill in columns 3 and 4 after the Train Dispatcher/Controller indicates the start and end times. After entering the start and end times on the record, the QPE must repeat the foul time authority as follows: "Track Foreman John Doe authorized foul time on No. 'X' track between 'Able' and 'Baker' from 10:15 AM to 10:30 AM.

After the QPE repeats the foul time properly, the Train Dispatcher/Controller will give his / her first initial and last name, which the QPE will record in column 5 and repeat to the Train Dispatcher/Controller. Train Dispatcher/Controller must not give his / her name if the information is not repeated in the proper manner. Foul time becomes effective after the QPE repeats the authorizing dispatcher's name

#### C. Job Briefing Requirements

Before beginning work under foul time authority, the Qualified Protection Employee must conduct a job briefing with all affected employees, and review the track(s) being protected, the track and time limits of the authority, and all other factors affecting the work. The employees must not be permitted to foul the track(s) involved until they have verified their full understanding of all topics discussed during the job briefing.

Any additional roadway workers requesting permission to perform work within the foul time authority must comply with the job briefing requirements outlined above. In addition, the QPE must complete Work Limits Occupancy Authority Part 2 on the back of the SFT-2 form.

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#### D. Releasing Foul Time

After all work is completed and the affected track(s) are clear of all workers and equipment the QPE must contact the Train Dispatcher/Controller and report clear. Upon receiving the report, the Train Dispatcher/Controller must give a released time to the QPE. The QPE must repeat the release time to the Train Dispatcher/Controller and record it in column 6. A new Employee Record of Foul Time Authority must be used every day. Completed Employee Record of Foul Time Authority forms must be kept available for inspection upon request for seven days.

#### RDR-505. Protection By Establishing a Work Zone

#### A. General

The authority to establish a Work Zone is issued by a Form W, line 4. It may only be authorized by the Train Dispatcher / Controller and only directly to the Qualified Protection Employee.

The limits of the Work Zone must be designated on the Form W, and identifiable by milepost, station, or other recognized physical characteristic location.

All Work Zones established per this rule must be supplemented by Adjacent Track Protection prescribed per OTS 512. Adjacent Track Protection must be provided for each Track that immediately flanks the Work Zone.

Information regarding the location of Work Zones and associated Adjacent Track Protection may be published in the Bulletin Order, as information only. Bulletin Order information does not authorize the establishment of a Work Zone. If a Work Zone identified in the Bulletin Order is not going to be established, or if the effective times change, the Train Dispatcher / Controller must notify trains, vehicles, or other approaching equipment verbally or electronically.

If the limits of the Work Zone and associated Adjacent Track Protection are not published in the Bulletin Order or Supplemental Bulletin Order, the Train Dispatcher / Controller must notify trains, vehicles, or other approaching equipment verbally, electronically, or Supplemental Bulletin Order, of the limits.

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#### B. Structure of a Work Zone

The Work Zone is the area between the Stop Sign/Work Area Speed Limit Sign and the Work Area Resume Speed Sign, made up of an Entrance Buffer, Work Area, and Exit Buffer

The Entrance Buffer is the area between the Stop Sign/Work Area Speed Limit Sign and the Work Area. The Entrance Buffer must account for the maximum authorized speed of approaching movements. Therefore, the Stop Sign must be placed in advance of the Work Area according to the Braking Chart (RDR-231). The maximum authorized speed must be used plus 100 feet when making the calculation.

The Work Area is the location where roadway workers are actually working.

The Exit Buffer is a minimum 400 feet between the end of the Work Area and the Work Area Resume Speed Sign.

The approach to the Work Zone is the territory between the Approach Sign and the Stop Sign/ Work Area Speed Limit Sign. This area is not controlled by the QPE. The Approach Sign must be placed in advance of the Stop Sign according to the Braking Chart (RDR-231). The maximum authorized speed must be used when making the calculation.

The Qualified Protection Employee must ensure these switches are protected by the Train Dispatcher / Controller or by displaying additional work zone signage. If the Train Dispatcher / Controller provides switch protection, such protection must not be removed until permission has been granted from the Qualified Protection Employee.

When access to a work zone from adjacent track(s) is/ are being protected by signs, a Diverting Approach Sign(s) must be placed on adjacent track(s). Additional Stop Sign(s) will be required if the switch is located within the Work Area. In these situations, there is no Entrance Buffer. The Stop Sign/Work Area Speed Limit Sign will be placed in the switch adjacent to the Work Area.

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#### C. Placement of Signs

Before issuing the Form W, the Train Dispatcher / Controller must be assured that all signs have been properly placed. The employee requesting the Form W must arrange for the placement of signs and receipt of the Form W according to the following sequence:

1. The Work Area Resume Speed Sign,

THEN

2. The Approach Sign, and Diverting Approach Sign (if necessary)

THEN

3. The Work Area Speed Limit Sign,

THEN

4. Issuance and receipt of the Form W,

THEN

Replacement of the Work Area Speed Limit Sign with the Portable Train Stop Sign when the track is obstructed.

Once the signs are in place and the Form W has been issued, the Flagperson, when used, must be positioned near the Stop Sign and before the first worker.

**Note:** Roadway workers placing signs must not foul a track unless it is safe to do so. When placing signs for a bi-directional Work Zone, the order of placement need only be followed for one direction. Placing signs one direction at a time is not required.

#### D. Permission to Pass a Stop Sign

Permission to pass a Stop Sign must be issued verbally or by hand signal by the Flagperson. The Flagperson must be positioned close to the Stop Sign and prior to the first worker. The Flagperson must be clearly distinguishable from other people in the track area to vehicle or train operators.

When a Flagperson is not used, the Qualified Protection Employee must convey permission to pass the Stop Sign. When the Qualified Protection Employee cannot be positioned near the Stop Sign, permission to pass the Stop Sign can be relayed through the Train Dispatcher / Controller, but only after a clear understanding is established between the Train Dispatcher / Controller and the Qualified Protection Employee.

#### E. Movements Within Work Area

Trains, vehicles, or other equipment may only enter the Work Area:

- 1. When permission has been given as follows:
  - A hand signal or verbal authority to proceed past Stop Sign has been received from the Flagperson or Qualified Protection Employee, OR
  - The Portable Train Stop has been removed and a hand signal or verbal authority to pass Stop Sign has been received from the Flagperson or Qualified Protection Employee, OR
  - Verbal permission has been received from the Train Dispatcher / Controller, and, when necessary, Portable Train Stop has been removed. OR
- A Work Area Speed Limit Sign is displayed.

The Flagperson or Qualified Protection Employee must not authorize movements to enter the Work Area or display a Work Area Speed Limit Sign until he confirms the entire track through the Work Area is not obstructed and all Roadway Workers have been notified. Movements through the Work Area must not exceed 30 mph unless directed otherwise by Bulletin Order, Form W, the Flagperson or Qualified Protection Employee.

Exception: The Flagperson or Qualified Protection Employee may admit trains, vehicles, or other equipment that will be performing work and will be under the direct charge of the employee in charge of the work. Such equipment must operate at Restricted Speed when in the Work Area.

#### F. Removal of Signs

Before the Train Dispatcher / Controller cancels the Form W, he must be assured that the signs have been properly removed. The employee receiving cancellation of the Form W must arrange for the removal of signs and cancellation of the Form W according to the following procedure and sequence:

 Removal of Portable Train Stop Sign (or Work Area Speed Limit Sign),

THEN

Removal of the Approach Sign and Diverting Approach Sign (if necessary),

THEN

3. Removal of the Work Area Resume Speed Sign.

THEN

4. Cancellation of the Form W.

#### RDR-506. Removing Tracks From Service

Tracks must be removed from service by use of a Form W, line 3, which may only be authorized by the Train Dispatcher / Controller and must be issued directly to the person requesting the track out of service. The employee requesting the track must be a Qualified Protection Employee.

If the limits are not published by Bulletin Order, the Train Dispatcher / Controller must notify approaching movements either verbally or by Form W.

#### A. Action Required Prior to Issuance

All Tracks Removed From Service per this rule must be supplemented by Adjacent Track Protection prescribed per OTS 512. Adjacent Track Protection must be provided for each Track that immediately flanks the Out-of-Service (OOS) Track

Before removing the track from service, the Train Dispatcher / Controller must take the following actions:

 Determine the exact limits of the track segment to be removed from service.

#### AND

Determine that no other trains, vehicles, or other equipment have been authorized to occupy or are currently occupying the track segment to be removed from service,

#### AND

- Ensure the next movement approaching the affected track segment is held as follows:
  - a. Where signals are to be used, that Stop Signals have been displayed and blocking devices, where applicable, have been applied to the controls of switches and signals leading to the affected track segment, or
  - b. Where Portable Train Stop or other barricade is used, that the device has been erected at the limits of the out-of-service area, or
  - c. At other locations, a Temporary Block Station(s) has been established to hold trains clear of the affected track, that any track barricades that have been erected are clear of adjacent track movements, and that switches or crossovers, if present, are lined away from the out-of-service track segment, or

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d. A verbal hold is established. The Train Dispatcher / Controller must ensure the next approaching on-track movement is stopped at the hold point before authorizing roadway workers to foul the affected track area.

#### B. Establishing Out-of-Service Limits

Track Out-of-Service limits must be defined as specified in RDR-500 part F.

When track barricade or train stop device is used to designate a limit, the positioning must be stated on Form W, line 9.

#### C. Operation Within Out-of-Service Limits

Block, Automatic Train Control System, or interlocking rules do not apply within the limits of the out-of-service territory. Movement is under the direction of the employee designated on the Form W. All movements must operate at Restricted Speed unless otherwise directed by the holder of the Form W. When other than Restricted Speed is required, Form W line 9 must read, "Operate in accordance with the instructions of Track Foreman Jones"

#### D. Admitting Additional Workers or Equipment From Locations Controlled By Train Dispatcher / Controller

The Train Dispatcher / Controller may admit additional workers or equipment into the out-of-service limits by:

- Obtaining permission of the employee to whom the Form W was issued.
- Verbally authorizing entry by conveying permission to pass Stop Signal in signaled territory, or conveying permission to proceed into the out-of-service area.

The employee to whom the Form W was issued must conduct a job briefing with the roadway worker in charge of the additional

equipment/workers and record the additional equipment or workers on Part 2 of the Form W if they are not part of his work group

#### E. Admitting Additional Workers or Equipment From Locations Not Controlled By Train Dispatcher / Controller

The employee to whom the Form W was issued may admit additional workers or equipment into the out-of-service limits from a location not controlled by the Train Dispatcher / Controller.

The employee to whom the Form W was issued must conduct a job briefing with the roadway worker in charge of the additional equipment/workers and record the additional equipment or workers on Part 2 of the Form W if they are not part of his work group.

#### F. Qualified Protection Employee Going Off Duty

When a track is out of service by Form W Line 3, and the Qualified Protection Employee is to go off duty, Form W Line 3 must be issued to another Qualified Protection Employee if work is to continue:

The procedures below must be followed if work is to be suspended but the track is to remain out of service

- The Train Dispatcher/Controller must ensure that Blocking Device protection, if available, remains applied. Other personnel involved in ensuring protection must be issued Form W, Line 9, instructing them to hold all trains clear of the affected track.
- 2. The QPE must ensure barricades are erected to protect out-of-service area.
- The QPE must contact the Train Dispatcher/ Controller and advise all conditions affecting the out of service track area, including the locations of barricades, equipment and condition of track structure. This information must be recorded by the Train Dispatcher/Controller and repeated back to the QPE.
- 4. After steps 1, 2, and 3 are completed, the Form W, Line 3 must be canceled.

No further movements shall be permitted or maintenance performed on affected track until Form W, Line 3 is issued to a QPE.

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Before requesting Form W, Line 3, the QPE must communicate with the Train Dispatcher/Controller to ascertain all conditions affecting the out of service track area.

Upon completion of work, the provisions of steps 1 through 4 above will apply if track must again remain out of service.

#### G. Returning the Track to Service

When the track is to be returned to service, the employee to whom the Form W was issued must take these two actions:

- 1. Notify the Train Dispatcher / Controller of any restrictions necessary for the safe passage of trains, vehicles, or other equipment,
- 2. Ascertain that all trains, equipment and personnel are clear of the track area, and notify the Train Dispatcher / Controller of such.

Exception: When authorized by the Train Dispatcher / Controller, the track may be returned to service while it is still occupied by trains, vehicles, equipment or personnel. Before canceling the Form W, the Train Dispatcher / Controller must ensure that the equipment or personnel to remain receives the proper authority to occupy the track after it is returned to service.

# **RDR-507. Working On Station Platforms**Work may be performed on a station platform without establishing a Work Zone. Such work may only be performed if all four of the following criteria are met:

 The work does not foul or have the potential to foul the track area beyond the edge of the platform.

#### AND

b. A clear line of sight must be established, or a Watchperson used, between the platform working area and approaching trains, vehicles, or other equipment when the work is within two feet from the edge of the platform.

#### AND

c. All workers engaged in the work must position themselves a minimum of two feet from the edge of the platform at least 15 seconds prior to the arrival of a train or other equipment to enable passenger travel.

#### AND

d. All equipment or tools must be secured or moved a minimum of two feet from the edge of the platform

at least 15 seconds prior to the arrival of a train or other equipment to enable passenger travel.

A Worker's Portable Warning Signal must be used for work performed two feet or less from the edge of the station platform. When used, the sign must be secured in place and positioned at the entering end of the platform, or, where movement may enter from either direction, at both ends of the platform.

#### RDR-508. Speed Distance Table

The following table must be used to determine distances to establish the 15-second protection requirement. The calculation for positioning must use the maximum authorized track speed, not a temporary restriction implemented by rule or track condition.

Speed (MPH)	Feet per Second	Feet per 15 Sec.
10	14.7	221
15	22.0	330
20	29.3	440
25	36.7	551
30	44.0	660
35	51.3	770
40	58.7	881
45	66.0	990
50	73.3	1,100
55	80.7	1,211
60	88.0	1,320
65	95.3	1,430
70	102.7	1,541

#### RDR-509. Joint Occupancy of Work Zones, Foul Time and Out of Service Tracks

The QPE may allow additional workers to occupy the track within the work zone, foul time area, and out of service limits. Before authorization is given, the employee must:

a. Have a job briefing with the Lone Worker, or the EIC of the additional work group,

#### AND

- b. Complete Work Limits Occupancy Authority Part 2 by recording:
- 1. The name of the EIC of the additional work group.
- 2. The limits of the additional occupancy authority.
- 3. The time the occupancy was authorized.

Workers given authority to occupy the track within the designated area must report clear to the QPE immediately after clearing the track. The QPE must then record the

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time cleared on the Work Limits Occupancy Authority - Form W Part 2.

Prior to returning the track to service, the QPE must determine that all work groups given authority to occupy have reported clear.

#### RDR-510. Protection by Location Control

Location Control may be used to establish working limits. The Train Dispatcher / Controller may issue Location Control to a QPE when a roadway worker who is qualified to manage the signal system is capable of causing interlocking signals at the entrance to the working limits to convey an aspect indicating Stop Signal. Location Control must be requested using the following format:

- 1. The signal maintainer / roadway worker who is qualified to maintain the signal system must contact the Train Dispatcher / Controller for permission to take Location Control. The request must include specific location/limits and affected tracks.
- 2. The Train Dispatcher / Controller must determine no other trains, vehicles or equipment has been authorized to occupy or is currently occupying the territory
- 3. The Train Dispatcher/Controller will then provide authorization for Location Control and an effective start time

Individual train / vehicle movements may be allowed by the QPE while Location Control is in effect provided:

- 1. The QPE communicates with the Train Dispatcher/Controller and the work group, and
- 2. The QPE ensures all roadway workers and equipment are clear, and
- 3. Signal aspects can display a proceed indication or,
- If a Stop Signal is displayed, permission must be given to pass it in accordance with rule RDR-205.

Roadway workers must be in the clear before signal protection is released and must not return to a fouling position until protection via Stop Signals is re-established.

Protection must be maintained until all roadway workers and equipment are clear of the working limits. The QPE must notify the Train Dispatcher / Controller as soon as working limits are released.

#### RDR-511 Protection on Other Than Main Tracks

#### A. Methods of Establishing Protection

On-track protection may be established on tracks not controlled by the Train Dispatcher / Controller by TAW or making the track inaccessible at each possible point of entry. The QPE must receive permission to work on the track(s) from the employee in charge of the track before the track is fouled. The employee in charge of the track must be fully informed as to nature of the work and the tracks affected.

Any one of the following means may be used to establish protection:

- A hand-operated switch or derail aligned to prevent access to the working limits and secured with an effective securing device. The QPE must ensure a barricade is erected at the entrance(s) to the out of service tracks(s). The effective securing device and tag may be removed only by direction of the QPE.
- 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. When remotely controlled switches are involved, the QPE must communicate directly with the employee controlling such switches. Blocking device protection must not be considered in effect until it has been confirmed by the employee controlling the switch. In addition to blocking the remote controlled switch, the QPE must ensure a barricade is erected at the entrance(s) to the out of service tracks(s). Blocking device protection must be maintained until the QPE who requested the protection has reported clear. The employee providing blocking device protection must make a record of the application of blocking devices. including the reason.
- 3. A disconnected rail.
- 4. A flagperson assigned to hold trains and equipment clear of the working limits.
- 5. A watchman / lookout properly positioned and capable of warning workers of the approach of a train or on-track equipment that would allow the workers to be clear of the track not less than 15 seconds before the train or on-track equipment arrives at the location.

Once the track is made inaccessible, no workers or equipment may enter the working limits without permission of the QPE.

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#### B. Job Briefing Requirements

The QPE must conduct a job briefing with the employee in charge of the track, reviewing the tracks affected by the working limits, the means by which the working limits will be made inaccessible, estimated time frame working limits will be in effect, and any other additional information, such as traction power outages, if applicable. This briefing must be conducted face-to-face, unless the QPE and the employee in charge of the track are not at the same location.

#### C. On-Track Movements Within Working Limits

Unless part of the work group, stored equipment must be removed before the working limits are established. If stored equipment cannot be removed before working limits are established, the employee in charge of the track must ensure the equipment is secured and authority for movement is withheld until working limits are released.

When authorized, movements of on-track equipment must be made at Restricted Speed not exceeding 5 MPH.

# D. Additional Work Groups / On-Track Equipment Within the Working Limits

The QPE may admit additional workers or equipment into the working limits. The QPE must record the additional equipment or workers if they are not part of his work group.

#### E. Releasing Working Limits

Protection must be maintained until all roadway workers and equipment are clear of the working limits. The QPE must notify the employee in charge of the track as soon as working limits are released.

When remotely controlled switches are used to make the track inaccessible, the QPE must ensure track clamps are removed and the employee in charge of the remotely controlled switches are advised protection is no longer required before reporting clear to the employee in charge of the track.

#### RDR 512 - Adjacent Track Protection

#### A. General

Whenever work requires a work zone (RDR-505) or a track removed from service (RDR-506) – and the work requires roadway workers / personnel to perform tasks in the track area – the track(s) immediately adjacent to the track in which work is performed must also be provided protection against movements. Protection by Establishing a Work Zone RDR-505 / OTS-505; or removing [the affected] track from service RDR-506 / OTS-506, are the only approved methods to provide Adjacent Track Protection.

The authority to establish Adjacent Track Protection is issued by a Form W Line 4 authorization for a Work Zone; or Form W Line 3 for removing the adjacent track from service. It may only be authorized by the Train Dispatcher / Controller and only directly to the Qualified Protection Employee.

The structure and limits of the Adjacent Track(s) Protection must be designated on the Form W, and identifiable by milepost, station, or other recognized physical characteristic location.

When Adjacent Track Protection is established, the Train Dispatcher / Controller must notify trains, vehicles, or other approaching equipment verbally, electronically, or Supplemental Bulletin Order, of the limits.

#### B. Structure of Adjacent Track Protection

The QPE must establish Adjacent Track Protection for each and every track that immediately flanks either side of:

- A track Protected by a Work Zone (OTS-505 / RDR-505)
  Or
  - Track Removed from Service (OTS-506 / RDR-506).

The Adjacent Track Protection structure and associated distance limits between signage must conform to the boundaries prescribed in Protection by Establishing a Work Zone RDR-505(c) / OTS-505(c); or by the Out of Service Limits prescribed in Removing Tracks From Service RDR-506(b) / OTS-506(b).

#### C. Adjacent Track Protected by Work Zone

Placement of Signs for Adjacent Track Protected by Work Zone

The QPE must place Adjacent Track Protection signage per the sequence prescribed in Protection by Establishing a Work Zone RDR-505(c) / OTS-505(c).

Note: Roadway workers placing signs must not foul a track unless it is safe to do so. When placing signs for bi-directional Adjacent Track Protection, the order of placement need only be followed for one direction. Placing signs one direction at a time is not required.

Before Issuing the Form W, the Train Dispatcher / Controller must be assured that all signs for the Adjacent Track(S), and the track upon which work is performed, have been properly placed.

Once the signs are in place and the Form W has been issued, the Flagperson(s) assigned to the Adjacent Track(s) must be in-position at the Adjacent Track Stop Sign before the first workers enter the work area and commence work.

#### Current of Traffic Considerations

Each employee responsible for the on-track protection of roadway workers, QPE, must identify all tracks that flank – on both sides, as needed – the track in which roadway workers are protected by a either Work Zone (WZ) or Track Removed from Service (OOS). The QPE must determine the established current of traffic on the adjacent tracks; and then place Adjacent Track Protection signage based on the established movement direction and maximum authorized speeds for that Adjacent Track section.

If the Adjacent Track is used for Bi-Directional movements (i.e. – single tracking) passed the work area, the QPE must place the Adjacent Track Protection signage In Both Directions per the sequence prescribed in Protection by Establishing a Work Zone RDR-505(c) / OTS-505(c).

If the Adjacent Track Movements are In Same Direction as established current of traffic on WZ / OOS Track

- Example Sub / Surface Track adjacent to MFL
- Example BSS Express Track adjacent to BSS Local Track or opposing Express Track

Note 1: The Stop Sign (Flagperson) on the Adjacent Track must be positioned immediately adjoining to:

The Work Zone (WZ) Stop Sign (Flagperson)

Or

The Out-of-Service (OOS) Track Barricade

Note 2: Stop Signs on both the Adjacent Track(s) and the work track must be placed in advance of the Work Area according to the Braking Chart (RDR-231) – using the Highest Maximum Authorized Speed among the affected tracks. The Maximum Authorized Speed must be used PLUS 100 feet when making this calculation.

QPE's must be aware that Adjacent Track Protection may be required on multiple tracks, and that placement of appropriate signage on each affected track must consider both the established current of traffic and the Maximum Authorized Speeds (MAS) on each track.

#### Movements Pass the Adjacent Work Area

Movements on Adjacent Track(s) protected by a Work Zone must be restricted until the Flagperson determines that all workers are clear of the affected Adjacent Track(s). Personnel preforming flagging duties on Adjacent Track(s) must have positive communication (radio or hand signal) with the work area Employee In Charge (EIC) or Watchperson, and confirm that workers are clear of the adjacent track prior to allowing movement pass the Stop Sign.

Each workgroup within a Work Zone or Track Removed from Service must designate an Employee in Charge (EIC) or Watchperson who must:

 Be able to communicate (radio or hand signals) with the Adjacent Track Protection Flagperson(s); and the Work Zone Flagperson.

#### And

 Remain alert for notification from the Flagperson(s) about approaching movements on the work track and adjacent track(s)

#### And

 Ensure that Roadway Workers are clear of the affected Adjacent Track(s) or Work Zone when notified by the respective Flagperson of an approaching movement – before advising the Flagperson that such movements are safe to proceed.

#### Removal of Signs

Removal of Adjacent Track Protection signage must conform to the sequence prescribed for Work Zones in RDR-505(f) / OTS-505(f).

#### Interlocking Rules

#### General Information

Interlocking rules apply to any movement or activity within an interlocking. These rules cover the use of signals and appliances, movement within and through interlockings, and dangerous conditions within interlockings.

When the rules require the application of blocking devices, where it is not possible to do so, the Train Dispatcher / Controller must ensure adequate protection is provided by rule, special instruction, or other alternate method.

#### RDR-601. Clearing Interlocking Signals

Interlocking signals must be cleared sufficiently in advance of approaching trains to avoid delay.

#### RDR-602. Interlocking Appliances: Operation

Control mechanisms must be operated carefully and only by those charged with that duty. If any irregularity affecting their operation is detected, the signals must be set to display Stop Signals and blocking devices applied until repairs have been made. Defects must be reported promptly.

#### RDR-603. Rerouting Trains

Except in an emergency, when a signal has been cleared for an approaching train, the signal must not be changed to the Stop position until:

- a. The train has stopped, or
- b. The train operator has been informed of the situation and advises the Train Dispatcher / Controller that the train can be stopped before reaching the interlocking signal.

The route for an approaching train must not be changed until after the Train Dispatcher / Controller has determined the train has come to a complete stop.

## RDR-604. Interlocking Appliances: Control Mechanisms

Control mechanisms that operate interlocking appliances must not be operated when any portion of a train is standing on or closely approaching them.

#### RDR-605. Derailment or Damage

If there is a derailment or if any damage occurs to the track or interlocking structure, the affected signals must be set to display Stop Signals, blocking devices applied, and no movement permitted until all parts of the interlocking and track that may have been damaged have been inspected and are known to be in a safe condition.

# RDR-606. Interlocking Appliances: Locking When impossible to lock an interlocking appliance the Train Dispatcher / Controller must not give a train permission to pass a Stop Signal until:

- a. All control mechanisms are placed in the required position and blocking devices applied at the control location.
- All affected interlocking appliances are properly lined and secured in the field.

The Operator is directed to operate his equipment at Restricted Speed through the Interlocking.

# RDR-607. Interlocking Appliances: Repairs When interlocking appliances are undergoing repairs, a Stop Signal must be displayed for any movement that may be affected by such repairs and blocking devices applied until it has been determined that the interlocking appliances are properly lined for all movements.

RDR-608. Interlocking Signal Changes to Stop When a signal indication permitting a train to proceed is changed to Stop Signal before it is reached, the stop must be made as soon as safe train handling will permit. Such occurrences must be reported to the Train Dispatcher / Controller.

# RDR-609. Stopped in an Interlocking By Train Dispatcher / Controller or Tower Operator

A train that is stopped by the Train Dispatcher / Controller or Tower Operator while making a movement through an interlocking, must not move in either direction until it has received the proper signal indication or permission has been received from the Train Dispatcher / Controller.

# RDR-610. Movements That Might Not Shunt Movements of equipment that might not shunt in an interlocking may only be made upon permission from the Train Dispatcher / Controller. The Train Dispatcher / Controller must ensure that all interlocking appliances are properly lined and secured with blocking devices.

The Train Dispatcher / Controller shall not remove the blocking devices until the employee in charge of the movement reports clear of the track.

#### RDR-611. Rust on Rails or Wheels

Where rails are rusted, or where trains that have been left standing and wheels have become rusted, employees must immediately notify the Train Dispatcher / Controller. The Train Dispatcher / Controller must apply blocking devices prior to permitting movements over rusty tracks or for movements with equipment with rusty wheels.

After equipment has reported clear, blocking devices must be removed unless otherwise required.

# RDR-612. Reversing Direction Within an Interlocking

Trains must not reverse direction within the limits of an interlocking without prior permission of the Train Dispatcher / Controller, and all movements must be made at Restricted Speed.

#### RDR-613. Closing An Interlocking Station

When an interlocking station is closed, routes and signals must be set to comply with the instructions of Train Dispatcher / Controller and the building securely locked.

# RDR-614 Stopping Less Than 1 Car / Vehicle Length Beyond Interlocking Signal

If a train / vehicle stops less than one (1) car or vehicle length beyond an interlocking signal, it must not proceed in any direction without permission of the Train Dispatcher/ Controller. This rule applies even when the interlocking signal passed had displayed a permissive signal to enter the interlocking when it was passed.

#### Radios And Telecommunication Systems Rules

#### RDR-700. Use and Care of Radios

Authority radios must be used exclusively for Authority business. The use of radios other than those issued by the Authority is prohibited.

Employees using radio equipment must exercise care to prevent damage to or loss of the radio equipment. Employees assigned a portable radio are responsible for its proper care and protection.

No technical adjustments may be made to a radio set, except by those employees specifically trained and authorized to do so.

Employees must report damaged and defective radios to their supervisor as soon as practical.

#### RDR-701. Requirements for Two-Way Communication Devices

Each train or vehicle, track car, and employee assigned to provide on-track safety must have an on-board or portable radio available as a means of two-way communication with Control Center. When authorized by the Train Dispatcher / Controller, other means of two-way communication may be used when on-board radio has failed and a portable radio is not available.

#### A. Trains and Rail Vehicles

Each train or vehicle must have available at the controlling end location a working radio when it is dispatched from the yard, terminal, or depot. The working radio may be an on-board or a handheld portable radio.

#### B. Track Cars

Track cars operating on track must have a working radio. The working radio may be on-board equipment or a handheld portable radio. When more than one track car is moving under the same authority, only one working radio is required.

#### C. Roadway Workers

Each employee assigned to provide on-track safety for Roadway Workers, and Lone Workers must have immediate access to a working radio. When immediate access to a working radio is not available, the employee must be within hearing range of a radio capable of monitoring radio transmissions. These requirements do not apply when the work location is physically inaccessible to trains or rail vehicles, or has no through traffic or traffic on adjacent tracks during the period when Roadway Workers are present.

#### RDR-702. Radio Inspection

Employees shall permit inspection of the radio equipment in their charge, and all FCC documents pertaining to such, by a duly accredited representative of the FCC upon request.

# RDR-703. Communications Device Testing, Failure, Interference

When taking charge of radio equipment, or any other authorized communications device, employees must make a voice test of the device to ensure that the equipment is functioning as intended.

The test of a radio shall consist of an exchange of voice transmissions with another radio. The employee receiving the transmission shall advise the employee initiating the test of the quality and readability of the transmission. If the radio or device does not operate properly, it must be removed from service until repaired, and the Control Center and/or Yard Foreperson notified promptly. In the event of a failure en route, the Control Center must be notified as soon as practical, without a delay to operations, by an alternate means of communication.

Radio interference or areas of poor radio reception must be reported promptly to the Control Center and/or Yard Foreperson. Information to be provided includes time, location, and the nature of the problem.

# RDR-704. Radio Transmission and Reception Procedures

Before transmitting by radio, the employee must listen to ensure that the channel on which the employee intends to transmit is not in use.

An employee receiving a radio call must acknowledge the call immediately, unless doing so would interfere with safety. All transmissions pertaining to the movement of trains and/or track cars must be repeated by the

employee receiving them. Once repeated correctly, the Dispatcher/Controller will acknowledge that the transmission was correctly repeated.

Employees must ensure that radio contact with the intended person has been made, and must not take action until certain that all conversation concerning them has been heard, understood, and acknowledged.

Any radio communication that is not fully understood or completed in accordance with the requirements of these rules shall not be acted upon, and shall be treated as though not sent. Emergency communications are the only exception.

#### RDR-705. Radio Monitoring

When their duties involve the use of a radio, employees 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.

#### RDR-706. Emergency Communications

All employees shall give absolute priority to emergency communications. Except in answering or aiding a distress call, employees shall refrain from sending any communication until certain that no interference will result to the station in distress.

## RDR-707. Radio Messages: Content and Code Words

The following procedures will govern identification and content of messages when using the radio:

When originating or initially responding to a radio call, employees must identify themselves. Means of identification must include, as applicable, their calling station or route line, their block number, their vehicle, train, or name and/or title.

Communications must be as brief as possible. Employees must use these key words and/or codes to signify that the message was received and understood: "ROGER" or "CHECK" to signify that the message

was received and understood; when required by Rule RDR 704, it also means that you have repeated instructions

correctly.

"EMERGENCY" or transmitted three times to

"MAY DAY" obtain immediate use of radio channel for initial report of endangering

conditions.

#### RDR-708. Prohibited Transmissions

Employees shall not knowingly transmit:

- a. Any false distress communication.
- b. Any unnecessary, irrelevant, or unidentified communication.
- Any offensive, obscene, indecent, or profane language or remark.

# RDR-709. Radio Communication Instead of Hand Signals

When radio communication is used instead of hand signals to control a shoving, backing, or pushing movement, employees must comply with the following requirements.

#### A. Employee Directing the Movement

The employee directing the movement must:

1. Maintain continual radio contact with the person receiving the instructions.

AND

Specify a distance to be traveled; the distance must not exceed the distance known to be clear.

AND

 Communicate the names of fixed signals affecting the movement to the person operating the equipment or vehicle.

#### B. Employee Receiving the Communication

The employee receiving the communication must:

 Maintain continual radio contact with the person receiving the instructions.

AND

2. Repeat distance and names of fixed signals.

AND

 Stop within one half the specified distance, unless additional instructions regarding distance is received.

If instructions are not understood, or continual radio contact is not maintained, the movement must be stopped immediately. Movement may not be resumed until the misunderstanding is resolved or the communication is restored.

### RDR-710. Communication of Fixed Signals Via Radio

Except as indicated below, Train Dispatchers, Controllers, tower personnel, or other on-ground personnel must not advise the aspect, name, or indication of a fixed signal other than a Stop Signal. Employees operating equipment or vehicles must not request this information.

Following are exceptions when radio communication may be used to convey the aspect, name, or indication of a fixed signal:

- a. Communication between an employee directing movement and employee controlling a movement.
- b. Permission to pass Stop Signal.
- Supervisor or other designated employee on the ground who has been specifically authorized by the Control Center to communicate such information.

Radio communication may be used to impose a more restrictive action than the indication of a fixed signal.

#### RDR-711. Telephone Use

Telephones shall be operated in accordance with the instructions posted at the locations. Telephone boxes shall be closed and locked when not in use. Where a manual switch is provided to activate the telephone, it must be deactivated before closing the box. Telephone lines must be yielded promptly for calls pertaining to emergencies or train or vehicle movements.

#### RDR-712. Recording of Communications

Radio and telephone communications are regularly recorded when they involve:

- Train and vehicle radio communications.
- b. Control Center radio and telephone communications.
- c. Control Center open lines.
- d. Authority telephones, which are recorded when the presence of a "beep" tone is audible approximately every fifteen seconds.

### RDR-713. Computer Aided Radio Dispatch System (CARD)

Employees are governed by the procedures that apply to the utilization of the Computer Assisted Radio Dispatch (CARD) system's Smart Mobile Data Terminal (SmartMDT.)

When using the SmartMDT, employees must comply with the following:

- a. Vehicle must be at a complete stop when looking at or working with menus or the annunciator.
- b. Initial Login: employee initially taking charge of equipment must login to system as prescribed by login procedure.
- Relief Login: relieving employee taking charge of equipment must login to system as prescribed by relief login procedure.
- d. All new and stored messages must be viewed; messages requiring a response must be acknowledged as soon as possible.
- e. Text Messaging is the first / preferred method of communication and is to be used as a first contact with the Control Center.
- f. Voice calls placed as a request-to-talk (RTT) or priority-request-to-talk (PRTT) must wait a minimum of two minutes for a response before the call is placed again.
- g. A priority request-to-talk (PRTT) call must not be made unless an emergency condition exists and you can speak freely; conditions that are considered to be emergencies include: collisions, derailments, person(s) struck by vehicle, serious illness requiring immediate medical attention, conditions requiring evacuation, security situation; all other conditions where danger is not imminent must utilize requestto-talk (RTT.)
- h. The Emergency Alarm (EA) may be used only in a life threatening situation in which you cannot converse freely with the Control Center. (Note: Activation of the EA button will activate the "covert microphone" feature, which will allow the Control Center to monitor communications inside the vehicle for a period of two minutes before the system will permit verbal transmission.

- When it is safe to do so, the operator must contact the Control Center using (PRTT).
- When Control Center initiates a call there is an audible heard (system "beeps" twice), employee must respond as soon as practical without jeopardizing safety.
- No Relief Log Off: Employees departing equipment where no relief is present must logout of system as prescribed by logout procedure.
- k. Finished Log Off: Employees are required to log off the system at the completion of their assignment and only when having arrived at the district.

When the operator receives a visual display of 'fallback' on the vehicle AMDT display unit, it indicates that the normal communication between Control Center and the vehicle has been temporarily lost and the Control Center cannot initiate a call to any vehicle.

If the operator needs to contact Control Center, the operator must initiate the call utilizing the handset, which will establish two-way communication between the vehicle and Control Center.

At no time are operators permitted to log off the system while still in service, or while pulling into the district out-of-service. The proper route, block, and account number must be entered at all times while traveling in operation.

#### Movement Of Track Cars Rules

#### **General Information**

These rules apply to the movement of track cars and equipment other than trains, designed for maintenance, inspection or repair, which may or may not activate track circuits

### RDR-800. Responsibilities Governing Rules and Qualifications

A qualified track car operator or pilot will be in charge of track cars under their jurisdiction and will be governed by the operating rules and special instructions that apply to the movement of trains, except as modified by Rules RDR-801 through RDR-812. The qualified track car operator or pilot must be qualified on the operating rules and physical characteristics of the territory on which they are to operate.

Where such movements involve multiple pieces of equipment, only one qualified track car operator or pilot is necessary.

#### RDR-801. Inspection of Track Cars

The qualified track car operator or pilot must perform a visual inspection to see that the track car is in safe operating condition before being operated. Track cars must not be operated if found in an unsafe condition.

#### RDR-802. Display of Lights

Track cars must display a white light to the front and a red light to the rear.

Highway rail vehicles must have headlights on high beam when moving on any track.

### RDR-803. Placing or Operating Track Cars on Track

Form W, line 2 is the authority for the movement of track cars and must be obtained before track cars are placed or operated on a main track outside interlocking limits. Track car movements within Yard Limits may be made with verbal permission of the Yard Foreperson.

After receiving permission from Control Center, track cars may shift one train/vehicle length beyond a home signal or hand-operated switch for the purposes of making a movement in the opposite direction.

Track cars must approach interlocking signals prepared to stop, and must not pass interlocking signals indicating Stop without authorization of Rule RDR-205, or the Form

W, line 9. Movement must be made at Restricted Speed within interlockings limits.

Automatic Block Signal indications within the Form W line 2 limits do not apply to track car movements.

Before issuing Form W, line 2 authority for the movement of a track car, the Train Dispatcher / Controller must determine that:

No opposing or conflicting movements have been authorized.

AND

 Stop Signals are displayed and blocking devices are applied, when possible, to switch and signal control mechanisms leading to the affected track,

OR

 A Portable Stop Signal is applied to the track to the rear of the track car,

OR

 d. A flagperson is positioned at a location to protect the track car.

When protection cannot be provided by Stop Signals, Portable Stop Signals, or a flagperson, the Form W line 2 must not be issued until the Line is known to be clear of opposing, conflicting or following movements.

The Train Dispatcher / Controller must issue a copy of the Form W to all Tower Operators involved.

### RDR-804. Specified Directions and Specified Limits

A track car having received Form W authority to operate in a specified direction must not move in the opposite direction.

A track car having received Form W authority to operate in both directions may operate in either direction. The route must not be changed, protection must not be altered, and the Train Dispatcher / Controller must not authorize additional movements into the specified limits while the Form W authority is in effect.

### RDR-805. Track Cars Following Other Equipment

A track car may be permitted to follow a train or another track car authorized to move in the specified direction into the same block. The Train Dispatcher / Controller must notify the track car operator that a train or track car is ahead.

Passenger and truck type highway rail cars and multiple vehicles operating under the same Form W authority must operate at a speed that will allow stopping within one-half the range of vision, short of another track car. All other track cars must operate at Restricted Speed when following other equipment.

A track car following a train must not enter a passenger station platform until the train is known to have departed the station.

#### RDR-806. Trains Following Track Cars

Except in an emergency, a train/vehicle must not be permitted to follow a track car into the same block. In an emergency, the Train Dispatcher / Controller may permit a train to follow a track car at Restricted Speed. The Train Dispatcher / Controller must advise all operators of the track car ahead.

### RDR-807. Train Dispatcher / Controller or Tower Operator Responsibilities

The Train Dispatcher / Controller or Tower Operator must properly line the route and display signals for the movement of track cars at interlockings, where possible, except the signal governing movement into Automatic Block Signal System, Automatic Train Control System, or Non-Signaled Territory, which must remain at stop and blocking devices, where used, applied.

#### RDR-808. Reporting Clear of Interlockings

Unless otherwise instructed, except when the Form W authorizes movement in both directions the qualified track car operator or pilot must report clear of all interlockings.

#### RDR-809. Reporting Clear of Track

When a track car clears the track specified on Form W, line 2 the Qualified Track Car Operator, or Pilot must report clear to the Train Dispatcher / Controller and cancel the Form W. A new Form W, line 2 must be issued if further movement is desired.

#### RDR-810. Maximum Authorized Speeds

The maximum speeds for trains apply to track cars, except as specified below. The maximum authorized speed as specified for trains in the Special Instructions or Bulletin Order must not be exceeded.

Rail Detector	50 MPH 35 MPH
Passenger Type - Forward Backward	50 MPH 10 MPH
Truck Type - Forward Backward	30 MPH 10 MPH
PCC Work Car - Forward	35 MPH 10 MPH
Grinder - Forward Backward All Other Track Cars	15 MPH 10 MPH
- Forward	30 MPH 10 MPH 5 MPH
All types: Through crossovers and turnouts, and when passing standing trains on adjacent tracks	10 MPH
When pulling or pushing track cars or trailers When being passed by a train on an adjacent	10 MPH
track	Stop

### RDR-811. Operation through Switches and Over Moveable Point Frogs

Track cars must not pass over switches or movable point frogs until it is determined that such appliances are properly lined.

Track cars must not trail through semi-automatic or spring switches until such switch is lined for the movement.

#### RDR-812. Securing Equipment

When any type of on-track equipment is not continuously attended by the employee placed in charge of the equipment, it must be secured to prevent movement.

#### Train Dispatcher / Controller And Tower Operator Responsibility Rules

#### RDR-900. Receiving Instructions

Train Dispatchers/Controllers report to and receive their instructions from the Assistant Director of the Control Center or other designated officer. They must be qualified on the operating rules and physical characteristics of the territory in their charge.

Tower Operators report to and receive their instructions from the Train Dispatcher / Controller or other designated officer authorized by the Train Dispatcher / Controller. They must be qualified on the operating rules and the interlocking station. They must obey the instructions of the Train Dispatcher / Controller and advise the Train Dispatcher / Controller immediately of any occurrence which may affect proper operation or safety of train movements.

#### RDR-901. Responsibilities

Train Dispatchers/Controllers are in charge of the territory they dispatch. They are in charge of the movement of trains and have supervision over employees working in such territory. They will issue directives for movement and such other instructions as may be required in accordance with these rules, for the safe and efficient movement of trains and other on-track equipment.

Train Dispatchers/Controllers and Tower Operators are responsible for safe and efficient movement of trains and track cars. They will arrange for the use of blocks, tracks, interlocking switches, and signals for the safe and prompt movement of trains. They must maintain electronic or written records of train / vehicle and track car movements at the desk / location they are assigned.

Train Dispatchers/Controllers and Tower Operators must report any violation of the operating rules and any irregularity relating to the movement of trains. They must report any irregularities involving signal or switch appliances to the appropriate person. They must keep informed of weather and other unusual conditions that may affect the movement of trains.

#### RDR-902. Transfer Record

Train Dispatchers/Controllers must have available when being relieved, an electronic, written or typed transfer listing all outstanding authorities and messages, along with the number of the last Bulletin Order. Supplemental Bulletin

Order, all Form W's in effect, and other information relative to existing conditions. The relieving employee must read this information aloud to the employee being relieved to ensure complete understanding, and sign this record in his presence and indicate the time of accepting responsibility for the assignment.

#### RDR-903. Presence on Duty; Relief

Train Dispatchers/Controllers and Tower Operators must not absent themselves from duty until properly relieved. Tower Operators must notify the Train Dispatcher / Controller promptly should their relief fail to report at the prescribed time.

When reporting for duty, Tower Operators must contact the Train Dispatcher / Controller to verify all current instructions pertaining to the location to which they are assigned.

#### RDR-904. Blocking Devices

Where the rules require the application of blocking devices, they must ensure that the blocking devices applied afford the necessary protection.

When the use of blocking devices is required, a record must be maintained. When the record is manually recorded, it must be on the prescribed form in red ink and must indicate the time blocking devices are applied and removed, indicating the signal lever numbers, the position, and number of all switch levers affected.

Example of blocking device record for switch and signal blocking:

BDA 6 sig, 3 sw. nor., 11 sw. rev.- 9:01 a.m. BDR 6 sig, 3 sw. nor., 11 sw. rev.- 9:05 a.m.

Example of blocking device record for track blocking: BDA No. 1 track East - 3:45 a.m.
BDR No. 1 track East - 5:26 a.m.

Train Dispatchers/Controllers must maintain this record either electronically in the train control system or in writing on a record of train movements. Tower Operators must maintain this record on the Train Movement Log. This record must be made at once and never from memory or memoranda. When blocking devices have been ordered applied by the Train Dispatcher, they must not be removed unless authorized by the Train Dispatcher. Before requesting the removal of a blocking device to route a train around a protected track, alternate route and blocking device

protection must be established to ensure that the affected track is never unprotected and the Train Dispatcher / Controller notified. When movement is completed, original blocking device protection must be restored immediately and the Train Dispatcher / Controller notified. The application of alternate blocking device protection need not be recorded.

#### RDR-905. Reporting Unusual Conditions

Train Dispatchers/Controllers and Tower Operators must report immediately if air pressure falls below normal, any interruption of signal or station lighting power cables, activation of the dragging equipment indicator alarm, or any other operational irregularity. Location, time, and cause, if known, shall also be reported.

#### RDR-906. Emergency Releases

Tower Operators must make certain all emergency releases are properly sealed when reporting for duty, report any exceptions to the Train Dispatcher / Controller, and make a record on Tower Operator's report of trains. When it is necessary to use emergency release clock(s), the Tower Operator must obtain permission from the Train Dispatcher / Controller and make certain that no train is occupying or approaching signal or switch section before operating the release.

#### RDR-907. Unattended Tower

Tower Operators must not leave a tower in the "unattended mode" until it is determined that the automatic operation is functioning properly. This must be done by observing a train operate in each direction, and reporting it to the Train Dispatcher / Controller.

#### Train / Vehicle Operator Responsibility Rules

#### RDR-921. General Responsibility of Rail Vehicle Operators

#### A. General Responsibility

Operators of rail vehicles are responsible for the following:

- Compliance with all operating rules and procedures.
- The observance of all signals and signs, and for controlling their movements accordingly. They must regulate speed and exercise discretion, care and vigilance in moving vehicles to prevent accidents, injury to persons, damage to property, collisions or derailments, or delays to service.
- The safety, comfort and convenience of their passengers.
- 4. The safe and efficient operation of their trains or vehicles. This includes but is not limited to performance of all required tests and inspections when taking control of a train or vehicle, following proper Log On and Log Off procedures, and proper reporting of any equipment defects or unusual occurrences.
- 5. The proper operation of doors.
- 6. The proper display of destination signs.
- 7. The proper lighting and ventilation of vehicle.
- 8. Operating on schedule. At no time will a vehicle run ahead of scheduled time.
- All operational functions including, but not limited to, trainlining, troubleshooting, and responding to annunciator indications.
- 10. Preparation of Train / Vehicle, including:
  - Performing a vehicle inspection in accordance with the current procedure prescribed for that specific vehicle before departing any yard or when making relief.
  - Completion of the proper inspection forms or reports.
  - Performance of the brake test prescribed for the type of equipment to be operated.

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#### B. Operator Requirement to Report Defects on Vehicles

Operators are required to report all defects found on vehicles regardless of the degree of the defect. Defects affecting the safe operation of the vehicle or the ability to maintain schedule must be reported to Control Center or a supervisor immediately. Non-safety critical or non-schedule altering defects must be reported as soon as practical without delaying service. After reporting the defect the Operator is governed by the instructions received.

All defects must be recorded on the prescribed form and submitted no later than the completion of the assignment. Defects requiring a vehicle to be removed from service must be completed promptly and left with the vehicle or given to the relieving employee.

#### C. Vehicle Operation

Trains / vehicles must be operated in the appropriate manner. The following is prohibited:

- Rapid acceleration that causes spinning of the wheels.
- 2. Use of the "door switch" for braking.
- 3. Use of track brakes for routine braking.
- Misuse or non-compliance to the "Standard or Emergency Operating Rules" pertaining to equipment applications.
- Giving hands signals to highway traffic, pedestrians, or other users of streets and rights of way.

An assigned operator must not permit another qualified operator to take over operation of a vehicle unless authorized by Control Center or supervision. If authorized by supervision, Control Center must be advised immediately.

Scheduled trains / vehicles must complete their entire schedule unless otherwise directed by the Control Center.

#### D. Reporting Delays

Operators must advise the Control Center of interruptions, or any known condition that will delay the train / vehicle or prevent it from maintaining schedule, including but not limited to:

- 1. All Sub/El delays in excess of 1 minute;
- All standing delays in excess of 5 minutes, unless previously reported;

- All running delays to schedules of 10 minutes or more;
- 4. All delays of 2 minutes or more when relief does not show or is unfit for duty; and
- 5. Whenever a line diversion is required.

#### RDR-922. Reporting For Duty

Operators report to and receive their instructions from the District Dispatcher, Transportation Managers or other designated officer. They must obey the instructions of transportation supervisors, Train Dispatchers / Controller, Tower Operators, and from officers of other departments on matters pertaining to those departments. Operators must be qualified on the operating rules and the physical characteristics of the territory over which they are to operate.

Operators must have the following items in their possession before starting each assignment:

- a. Current copy of all Bulletin Orders in effect;
- b. Authority issued flashlight in operable condition;
- c. The approved Authority issued safety vest
- d. Pencil or pen and paper

## **RDR-923. Equipment and Service Qualifications**Operators must be qualified on the equipment which they are to operate and the type of service to which they are assigned.

#### RDR-924. Safe Operation of Train / Vehicle

Operators must be attentive and maintain a constant and vigilant lookout for anything that would affect the safe movement of their train or vehicle. If anything distracts the attention from a constant lookout ahead, or if weather or other conditions reduce visibility, operators must at once regulate their speed and operation to ensure safety.

#### A. Operator Responsibility for Safety

Operators are responsible for taking the following actions:

- Making the safety of patrons and employees a priority over every other consideration.
- Exercising good judgment, avoiding risks and complying with all rules and orders.
- Ensuring all passengers boarding or leaving the vehicle are clear of the doors and the doors are closed before moving the train / vehicle.
- Keeping aisles and passageways of vehicles clear of all baggage, to the extent practical. Baggage should be kept between seats and out of the aisles.

- Keeping careful watch for trespassers on the right-of-way, pedestrians, highway traffic and other obstacles in the foul of the track and exercise due diligence to avoid an accident or injury.
- Notifying the controller of any trespasser or hazardous condition on the right-of-way.

Operators must monitor air pressure and other gauges and indicators while operating trains / vehicles. The Control Center must be immediately notified any time the gauges indicate abnormal conditions or any time the braking system is defective.

#### **B.** Adverse Weather Operations

Operators must adjust their operation during adverse weather and other unusual conditions to ensure safety, including but not limited to:

- Adjusting their speed to maintain control of the vehicle when poor or limited visibility exists such as fog, heavy rain or snow.
- Operating with extreme caution during slippery rail conditions caused by rain, sleet, petroleum or other slippery materials, chemical spray, leaves, snow or ice. Operators must consider temperature and other weather related changes when operating trains / vehicle.
- 3. During periods of snow or ice accumulation, ensuring that all switch points are free of ice/ snow and that the points can be properly set for direction of travel. Upon inspection, operators may have to clear an obstruction in order to restore the switch to the normal operation. In such instances, the Control Center must be immediately notified. Operators must never place hands, feet or any other body part in switch points.

When the track area is flooded, Operators must stop their vehicles short of the flooded area, ensure it is safe before proceeding, and follow the proper procedures for operating through high water.

### RDR-925. Display of Train / Vehicle Information

Where applicable, Operators must display the proper:

- a. Destination Signs; and / or
- b. route sign; and / or
- c. block number: and / or
- d. train number

at all locations provided for on the equipment. When

applicable, operators must properly position the automatic route selection.

All must be properly displayed to show the current route and destination.

#### RDR-926. Required Duties

Operators must be positioned in the operating cab and depart on their scheduled time unless otherwise directed by Train Dispatcher / Controller or other designated supervisor. Operators must remain in the operating cab at all times except in the performance of duty, and keep cab door closed unless secured open by an authorized device.

When changing ends at a terminal, or other turn back location, Operators must secure the operating cab on the non-operating end of the train by ensuring that the cab window(s) and door are completely closed and locked.

#### RDR-927. Announcements

Except on trains / vehicle equipped with automatic announcement systems, Operators must make station and/ or stop announcements. When necessary, Operators must make route announcements.

When necessary, Operators must make service delay or interruption announcements for passenger information and guidance.

#### RDR-928. En-route Relief Assignments

When required to relieve an operator en-route, the relief must be made at the scheduled or assigned time and at the scheduled or designated location. The relief operator must contact Control Center if, after waiting at the relief location five minutes beyond the scheduled relief time, the train / vehicle has failed to arrive.

Operators who are scheduled to be relieved at a designated time must contact Control Center if relief hasn't arrived within two minutes of the scheduled relief time.

#### **Cashier Responsibility Rules**

#### **General Information**

Cashiers are governed by those Rules and Special Instructions contained that relate to their duties.

#### RDR-961. Receiving Instructions

Cashiers report to and receive their instructions from the Cashier Dispatcher or other designated officer of the Line to which they are assigned.

They must obey the instructions of management employees. They must comply with the instructions of officers of other departments on matters pertaining to those departments.

### RDR-962. Responsibility for Reporting Unusual Occurrences

Cashiers must advise the Cashier Dispatcher or other proper authority immediately of any occurrence that might affect the safety of employees or non-employee personnel, or the safety of the movement of trains.

They must promptly report any occurrences that interfere with the proper collection of fares or service to passengers.

#### RDR-963. Acceptance of Working Assignment

Cashiers who have accepted a run assignment are responsible for working and completing that run assignment as it appears on the working assignment schedule for that particular line. Unauthorized early relief from a working assignment is prohibited.

### RDR-964. Extra Cashiers - Assignment Responsibility

Cashiers who are working as extra personnel are solely responsible for obtaining their assignments for the following day.

They must contact the Cashier Dispatcher each day between the hours of 2:00 pm and 8:00 pm to receive their assignment. Cashiers who are assigned to a temporary hold-down are not required to contact the Cashier Dispatcher unless their hold-down is for reason of the regularly assigned person being off due to sickness or injured-on-duty.

#### RDR-965. General Responsibilities

Cashiers are responsible for the following general duties while they are assigned to a location:

- a. Stopping trains when emergency conditions occur.
- b. Protecting Authority property and equipment.

- Taking appropriate action to protect employees and non-employees.
- d. Attempting to collect the proper fare or observe an appropriate fare instrument. (Note: In the event a counterfeit pass or a "blacklist" pass is presented by the passenger, Cashiers are responsible for immediately notifying the Cashier Dispatcher and following the instructions given.)
- e. Properly operating turnstiles and fare boxes.
- f. Properly handling of all fare instruments.
- g. Selling tokens, passes, and making change for use in fare boxes.
- Supplying information to customers pertaining to routes, fares, interchange privileges, and other issues concerning public transportation.
- Permitting bikes on revenue vehicles in accordance with the currently prescribed Authority's Bike-On-Rail Program.
- Promptly reporting graffiti or vandalism to Authority equipment or property.

#### RDR-966. Cashier Conduct Toward Public

Cashiers must be continually aware that they are engaged in a public service. They must dedicate themselves to serving the Authority's customers. Cashiers must project a positive image of themselves and of the Authority. In serving the public, they must place safety and courtesy above all else, rendering assistance whenever practical, and maintaining a secure environment to the best of their ability. They must exercise patience and self-control when interacting with passengers and the general public. They must take into consideration all influencing factors of human behavior when confronted with unruly persons, exercising full discretion if forced to protect themselves and Authority concerns.

Should a complaint be made because of the employee's enforcement of Authority rules or policies, Cashiers must attempt to explain to the complainant the reason for the action. They shall suggest to the patron that an appeal may be made directly to the Customer Services Section of the Public Affairs Department, giving the patron the telephone number, the run assignment, the Cashier Booth number, and his or her employee account number if requested. When such information has been given to any patron, Cashiers must notify the Cashier Dispatcher as soon as practical that this information has been passed to a patron, and must submit a detailed written report of the incident the Cashier Dispatcher.

### RDR-967. Familiarization with Fares Bulletins and Notices

Prior to beginning their work assignment, Cashiers are responsible for familiarizing themselves with all current fare policies and instructions, and other information contained on Fares Bulletins and Notices which are periodically issued by the Revenue and Market Development Department.

They are responsible for complying with all instructions that apply to the revenue collection policies and procedures of the Authority. If unsure concerning these instructions or policies, they must contact the immediate supervisor to request a further explanation.

### RDR-968. Responsibility for Proper Handling of Cash and Fare Instruments

Cashiers are responsible for the proper handling of all fare instruments, including but not limited to: cash, tickets, Convenience Passes, Transpasses, and tokens which are in their possession while on duty.

They are responsible for accurately accounting for all monies and boarding instruments received or dispersed, and for the safekeeping of those items retained at their location. They are responsible for properly recording any shortages or overages. Upon receiving allotments at the beginning of the shift, Cashiers must immediately count the allotment to verify that the proper amounts are received. If an allotment discrepancy exists, they must immediately contact the Revenue Control Center and the Cashier Dispatcher and await/receive further instructions

Cashiers who are assigned to sales windows must accept all cash denominations (including pennies) up to and including one hundred dollar bills, unless otherwise instructed by their supervisor to accept larger denominations. They must not return pennies as change unless requested by the customer. If in doubt as to the

validity of a bill, the Cashier must politely return the bill to the customer and request a different fare instrument. If unable to resolve the situation, the Cashier must contact the Cashier Dispatcher at once for further instructions.

Upon request by the customer, they must issue an Authority Sales Receipt for the purchase of a Transpass or Tokens.

**RDR-969.** General Instructions for Fare Collection Employees are governed by the procedural instructions of the Revenue Department concerning the collection of fares.

Fare collection must be in the form of cash, token, ticket, or valid pass. Passage for children accompanied by a parent or adult is governed by the instructions for the Division.

Employees must attempt to collect or examine the required fare instrument from all individuals utilizing the transportation system.

Passengers unable to pay the fare shall be permitted to ride after completion of Report of Transit Fare Not Paid Form F-042A. Passengers refusing to pay shall be informed that he or she is not entitled to ride in accordance with standard Authority policy. Individuals who repeatedly refuse to pay the fare shall be brought to the attention of the Station Manager. In all such instances, Cashiers must submit a detailed written report of the occurrence to the Station Manager.

Fares may not be refunded to a customer unless otherwise directed by management personnel. In such instances, Cashiers must submit a written report of the occurrence to the Station Manager. Once a valid fare has been tendered, it may not be returned. A rebate card must be issued to the customer with appropriate instructions.

Fare collections during periods of emergencies are subject to the instructions of supervision. In the event that passengers are being transferred from one mode of transportation to an alternate mode of transportation, employees receiving such transfer of passengers shall accept them without further payment of fares on orders from any authorized representative of the Authority.

### RDR-970. Exact Fare Collection Procedures for Paper Currency

Cashiers are responsible for following the exact fare collection procedures when involved in the collection of paper currency for fares. When receiving paper currency, Cashiers must utilize the "casino box" and observe the following procedures:

a. When receiving the paper currency from the customer, immediately and with one movement deposit the bill into the dollar bill collection box by placing the bill over the slot and pushing it down into the vault using the plunger provided.

- Cashiers are prohibited from accumulating bills on the counter, allowing them to pile up, or placing them in drawers or other containers.
- c. If the bill deposit vault becomes jammed, immediately contact Revenue Control and the Cashier Dispatcher to inform him or her of the situation and to request instructions; while waiting for instructions place bills in envelopes, fill in the information, and then deposit them in the roll-over safe.

#### RDR-971. Cashier Booth Procedures

Cashiers are responsible for following the security procedures that are established for the purpose of providing personal safety and protecting Authority funds and boarding instruments.

#### A. Taking Charge of a Booth

Cashiers must ensure the following when taking charge (opening) of a booth:

- All required lighting (including booth, platform, and stairway) must be activated; in the event of burned out bulbs or broken switches, the proper authority must be promptly notified.
- 2. Required gates must be opened, turnstile chains unfastened and required window(s) opened.
- 3. Log account number into the Electrofare
- 4. Call the Cashier Dispatcher to report on duty and provide run number.

#### B. On Duty at a Booth

Cashiers are responsible for the following while on duty at a booth:

- 1. The booth must be kept locked at all times.
- An orderly and neat appearance must be maintained at all times inside the booth.
- No persons or visitors are permitted inside the booth unless the individual is clearly identified as an Authority employee and that individual has a valid reason for entering.
- For an individual to gain authorization to enter a booth, the individual must be recognized by the cashier or present a valid SEPTA Employee Pass
- In the event that the door must be opened for ventilation, the safety chain must be in place before the door is unlocked and opened.
- In the event there is a question concerning an individual's authority to enter a booth or it is believed that an unauthorized person is attempting to enter the booth, immediately contact the immediate supervisor.
- Casual socializing is prohibited.

The use of portable radios may be authorized for a particular location at the discretion of the immediate supervisor. (**Note:** The use of earphones, cell phone, DVD players and any other electronic device is strictly prohibited.) Smoking and the use of any tobacco product in a booth is prohibited.

#### C. Leaving a Booth

The following procedures must be observed by personnel when leaving (closing) a cashier booth location:

- 1. All designated light switches must be turned off.
- Gates must be locked, turnstile chains fastened, and doors and windows locked.
- 3. All fans, heaters or air conditioners and lights must be turned off before closing the booth at the end of the day.
- Sales Window after supervisor verification and signing of waybill, observe placement of monies into safe.
- 5. Upon completion of duty, when required, return the cashier safe key.

# RDR-972. Cashier Booth Work Area Instructions While performing duty at a cashier booth location, personnel must comply with the following instructions pertaining to work area activities:

- a. While on duty or at any other time while occupying a cashier booth, personnel are prohibited from sleeping or assuming the attitude of sleep (i.e. relaxing with eyes closed).
- b. In the event illness occurs or special consideration is needed for medical reasons, the Cashier Dispatcher must be contacted and notified of the situation.
- c. While on duty assigned to a cashier booth location, personnel are prohibited from leaving the booth unless specifically authorized to do so by the Cashier Dispatcher.
- d. Relief cashiers are required at each location to log their account number on the Electrofare and call the Cashier Dispatcher every 30 minutes. When not performing duty, they must not leave Authority property. Such employees are prohibited from occupying another cashier booth during relief. Such employees must take relief in the designated area or as assigned.

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- Eating while on duty at the window is prohibited unless specifically authorized by the immediate supervisor.
- f. Unauthorized activities that involve personal business, solicitation, or distribution of unauthorized signs, leaflets, or other literature are prohibited.

### RDR-973. Responsibility to Maintain Cashier Booth Work Area

While performing duty at a cashier booth location, personnel are responsible for maintaining the work area as follows:

- a. Personal utensils or other personal items must be kept in a personal travel bag when not in use.
- b. Hand-written signs displayed in window areas are prohibited.
- c. Notices must be kept in the designated binder.
- d. All food, drink, or condiments must be used daily, or disposed of at the end of the assignment; these items are prohibited from being left at the location overnight.
- e. No personal effects may be left in the booth overnight.

#### RDR-974. Cashier Booth Station Sign-in Log

All personnel entering a cashier booth location must register their visit by signing their name, title, location, and purpose for the visit in the Station Sign-In Log.

Cashiers are responsible for assuring that all personnel who enter their booth location properly register their visit. In the event of any discrepancy or doubt, they must promptly contact the immediate supervisor for further instructions.

#### RDR-975. Leaving Cashier Booth

Cashiers, when required to leave the cashier booth for any reason, must take the following precautions.

- a. Non-emergency situations
- Notify the Cashier Dispatcher of your particular needs.
- 2. Sales Window move all monies from counter to the safe and lock booth behind you.
- 3. Promptly notify the Cashier Dispatcher upon returning to the booth.
- b. Emergency situations
- Immediately notify the Train Dispatcher and Cashier Dispatcher of the problem.

- 2. Sales Window move all monies from counter to the safe and lock booth behind you.
- 3. Keep the Train Dispatcher / Controller advised as the situation grows or diminishes.

### RDR-976. Responsibility for Conducting Passenger Traffic Counts

Cashiers are responsible for properly conducting accurate passenger traffic counts in accordance with the information contained in Notices or Fares Bulletins.

They must complete these reports in there entirety and prepare them as instructed for forwarding or pick-up by the designated official.

### RDR-977. Prohibition on Co-Mingling of Funds; Shortages in Funds

Cashiers are prohibited from co-mingling of Authority funds and their own personal money. They are prohibited from using or taking Authority cash or fare instruments for their own personal use. They are prohibited from making up a determined shortage by adding personal funds to their return except when authorized. Cashiers may be authorized by the supervisor to make up a shortage on the spot only when discovered during the close out, and only when the supervisor is present to observe.

#### RDR-978. Shortages/Overages Procedure

When notified of a revenue shortage, Cashiers must repay the shortage. Repayment of shortages must be made in accordance with the current procedure outlined by Division policy.

If an overage exists, it must be returned to the Processing and Distribution Department. (Note: An overage may not be used as a credit toward a future shortage.)

#### RDR-979. Use of Electrofare Coding

Cashiers are responsible for properly utilizing the Electrofare device of the Gen-Fare system.

They must key in their personal account number into the Electrofare coding device for the following activities:

- a. Opening a cashier booth location,
- b. Five minute relief period.
- c. Half hour lunch period, or
- d. Relieving a window.

The practice of using another employee's account number for any reason or at any time to access the system is prohibited.

#### RDR-980. Auditing of Cashier Booths

Cashiers must permit the auditing of their cashier booth location by authorized inspectors. Before permitting any individual to enter the booth location, personnel must ascertain that the individual is properly identified as an Authority employee who has been charged with the responsibility to audit cashier activities.

When an inspector enters the booth location with the clear intention of auditing transactions, Cashiers must remain with the inspector and comply with all directives given by that individual.

When in doubt as to the validity of the individual, Cashiers must immediately contact the Cashier Dispatcher for further instructions.

### RDR-981. Uniformed Personnel Authorization of Free Passage

Cashiers are prohibited from permitting free passage to uniformed persons unless that category of persons is specifically permitted free passage by Authority policy.

#### RDR-982. Use of Telephone

Authority telephones installed at cashier booth locations must be used exclusively for conducting Authority business. Cashiers are prohibited from using Authority telephones for personal calls or to conduct personal business unless authorized to do so by their Cashier Dispatcher. Certain Authority telephone lines may be recorded. An audible "beep" tone will sound approximately every 15 seconds, or other indications may be given when telephone conversations are being recorded.

#### RDR-983. Person-in-Track Area - Emergency Procedures

Cashiers are responsible for prompt notification when unauthorized persons are in the track area in the vicinity of the location to which they are assigned. When Cashiers become aware of or are made aware of unauthorized persons in the track area, the following actions must be taken:

- a. Activate the Emergency Train Stop Signal" alarm immediately (if switch is present).
- b. Notify the Train Dispatcher giving your name, location, nature of the problem as you understand or observe it and the fact that the "Cashier Emergency Train Stop Signal" alarm has been activated (if switch is present).

- c. Remove the "Red Flag" provided in the cashier booth (or flashlight) and proceed to the appropriate platform and take a position at the entering end of the platform where on-coming trains will approach. Initiate a hand signal to stop approaching trains.
- d. If no Red Flag or flashlight is available, take any item available that can be seen from a distance (newspaper, jacket, etc) and follow the instructions previously indicated.

Prior to leaving the booth, place all money in a secure place inside the booth (i.e. drawer, box, etc.), lock the booth, and pocket the key.

#### RDR-984. Accident/Incident Report Procedures

Cashiers are responsible for the timely and accurate reporting of any accidents or incidents that occur in the vicinity of their location to which they are aware while on duty.

Such reports must be made in accordance with all rules pertaining to the reporting of accidents / incidents. In addition, the following also applies:

- a. The report must be prepared on the day of the accident/ incident while on duty, unless otherwise instructed.
- b. The Cashier Dispatcher must be notified for the purpose of having the report picked up, or for further instructions, if going off duty, as to where the report must be turned in.
- c. A detailed description must be given to include gender, race, approximate age, and type of injury. If injury was a fall, indicate if individual was wearing glasses, high heel shoes, or using a cane or other support device, and general appearance of the victim.

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#### **Customer Attendant Responsibility Rules**

General Information

Customer Attendants are governed by those General Rules, Operating Rules, Customer Service Rules and Special Instructions contained in this manual that relate to their duties.

#### RDR-985. Receiving Instructions

Customer Attendants report to and receive their instructions from the Manager or other designated personnel. They must obey the instructions of management employees.

### RDR-986. Responsibility for Reporting Unusual Occurrences

Customer Attendants must advise the Train Dispatcher/ Controller or other proper authority immediately of any occurrence that might affect the safety of employees and nonemployees. They must promptly report any occurrences that interfere with service.

#### RDR-987. General Responsibilities For Customer Attendants

Customer Attendants are responsible for the following general duties while they are assigned to a location:

- a. Provide passenger assistance in the use of automatic fare vending equipment and report any abnormalities or inoperable conditions to the designated personnel.
- b. Provide assistance to all customers by providing a helpful and speedy response to inquiries and complaints. Seek management and/or police assistance when necessary.
- c. Call immediately for manager assistance in the event that any customer issue/concern cannot be remedied or when requested by a customer. While on the fare line, the CA can use the station customer call box, the booth phone or the Authority authorized station hand held station cell phone device.
- d. Make themselves available to passengers at all areas of the station including but not limited to platform areas, fare lines, station entrance/exit areas, as well as all other paid and unpaid areas within the confines of the station.
- e. Direct disabled and senior citizens, when required, to elevators/escalators and ADA accessible gates.
- f. Assist passengers with directions and travel routes.
- g. Assist customers at all fare kiosks, turnstiles, barriers, elevators and escalators.
- h. Monitor the operation of escalators and elevators and the status of any fire detection equipment throughout the station that the Customer Attendant is authorized to access. Must report any equipment issues and/or defects to the SEPTA key Control Room (SKCR).

- i. Verify that accurate, up-to-date and appropriate customer information is provided through correct public address announcements, current schedules, maps, verbal directions and notices.
- j. Safeguard, collect and turn in all lost and found articles and immediately notify management upon receipt of such items.
- k. Complete station assessments as required or as instructed. Remedy and/or report equipment defects or system malfunctions.
- I. Promptly report graffiti or vandalism to Authority equipment or property as well as any found or discovered station defect to the SKCR.
- m. Provide information in a polite and professional manner regarding station openings/closings, station evacuations, emergencies, unloading of trains on platforms, fire/medical emergencies, turn back operations, single track operations, special events and other emergency operations when necessary and/or as directed.
- n. Stop trains when emergency conditions affecting trains occur.
- o. Inform customers regarding the prescribed Authority's Bike-On-Rail Program when applicable.
- p. Take appropriate action to safeguard employees and nonemployees from potential hazards.
- q. Complete all relevant paperwork, documentation and electronic records.

### RDR-988. Customer Attendant Conduct Towards the Public

Customer Attendant personnel must be continually aware that they are engaged in a public service. They must therefore dedicate themselves to serving the customers who patronize the Authority's transportation system.

Customer Attendants must project a positive image of themselves and of the Authority. Should a complaint be made because of the employee's enforcement of Authority rules or policies, Customer Attendants must attempt to explain to the complainant the reason for the action. They shall suggest to the customer that an appeal may be made directly to the Customer Service Department giving the customer the telephone number, the run assignment, the station location, and his or her employee account number if requested. When such incident has occurred, the Customer Attendant must notify their manager as soon as practical and must submit a detailed written report of the incident to his or her manager.

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### RDR-989. Customer Attendant Station (booth) Procedures

Customer Attendants are responsible for following Authority policy on Station (booth) security procedures.

- a. When taking charge (Opening) of a Customer Attendant Station (booth) location:
- 1. All required lighting (including booth, platform, and stairway) must be activated; in the event of burned out bulbs or broken switches, a supervisor must be promptly notified.
- 2. Gates should be opened and secured where necessary.
- b. When leaving (Closing) a Customer Attendant Station (booth) location:
- Gates must be locked, turnstile chains fastened, and doors and windows locked.
- 2. All fans, heaters or air conditioners must be left on or off according to seasonal instructions.
  - 3. Booth light(s) must be left on at all times.
- c. The following station assessments must be followed by Customer Attendants while on duty:
- 1. The booth must be kept locked at all times while occupied and/or unoccupied.
- 2. An orderly and neat appearance must be maintained at all times.
- 3. No persons or visitors are permitted inside the booth unless the individual is clearly identified as an Authority employee. Any individual with a valid reason for entering, must sign the station sign in log book.
- 4. In the event that the door must be opened for ventilation, the safety chain where equipped, must be in place before the door is unlocked and opened.
- 5. In the event there is a question concerning an individual's authority to enter a booth or it is believed that an unauthorized person is attempting to enter the booth, immediately contact SEPTA Police, then your location manager.
- 6. The use of earphones is strictly prohibited as are all unauthorized electronic devices.

### RDR-990. Customer Attendant Work Area Instructions

While performing duty at a station location, Customer Attendants must comply with the following instructions pertaining to work area activities:

a. While on duty or at any other time, Customer Attendant are prohibited from sleeping or assuming the attitude of sleep.

- b. In the event illness occurs or special consideration is needed for medical reasons, the proper authority must be contacted and notified of the situation.
- c. The Customer Attendant shall monitor the station by conducting visual assessments on a regular periodic bases. The Customer Attendant may seek refuge of the booth when practical, however when customers are present, the Customer Attendant must make themselves available to the fare line or platform area, turnstiles, Fare Vending Device (FVD) or fare Kiosk area when required to assist customers.
- d. Unauthorized activities that involve personal business, solicitation, or distribution of unauthorized signs, leaflets, or other literature are prohibited.
- e. Personal items are to be kept in a personal travel bag when not in use.
- f. All paper materials, written instructions or information must be neatly stacked, but not located in window areas; hand-written signs must not be displayed in window areas.
- g. All Authority notices must be kept in the designated binder. Every Customer Attendant when reporting for duty must familiarize themselves with the Notice Binder to confirm receipt and understanding of any added notices.
- h. All food, drink, or condiments must be consumed at the designated location(s). These items are prohibited from being left at the Customer Attendant Station (booth) overnight. The Authority will not be responsible for any personal property or items and will be removed without notice if found.

#### RDR-991. Authorization of Free Passage

Customer Attendants are prohibited from permitting free passage into the paid area. However, in any instances where free passage may be considered, Customer Attendants must adhere to the current fare policy regarding free passage and confer with the SKCR manager.

#### RDR-992. Use of Telephone

Authority telephones installed at station locations must be used exclusively for conducting Authority business. Telephone lines must be yielded promptly for any calls pertaining to emergency conditions.

All Authority telephone lines that are recorded will have an audible "beep" tone approximately every 15 seconds, or other indications may be given when telephone conversations are being recorded. Use of Authority cell phones must be used for Authority business only. Any personal use is strictly prohibited.

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### RDR-993. Person or obstruction in track area – Emergency Procedures

Customer Attendants are responsible to take action when unauthorized persons or obstructions are in the track area that will affect the safety of the trains or passengers. Once the Customer Attendant becomes aware of danger in the track area, they should immediately attempt to stop the train by the quickest way available either by activating the "Emergency Train Stop Signal", or signaling the Train Operator.

- 1. When activating the "Emergency Train Stop Signal" alarm, notify the Train Dispatcher/Controller as to the nature of the situation and that the "Emergency Train Stop Signal" alarm has been activated.
- 2. When signaling the Train Operator, proceed to the appropriate platform and take a position where on-coming trains will approach. Immediately give a hand signal swung horizontally or signal with an object waved violently when the train is seen approaching.

Where available, use the "Red Flag" in the booth or a flashlight to signal the train. If no Red Flag or flashlight is available, use any item available that can be seen from a distance (newspaper, jacket, etc.) and follow the instructions previously indicated. Remain in position until train stops. Once the train is stopped, notify the Train Dispatcher/ Controller/Controller of the situation.

#### RDR-994. Accident/Incident Report Procedures

Customer Attendants are responsible for the timely and accurate reporting of all accidents or incidents that occur or are reported to them while on duty.

- a. The report must be prepared on the day of the accident/incident while on duty, unless otherwise instructed.
- b. The SKCR Manager must be notified for the purpose of having the report picked up, or for further instructions.
- c. A detailed description must be given to include gender, race, approximate age, if injury was a fall (in which case it must be indicated if individual was wearing glasses, high heel shoes, or using a cane or other support device), and general appearance of the victim (attire, type clothing etc.).

#### RDR-995. Acceptance of Working Assignment

Customer Attendants who have accepted an assignment are responsible for working and completing that run assignment as it appears on the assignment schedule for that particular line. Unauthorized early relief from a working assignment is prohibited.

### RDR-996. Extra Customer Attendants – Assignment Responsibility

Customer Attendants who are working as extra personnel are solely responsible for obtaining their assignments for the following day. They must contact the Dispatcher each day after 12:30 pm to receive their assignment. Customer Attendants who are assigned to a temporary hold-down are not required to contact the operations desk daily, unless their hold-down is for the reason of sickness, FMLA or injured-onduty.

#### RDR-997. Familiarization with Fares Bulletins

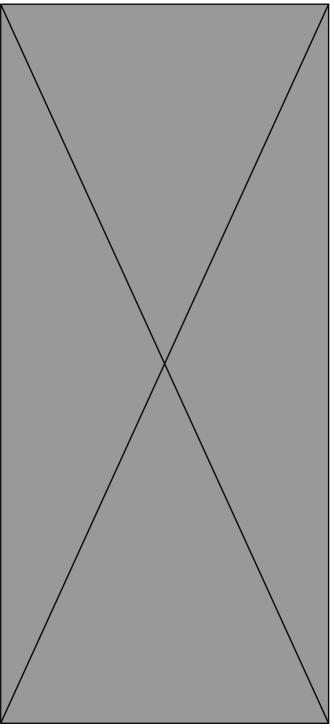
Prior to beginning their work assignment, Customer Attendants are responsible for familiarizing themselves with all current fare policies and instructions, and other information contained on Fares Bulletins which are periodically issued by Revenue and Market Development Department. They are responsible for complying with all instructions that apply to Septa Key policies and procedures of the Authority. Any Customer Attendant who is unsure about these instruction and/or policies must contact the district Zone Office to request a further explanation.

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### Southeastern Pennsylvania Transportation Authority Rail Transit Form W

F	orm W No	Da	ate:	To:			
	*****	*******	****	*******	*****		
1.	Temporary	Speed Restriction(s)					
Г				Speed Signs			
L	Track(s)	Between or At	Speed	from Bent/MP/ Station	to Bent/MP/ Station		
L			mph				
H			mph mph				
2.	Operate in	Operate in direction(s) on trk between and					
	Operate in direction(s) on trk between and						
3.	track(s) out-of-service between/at and						
	in charge of Barricade(s):						
	track(s) out-of-service between/at and						
	in charge ofBarricade(s):						
4.	Work Zone established on track between and						
5.	Non-Signaled System or Single Track Operation in effect ontrk between						
	and						
6.	6. Temporary Block Station(s) in service at						
7.	7. ATCS or CBTC System Out Of Service between and on						
	track(s) No(s).						
8.	8. Automatic Grade Crossing Warning Devices Not in Service at:						
9.	O. Other Instructions/Information:						
	*******	*******	******	******	******		
Fo	orm W Effective	, Time: Disp	atcher/Contr	oller:			
Fc	orm W Transferr	ed, Time: Date	e: Disp	oatcher/Controller:			
	Transf	erred to:					
Fc	Form W Cancelled, Time: Date: Dispatcher/Controller:						

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