Long Island Rail Road

ROADWAY WORKER PROTECTION PROGRAM ON-TRACK SAFETY MANUAL

Issued
February 14, 1997
Revised
January 1, 2017

THIS BOOK BELONGS TO:

_____

DATE OF TRAINING:

_____

NOTICE

Safety is of the first importance in the discharge of duty and, in case of doubt or uncertainty; the safe course must be taken.

The rules set forth herein govern the safety and operations of the MTA Long Island Rail Road (LIRR) and must be observed by all roadway workers whose duties are in any way affected.

A roadway worker is any employee of a railroad or of a contractor to a railroad whose duties include inspection, construction, maintenance, or repair of railroad track, bridges, roadway, signal and communications systems, electric traction systems, roadway facilities or roadway maintenance machinery on or near track or with the potential of fouling a track, and flagman and watchman/lookout responsible for protection.

Use of male gender throughout this manual is for the sake of consistency. All rules apply equally to male and female personnel.

Contents

IMPORTANT PHONE NUMBERS

MTA Police	[redacted] ext. 3300
Local Police Department	
Local Fire Department	
LIRR Fire Marshal	
Movement Bureau	
Transportation Flag Office	
LIRR Power Director (ESO)	
Maintenance of Equipment Central Control	
Maintenance of Way Repair Shop	
Signal Control Desk	
Communications Desk Network Operations Center (CNOC)	
EL&P/Third Rail Help Desk	[redacted]
Track/B&B Help Desk	
LIRR Operator	
Safety One Call	
Amtrak Power Director (ESO)	
Employee Training and Corporate Development	

TOWERS

TOWER	PHONE	RADIO CHANNEL	LOCATION
Babylon	[redacted]	1	Babylon (West)
Babylon		1	Babylon (East)
Brook		1	Atlantic Terminal
Divide		3	Hicksville
Dunton R-JCC		1	Jamaica
Hall R-JCC		1	Jamaica
Jay R-JCC		1	Jamaica
Lead		1	Island Park
Nassau		1	Mineola
NYAR Train/Yard Master		3	Zone D
PSCC		1	Zone A
Queens		1	Queens Village
Valley	[redacted]	1	Valley Stream
Westside		3	Westside Yard

NOTE: Can be Four Digit Dialed by extension.

INTRODUCTION

What is Roadway Worker Protection (RWP)?

Roadway Worker Protection means a state of freedom from the danger of being struck by a moving train or other railroad equipment. RWP is provided by Code of Federal Regulations, Long Island Rail Road (LIRR) Operations Manual, and LIRR Corporate Safety Rules for Employees that govern track occupancy by employees, trains, and on-track equipment.

What is the purpose of this manual?

Safety is of the first importance in the discharge of duty and, in case of doubt or uncertainty; the safe course must be taken. The rules herein set forth govern the safety and operations of the LIRR, and must be observed by all roadway workers whose duties are in any way affected. The purpose of this manual is to prevent accidents and casualties caused by moving railroad cars, locomotives or roadway maintenance machines striking roadway workers or roadway maintenance machines. This comprehensive manual familiarizes LIRR roadway workers with the rules and regulations of Title 49 CFR Part 214 and their application at the LIRR. Its express purpose is to reduce the risk of death or injury to railroad workers through the establishment of specific responsibilities for both employer and employee.

What information does this manual contain?

This manual contains Safety Rules, Operating Rules, and procedures that apply to on-track safety, including the responsibilities of roadway workers and procedures for providing protection from trains, clearing tracks, and working in various settings.

How should I use this manual?

The Roadway Worker in Charge (RWIC) must keep this manual available at all times. An RWIC must be qualified on the physical characteristics of the territory on which they are serving as RWIC; as evidenced by examination through the LIRR Transportation Department Office of the Rules Examiner or through examination on the physical characteristics maps provided during the RWIC training class instructed by Employee Training and Corporate Development (ETCD). An RWIC qualified through ETCD must have the physical characteristics maps available at all times. This manual and knowledge of the physical characteristics must be used to establish the required level of protection for roadway workers.

Use the Definitions on pages 11-14 to help you understand the RWP terms used in this manual.

Use the flow chart for establishing RWP on page 15 to understand the steps in establishing RWP.

Use the Policy and Procedures for Handling RWP Challenge section on page 44 to resolve any conflicts about the RWP procedures at your work location.

How frequently must I be trained?

Employees performing the duties of a roadway worker must be trained in the on-track safety procedures associated with the assignment to be performed and demonstrate the ability to fulfill the responsibilities for on-track safety that are required of an individual roadway worker performing that assignment. Training is required once per calendar year. To ensure compliance with the required timeframe for training, we suggest you record the date you are trained on page 1 of this Program Manual. As best practice, if you attended training in February this year you should attend training again by the end of February next year. Employees whose duties and responsibilities require them to be on or about the right of way (e.g. Corporate Safety, Department of Program Management, Procurement, Legal/Claims, and other administrative employees) must also be trained once per calendar year. Transportation Department employees should check with their department to determine their training frequency requirement.

DEFINITIONS

Adjacent Tracks - Two or more tracks with track centers spaced less than 25 feet apart.
Adjacent Controlled Track - Adjacent controlled track means a controlled track whose track center is spaced 19 feet or less from the track center of the occupied track.
Blocking Device - A method of protection that restricts the operation of a switch or signal.
Block Operator - The railroad employee in charge of remotely controlled appliances within interlocking limits.
Clearing a Track - Moving to a location at least 4 feet outside the field side of the rail, or between sets of tracks where track centers are greater than 25 feet apart, or between the gauge of a track that is out of service.
Controlled point - A location where signals and/or other functions of a traffic control system are controlled from the control machine *(change effective April 01, 2017).*
Controlled Siding – A designated track, the entrance and exit of which are governed by home signals.
Derail - A track safety device, fixed or portable, designed to guide a car off the rails at a selected location on a track as a means of protection against collisions or other accidents.
Effective Locking Device - A switch padlock used in relation to a manually operated switch or a derail that is vandal resistant; tamper resistant; and capable of being locked and unlocked only by the class, craft or group of employees for whom the protection is being provided.
Effective Securing Device - A vandal and tamper resistant lock, keyed for application and removal only by the roadway worker(s) for whom the protection is provided. In the absence of a lock, it is acceptable to use a spike driven firmly into a switch tie or a switch point clamp to prevent the use of a manually operated switch. It is also acceptable to use portable derails secured with specifically designed metal wedges. Securing devices without a specially keyed lock shall be designed in such a manner that they require railroad track tools for installation and removal and the operating rules of the railroad must prohibit removal by employees other than the class, craft, or group of employees for whom the protection is being provided. Regardless of the type of securing device, the throwing handle or hasp of the switch or derail shall be uniquely tagged. If there is no throwing handle, the securing device shall be tagged *(change effective April 01, 2017).*
Employee in Charge (EIC) – A roadway worker in charge (RWIC) who is qualified on the LIRR Book of Rules, Timetable, and Special Instructions as well as the physical characteristics of the territory on which he is serving as the RWIC. This qualification is achieved and maintained through examination by the LIRR Transportation Department Office of the Rules Examiner.
Flagman - When used in relation with roadway worker safety is an employee assigned to direct or restrict the movement of trains past a point on track to provide on-track safety for roadway workers, while engaged solely in performing that function.
Foul Time - A method of establishing working limits on a main track, secondary track or siding in which a roadway worker is notified by the Train Dispatcher through the Block Operator that no trains will operate within the working limits established on that track until the roadway worker reports clear of that track.
Fouling a Track - The location of an individual or equipment in such proximity to a track that the individual or equipment could be struck by a moving train or on-track equipment, or in any case is within 4 feet from the field side of the rail (the distance for third party contractors is 15 feet from the centerline of the track).
Gang – See definition for Roadway Work Group.

Inaccessible Track - A method of establishing Working Limits on tracks not controlled by the Train Dispatcher or Block Operator by physically preventing the entry and movement of trains.
Individual Train Detection (ITD) - A procedure which must be used under circumstances strictly defined by RWP, in which a Lone Worker acquires on-track protection by seeing approaching trains and leaving the track before they arrive.
Interlocking – An arrangement of signals and signal appliances so interconnected that their movements must succeed each other in proper sequence and for which interlocking rules are in effect.
Interlocking Limits - The tracks between the extreme opposing home signals of an interlocking.
Interlocking, Manual - An arrangement of signals and signal appliances operated from an interlocking machine and so interconnected by means of mechanical and/or electric locking that their movements must succeed each other in proper sequence, train movements over all routes being governed by signal indication *(change effective April 01, 2017).*
Inter-Track Barrier - Means a continuous barrier of a permanent or semi-permanent nature that spans the entire work area, that is at least four feet in height, and that is of sufficient strength to prevent a roadway worker from fouling the adjacent track.
Job Briefing - When reporting for duty, employees whose duties require coordination with other employees must hold a job briefing to review operational and safety conditions. If these conditions change, employees must hold an additional job briefing to discuss the new conditions.
Lone Worker - An individual roadway worker who is not being afforded on-track safety by another roadway worker is not a member of a roadway work group, and who is not engaged in a common task with another roadway worker.
Main Track - A designated track upon which trains are operated by timetable, Form L or both, or the use of which is governed by block signals.
Maximum authorized speed (LIRR Definition) – The highest speed that is permitted over a specific portion of the railroad. It may be authorized by the special instructions of the current timetable, Rules of the Operating Department or any other publication authorized by the General Superintendent – Transportation.
Maximum authorized speed (FRA Definition) - The highest speed permitted for the movement of trains permanently established by timetable/special instructions, general order, or track bulletin *(change effective April 01, 2017)*.
Minor Correction - Means one or more repairs of a minor nature, including, but not limited to, welding, spiking, anchoring, hand tamping, and joint bolt replacement, that are accomplished with hand tools or handheld, hand-supported, or hand-guided power tools. The term does not include machine spiking, machine tamping, or any similarly distracting repair.
Occupied Track - Means a track on which on-track, self-propelled equipment or coupled equipment is authorized or permitted to be located while engaged in a common task with a roadway work group with at least one of the roadway workers on the ground.
On-Track Safety - A state of freedom from the danger of being struck by a moving railroad train or other railroad equipment provided by operating and safety rules that govern track occupancy by personnel, trains and on-track equipment.
On-Track Safety Manual - The entire set of on-track safety rules and instructions maintained together in one manual designed to prevent roadway workers from being struck by trains or other on-track equipment. These instructions include operating rules and other procedures concerning on-track safety protection and on-track safety measures *(change effective April 01, 2017)*.

Pilot - An employee assigned to a train or track car when the Engineer, Conductor or Track Car Driver is not qualified on the physical characteristics or rules of the railroad or portion of the railroad over which the movement is to be made.

Placing Track Out of Service - A Form L, General Notice or Form D will be issued when necessary to establish working limits by removing a track from service between interlockings, block stations, block-limit stations or any combination thereof unless otherwise specified.

Predetermined Place of Safety (PPOS) - Means a specific location that an affected roadway worker must occupy upon receiving a watchman/lookout's warning of approaching movement(s) ("warning") or a roadway worker in charge's ("RWIC's") notification of pending movement(s) on an adjacent track ("notification"), as designated during the on-track safety job briefing. The PPOS may not be on a track, unless the track has working limits on it and no movements permitted within such working limits by the RWIC. The RWIC must determine any change to a PPOS, and communicate such change to all affected roadway workers through an updated on-track safety job briefing.

Qualified Individual - An employee who has successfully completed any required training for, has demonstrated proficiency in, and has been authorized to perform the duties of a particular position or function.

Railroad Bridge Worker - Any employee of, or an employee of a contractor of, a railroad responsible for the construction, inspection, testing, or maintenance of a bridge whose assigned duties, if performed on the bridge, include inspection, testing, maintenance, repair, construction, or reconstruction of the track, bridge structural members, operating mechanisms and water traffic control systems, or signal, communication, or train control systems integral to that bridge.

Restricted Speed - A mode of operation, at which a train can be stopped within one half the range of vision, short of the next signal, another train, obstruction, derail, or switch improperly lined, looking out for broken rail or crossing protection not functioning, not exceeding 15 miles per hour.

Roadway Maintenance Machine - A device powered by any means of energy other than by hand power, which is being used on or near railroad tracks for maintenance, repair construction, or inspection of tracks, bridges, roadway, signal communications, or electric traction systems. Roadway Maintenance Machines may have road or rail wheels or may be stationary.

Roadway Work Group - Two or more roadway workers organize to work together on a common task. A gang is a roadway work group.

Roadway Worker - An employee of a railroad, or of a contractor to a railroad, whose duties include inspection, construction, maintenance or repair of railroad track, bridges, roadway, signal and communication systems, electric traction systems, roadway facilities or roadway maintenance machinery on or near track or with the potential of fouling a track, and Flagman and Watchman/Lookout, responsible for their protection.

Roadway Worker in Charge - A roadway worker who is qualified under § 214.353 to establish on-track safety for roadway work groups, and lone workers qualified under § 214.347 to establish on-track safety for themselves *(change effective April 01, 2017)*.

Secondary Track - A designated track upon which trains may be operated without timetable or Form L authority, or block signals subject to the prescribed signals, rules and special instructions.

Siding - A designated track adjacent to a main track for the meeting or passing of trains.

Track Barricade - A designated sign or obstruction fastened to a track that prevents access to the track (i.e. tie bumper).

Track Car - A roadway maintenance machine, not classified as an engine, which is operated on track for inspection or maintenance. It may not shunt track circuits or operate signals and will be governed by rules and special instructions for trains other than passenger trains.
Track Car Driver – A LIRR employee qualified to operate on-track Roadway Maintenance Machines under the direction of a Track Car Pilot.
Track Car Pilot – A LIRR employee qualified on the Rules of the Operating Department, Timetable, and Physical Characteristics of the portion of railroad on which they are to operate.
Track Centers - The distance from the centerline of one track to the centerline of an adjacent track.
Train Approach Warning - A method of establishing on-track safety by warning roadway workers of the approach of trains in ample time for them to move to, or remain in a place of safety in accordance with the provisions of RWP.
Warning Tag - Tag used to indicate that a switch and/or equipment operating control is out of service and should only be removed by the class, craft or group who placed it, with permission from the Roadway Worker in Charge.
Watchman/lookout - An employee who has been annually trained and qualified to provide warning to roadway workers of approaching trains or on track equipment. Watchmen/lookouts shall be properly equipped to provide visual and auditory warning such as whistle, air horn, white disk, red flag, lantern, or fusee. A watchman/lookout's sole duty is to look out for approaching trains/on-track equipment and provide at least fifteen seconds advanced warning to employees before arrival of trains/on-track equipment *(change effective April 01, 2017).*
Working Limits - A segment of track with definite boundaries upon which trains may move only as authorized by the Roadway Worker in Charge of that segment of track.
Yard Track - A system of tracks, other than main tracks, secondary tracks or sidings, used for making up trains, storing cars and other purposes. All movements are subject to prescribed signals, rules and special instructions.
Zone A – AMTRAK North East CORRIDOR-New York Division, A to Harold including all tracks in Penn Station and lines 1, 2, 3, and 4. Arch Street Access (over Sub 1 and Sub 2 and North Runner). Special Instructions 1280 – 1296A are in effect over highlighted route.
Zone C – LIRR-Entire System including West Side Storage Yard (WSSY).
Zone D – New York and Atlantic (NYAR) jurisdiction, NYAR Secondary No 1 and 2 track, "C" Secondary track, Montauk Cut-Off Secondary track.

ESTABLISHING ROADWAY WORKER PROTECTION

REMEMBER:
Once personnel and equipment are clear, report clear of track!

Step 1. Know Your Responsibilities

The first step in establishing RWP is to know your responsibilities. This section gives responsibilities for six types of roadway worker employees:

- All Roadway Workers
- Roadway Worker in Charge
- Employee in Charge
- Track Car Pilot
- Individual responsible for providing RWP
- Lone Workers

All Roadway Workers

1. A roadway worker must comply with the rules and instructions in this RWP Manual as well as all other applicable instructions:
    a. 49 CFR Part 214 subpart B,C,D
    b. Communication Standard 220
    c. LIRR Corporate Safety Rules for Employees
    d. LIRR Rules of the Operating Department
    e. LIRR Timetable and Special Instructions
2. Before beginning work, all roadway workers must participate in a job briefing and subsequently additional job briefings when conditions change.
3. Do not foul tracks except when necessary to perform your duties.
4. Before fouling any track:
    a. Get a job briefing from the RWIC.
    b. Verify that proper RWP is being provided.
    c. Acknowledge understanding of the RWP procedures being used.
    d. Know who the individual is responsible for providing RWP.
5. You have the absolute right to challenge, in good faith, any directive that would violate a RWP Procedure. If you are given such a directive, inform the RWIC that the RWP to be applied does not comply with the Roadway Worker Protection Standard. Remain clear of the track until the conflict is resolved.
6. Do not perform any work that will interfere with the safe passage of trains.
7. Crossing Tracks
    a. Look both ways, and then take the safest route. If you must cross multiple tracks, stop and look both ways before crossing each track.
    b. Cross tracks at least 25 feet from standing equipment.
    c. Do not pass between cars standing less than 30 feet apart on the same track unless it is safe to do so.
8. Safety Precautions Working around Track Equipment:
    a. All persons operating and riding on self-propelled equipment must understand the duties that each person will perform.
    b. Use the handrail when riding or when getting on/off equipment.
    c. Do not get on or off moving equipment.
    d. When working near or observing equipment, communicate with the equipment operator and make sure that everyone understands:
        i. Normal equipment operating procedures
        ii. Location of individuals working around/observing equipment

iii. Operator's blind spots
iv. Signals warning that the equipment will move.

e. When your duties require you to be around the equipment, keep outside the 10-foot safe area around the equipment.

EXCEPTION: If your duties require you to be within the 10-foot safe area around the equipment, perform those duties from the location established with the equipment operator.

9. Audible Warning From Train(s)
    a. Trains must sound their locomotive whistle or horn when approaching roadway workers on or near the track, regardless of local whistle prohibitions.
    b. To give trains advance notice of roadway workers on or near the track, each roadway worker fouling the track must:
        i. Wear company-approved high visibility attire (vest or jacket).

Roadway Worker in Charge (RWIC)

When roadway workers are working or inspecting on or about track, one individual must be designated the RWIC. When two or more gangs work on a common task, one individual must be designated the Employee In Charge (EIC) for the working limits; and each gang must also have their own RWIC. The RWICs for each gang must coordinate job briefings and protection with the designated EIC who has authority over the working limits.

1. The RWIC is responsible for the safety, instruction, performance and protection of all roadway workers under his or her jurisdiction.
2. The RWIC is responsible to prepare roadway workers for their job assignments by giving all roadway workers a job briefing.
3. The RWIC must conduct job briefings with each roadway worker that includes the RWP that will be provided and the safety procedures that will be followed.
4. Do not consider the job briefing complete until all roadway workers acknowledge understanding of the RWP being used and have indicated this on the job briefing card by printing his/her name, employee # and or company name. The RWIC is required to have the completed job briefing card(s) available for presentation upon request.
5. Make sure that protection is in effect on all adjacent tracks that are not included in the working limits when any number of employees with at least one Roadway Maintenance Machine are present or when performing large-scale (i.e. ten or more roadway workers) track maintenance such as rail and tie gangs, production in-track welding, ballast distribution, undercutting, switch and crossing gangs. Large-scale work may also include tasks being performed by employees from Electric, Light and Power; Communications; Signal; as well as third party contractors.

NOTE: Please review definitions for Adjacent Tracks and Adjacent Controlled Track to determine the type of protection required.

6. If the roadway worker protection changes during the work period, inform each roadway worker before the change becomes effective, except in an emergency. If a roadway worker cannot be notified in advance because of an emergency, have the roadway worker clear the track immediately and stay clear until roadway worker protection is re-established.

7. The RWIC must notify the EIC of any work which will interfere with the safe movement of trains or on-track equipment.
8. Notify all roadway workers before the working limits are released for the operating of trains. Do not release the work area until all affected roadway workers have either left the track or have been given roadway worker protection by Watchmen.
9. Engineering, Stations, and Maintenance of Equipment (M of E) RWICs must have this manual and appropriate Physical Characteristics Maps at the job site.

Employee in Charge (EIC)

When two or more gangs work on a common task, one individual must be designated the Employee in Charge (EIC) for the working limits. The EIC must coordinate job briefings and protection with the RWICs who are within his working limits.

1. The EIC is responsible for the safety, instruction, performance and protection of all roadway workers under his or her jurisdiction.
2. The EIC is responsible to provide a job briefing to all RWICs within his working limits. The EIC is required to have the completed job briefing card(s) available for presentation upon request.
3. Do not consider the job briefing complete until all RWICs acknowledge understanding of the RWP being used and have indicated this on the job briefing card by card by printing his/her name and employee # or via verbal acknowledgement over the phone or radio. If over phone or radio, the EIC should write the RWIC's name and employee number on Page 2 of the Card.
4. Make sure that protection is in effect on all adjacent tracks that are not included in the working limits when any number of employees with at least one Roadway Maintenance Machine are present or when performing large-scale (i.e. ten or more roadway workers) track maintenance such as rail and tie gangs, production in-track welding, ballast distribution, undercutting, switch and crossing gangs. Large-scale work may also include tasks being performed by employees from Electric, Light and Power; Communications; Signal; as well as third party contractors.

NOTE: Please review definitions for Adjacent Tracks and Adjacent Controlled Track to determine the type of protection required.

5. If the roadway worker protection changes during the work period, inform each RWIC before the change becomes effective, except in an emergency. If an RWIC cannot be notified in advance because of an emergency, have the roadway workers clear the track immediately and stay clear until roadway worker protection is re-established.
6. Before authorizing movement of trains or on-track equipment within the working limits, the EIC must confirm work being performed will not interfere with the safe movement of such equipment.
7. Notify all RWICs before the working limits are released for the operating of trains. Do not release the work area until all affected roadway workers have either left the track or have been given roadway worker protection by Watchmen.

Track Car Pilot

An employee assigned to a track car when the Track Car Driver is not qualified on the physical characteristics or rules of the railroad or portion of the railroad over which the movement is to be made. The Track Car Pilot is required to be qualified on the LIRR Rules of the Operating

Department, Timetable, and Special Instructions as well as the physical characteristics of the territory being operated over. This qualification is achieved and maintained through examination by the LIRR Transportation Department Office of the Rules Examiner.

LIRR Rules of the Operating Department Rule 805 requires, in part, that: "…A Pilot's responsibility is to ensure compliance with all operating rules and special instructions that are in effect. When acting in this role, a Pilot must be on the leading end of a move and positioned in such a place to take appropriate action when necessary. Appropriate actions are dependent on the situation and may include stopping the movement by any means necessary to prevent accident or injury…"

Take note that this requires, when in travel mode, that the Track Car Pilot be on the leading end of the movement when the Track Car Driver of the lead piece of equipment is not qualified on the LIRR Rules of the Operating Department, Timetable, and Special Instructions as well as the physical characteristics of the territory being operated over. This applies to both track car and hi-rail equipment moves. The Track Car Pilot must notify the EIC or RWIC before movement is made within the working limits.

Individual(s) Responsible for Providing RWP

1. Flagman

When used in relation with roadway worker safety is an employee assigned to direct or restrict the movement of trains past a point on track to provide on-track safety for roadway workers, while engaged solely in performing that function.

a. Ensure That Tracks Are Not Fouled Without Permission.
    i. Work cannot be started on or adjacent to a track, or the use of cranes or other equipment which may foul adjacent tracks which will interfere with the safe movement of trains at Maximum Authorized Speed (MAS), without permission of the Train Dispatcher through the Block Operator.
    ii. When permission is obtained, protection must be provided against trains in both directions before the track is obstructed or fouled in any manner.

2. Watchmen / Advance Watchmen

When a gang fouls a track outside the working limits, one or more watchmen are assigned to give roadway workers warning of approaching trains that will allow them to be in a safe position in the clear at least 15 seconds before the engine(s) or on-track equipment arrives at the location where they are working. Where working limits are not established, the RWIC assigns watchmen to watch for approaching trains and to warn roadway workers to clear the tracks. Only trained and qualified watchman with current RWP qualifications can perform this function.

If you have been assigned as a watchman, you are responsible to:

a. Give full attention to detecting the approach of trains and warning roadway workers to clear the tracks.
b. Do not perform any other duties, even momentarily.
c. Provide effective warning of roadway workers of the approach of trains.
d. Determine the distance along the track at which trains must be visible in order to provide the prescribed warning time.
e. Signal roadway workers to clear the tracks if:

i. You do not have sufficient sight distance to detect approaching trains and cannot have the gang in a position of safety, in the clear at least 15 seconds before the train reaches the point of work; or,
ii. You cannot give your full attention to your duties as a Watchman.

f. Do not leave your assigned station until:
   i. The RWIC tells you that the gang is no longer fouling the track and watchmen are no longer needed; or,
   ii. The RWIC has assigned another watchman who is in position and watching for approaching trains.

NOTE: Watchmen must also clear on the approach of trains or equipment.

g. If roadway workers may have trouble hearing the watchman's warning whistle or horn (due to noisy machinery, the size of the gang, or any other reason), additional watchmen/lookout must be assigned as necessary.
h. If the watchman does not have sufficient sight distance to clear the gang at least 15 seconds before the train or engines reach the work site, advance watchmen must be assigned.
i. If visibility is restricted by weather or any other reason, additional RWP measures must be used as needed.

3. Lookout

A lookout is assigned to an individual roadway worker whose ability to respond to visual and/or auditory warning is affected by the task he is performing (i.e. noise of equipment, welding, etc.). The lookout is required to tap the roadway worker on the shoulder in sufficient time to enable the lookout and the roadway worker he is protecting to clear to a point of safety as designated during the RWIC's job briefing. Only trained and qualified lookouts with current RWP qualifications can perform this function. A lookout may also be relaying warnings provided by a watchman.

4. Lone Worker

An individual roadway worker who is not being afforded on-track safety by another roadway worker, is not a member of a roadway work group, and who is not engaged in a common task with another roadway worker is a lone worker. As a roadway worker working alone and providing your own RWP, you may watch for trains yourself (where permitted) or use another method to provide RWP.

Step 2. Determine the Type of Track

An RWIC must know the type of track(s) his gang is fouling or has the potential to foul in order to determine the type of RWP to be used.

An RWIC must be qualified on the physical characteristics of the territory on which they are serving as RWIC; as evidenced by examination through the LIRR Transportation Department Office of the Rules Examiner or through examination on the physical characteristics maps provided during the RWIC training class instructed by Employee Training and Corporate Development (ETCD). An RWIC qualified through ETCD must have the physical characteristics

maps available at all times. This manual and knowledge of the physical characteristics must be used to establish the required level of protection for roadway workers.

An RWIC must also know what Zone his roadway workers are occupying (See definitions for Zone A, C, and D on page 14).

To determine the type of track, an RWIC must use his knowledge of the physical characteristics as well as the following definitions on pages 11-14 of this manual:

1. Adjacent Tracks
2. Adjacent Controlled Track
3. Interlocking
4. Main Track
5. Secondary Track
6. Siding
7. Yard Track

Step 3. Determine Who Needs Protection

Determine whether the roadway workers(s) to be protected are acting as an LIRR employee roadway work group (gang) or LIRR employee lone worker as defined on Page 12 of this manual; or are LIRR third party contractor(s). The individual or gang who needs to be protected can impact the type of protection required.

Step 4. Determine the Types of Protection Available

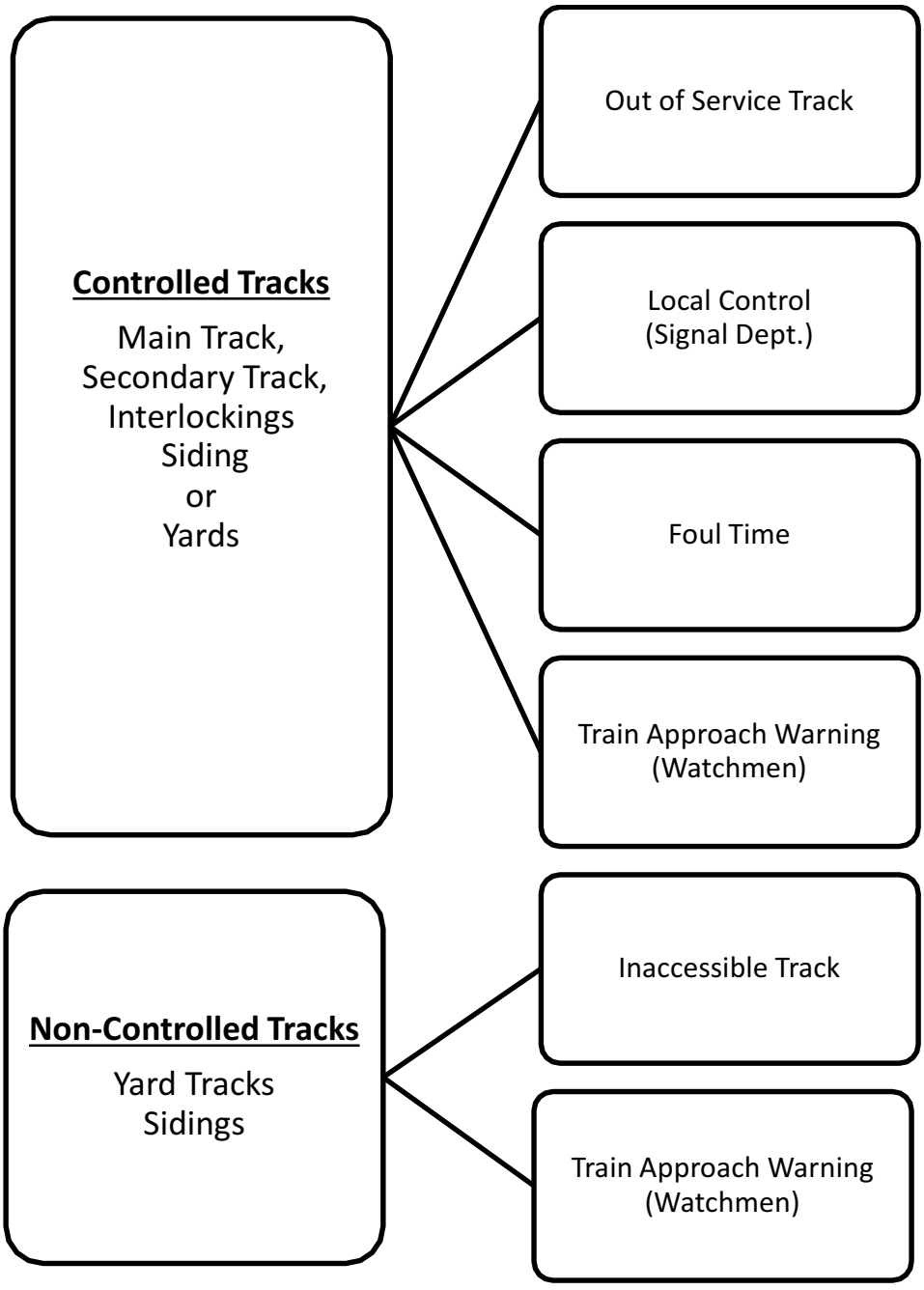
The type of protection available is based on the type of track and roadway worker(s) that need to be protected.

Use the chart "Hierarchy of Roadway Worker Protection" that follows to determine the types of protection available in your situation:

1. Placing Track Out of Service
2. Local Control (Signal Department)
3. Foul Time
4. Inaccessible Track
5. Train Approach Warning (Watchmen/Lookout)
6. Individual Train Detection (ITD)

    Please note: ITD not included in Chart.

Hierarchy of Roadway Worker Protection



Please note:
A Controlled Track may require permission, depending upon the choice of protection being used.

See Step 5. Obtain Permission (If Needed) for more detail.

Step 5. Obtain Permission (If Needed)

1. To place a Track Out of Service, depending on your location, you must contact the appropriate block operator; the Section A Dispatcher in Port Washington; or Penn Station Central Control (PSCC).
2. Local Control is only available to qualified Signal Department employees. Depending on your location, you must contact the appropriate block operator; the Section A Dispatcher in Port Washington; or PSCC.
3. To obtain Foul Time, depending on your location, you must contact the appropriate block operator; the Section A Dispatcher in Port Washington; or PSCC.
4. For Inaccessible Track, contact the appropriate yard master.
5. Train Approach Warning (Watchmen/Lookout) does not require permission.
6. An employee using Individual Train Detection (ITD) should notify his/her supervisor and, depending on the location, the appropriate block operator; the Section A Dispatcher in Port Washington; or Penn Station Central Control (PSCC).

Step 6. Establish the Protection

There are six types of protection available. This section describes the procedures for establishing each type of protection.

1. Placing Track Out of Service

This is a form of exclusive track occupancy. In order to take a track out of service, an EIC or RWIC must be qualified on the LIRR Book of Rules, Timetable, and Special Instructions as well as the physical characteristics of the territory on which they are serving as EIC or RWIC. This qualification is achieved and maintained through examination by the LIRR Transportation Department Office of the Rules Examiner.

A Form L will be issued when necessary to establish working limits by removing the main track from service between interlockings, block stations, block-limit stations or any combination thereof. Form L authority must be issued to the EIC or RWIC and to the Block Operator(s) controlling train movement at the entrance to the working limits.

Placing main track out of service establishes working limits on Main Tracks by restricting the authority to use that track to the EIC or RWIC. The EIC or RWIC must communicate the scope and nature of the type of work to be performed. The scope and nature of the work must be repeated back to the EIC or RWIC. The EIC or RWIC must communicate any work that will interfere with the normal operation of Highway Crossing Warning Devices (*effective* 01/01/2018).

FORM L

MOVEMENT PERMIT
FORM L *2nd Revision – August 2016*

Form L Number _____

Date _____

For Hand and/or Electronic Delivery Only:
AMOUNT OF FORM L(S) _____ **FORM L NUMBER(S)** _____

TO: _____

Long Island Rail Road

1A _____ OUT OF SERVICE BETWEEN _____
AND _____ UNTIL _____
_____ BUT MAY BE USED WITH AUTHORITY OF _____

1B _____ OUT OF SERVICE BETWEEN _____
AND _____ UNTIL _____
BUT MAY BE USED WITH AUTHORITY OF _____
TO ASSIST _____

2A PROCEED AT RESTRICTED SPEED OVER _____ CROSSING(S)
_____
_____ ACCOUNT CROSSING PROTECTION(S) OUT OF ORDER

2B PROCEED AT RESTRICTED SPEED OVER _____ CROSSING(S)
_____
_____ ACCOUNT CROSSING PROTECTION(S) OUT OF ORDER

2C STOP CLEAR OF ALL CROSSING(S) BETWEEN _____ AND _____
DO NOT PROCEED OVER CROSSING(S) UNTIL PROTECTED BY A CREW MEMBER

2D PROCEED AT RESTRICTED SPEED _____
_____ ACCOUNT _____

3 TEMPORARY SPEED RESTRICTION
BRANCH _____ TRACK(S) _____ SPEED _____
LOCATION : _____
_____ ACCOUNT _____

SPEED SIGNS INSTALLED
Y / N

4 _____ MEET _____ AT _____

5 OTHER INSTRUCTIONS / INFORMATION _____

MADE COMPLETE TIME _____ **M** **OPERATOR** _____
REPEATED BY _____ TIME _____ M
LINE 1A TIME EXTENDED UNTIL _____
UNDER AUTHORITY OF RWIC _____ **AT** _____ **M**
FORM L _____ **DATED** _____
CANCELLED AT _____ **M** **DATE** _____ **OPERATOR** _____

OFFICE USE ONLY:
RECORD NAME AND TIME REPEATED/RECEIVED
ENGINEER _____
CONDUCTOR _____
RWIC _____
RELIEVING EMPLOYEES _____ / _____

Procedure to complete the form:

Form L Line 1A will be used to remove a track from service for the following purposes:

1. When necessary to establish working limits for roadway worker protection.
2. When necessary for testing equipment.

I. Form L Line 1A will be issued to establish working limits by removing a track from service. The portion of track removed from service is between the points specified in the Form L. Working limits may be established between interlockings, block, block-limit stations, or any combination thereof. The exact location of the working limits only includes the main track between the points specified unless the order specifically states otherwise. When a track is removed from service between interlockings, the interlockings specified remain IN service and interlocking rules still apply. Tracks may be removed from service within and beyond interlocking limits or other designated locations when specifically stated in the Form L.

NOTE: When a track is removed from service to a non-interlocked location including block stations and controlled home signals the limits of the out of service track end at the end of block sign unless otherwise specified in the Form L.

Form L Line 1A authority must be issued to the EIC or RWIC and to the Block Operator(s) controlling train movement at the entrance to the working limits.

Before the Form L Line 1A authority is issued, the Train Dispatcher must determine that the affected track is clear of other train movements and that stop signals, where provided, are displayed and effective blocking devices are applied to the controls of switches and signals leading to the affected track. The hold feature device must be applied to the affected track. Such signals must not be displayed for movement leading to the working limits.

When a track has been removed from service to establish working limits, the rules in effect on the portion of track specified are also out of service. Unless so specified in the Form L Line 5, Timetable Special Instructions, interlocking, home, manual block and block-limit signals will remain in service.

Unless otherwise provided in Form L Line 5, all train movements within the working limits will operate at RESTRICTED SPEED. The EIC or RWIC named in the Form L may admit additional roadway maintenance machines or trains to the working limits from a point not controlled by the Block Operator by showing or reading his copy of the Form L to the employee in charge of such equipment or trains. When direct communication is not possible, this permission may be relayed by the Train Dispatcher or Block Operator along with any other instructions or information given by the EIC or RWIC named in the Form L.

The EIC or RWIC named in the Form L may authorize the Train Dispatcher to admit additional roadway maintenance machines or trains to the working limits. After receiving permission from the EIC or RWIC, the Block Operator, when authorized by the Train Dispatcher, may admit additional roadway maintenance machines or trains to the working limits by issuing a copy of the Form L to the employee in charge of such equipment or trains. When a copy of the Form L has been delivered to the employee in charge of the additional roadway maintenance machines or

trains, the Train Dispatcher will then authorize the additional roadway maintenance machines or trains to pass the stop signal at the entrance to the working limits as provided by Rule 241.

The EIC or RWIC of the working limits shall be responsible for ascertaining and notifying the Train Dispatcher through the Block Operator, that all roadway maintenance machines and trains are clear of the working limits by the expiration time specified in the Form L. Additionally, the Train Dispatcher must be advised of any speed restrictions necessary for the safe passage of trains.

II. When necessary, a portion of the track between interlockings, block, block-limit stations or any combination thereof may be removed from service to establish working limits. Movements within that portion of track remaining in service will be authorized as follows:
    1. Movements on the in service portion of the track must receive a copy of the Form L identifying the working limits. Applicable rules in effect will apply for movements in the direction of the working limits. Trains will approach the working limits prepared to stop and must not enter the working limits without the permission of the EIC or RWIC named in the Form L. When a train clears the in service portion of track, a member of the crew must report clear to the Train Dispatcher through the Block Operator.
    2. Movements operating in working limits must not enter the in service portion of track without applying the rules in effect and receiving permission of the Train Dispatcher.

NOTE: When working limits are established through the issuance of a General Notice instead of Form L Line 1 authority, the Train Dispatcher will record the name of the EIC or RWIC on the record of train movements. The applicable instructions specified in part I or II will be applied when issued in a General Notice.

III. Form L Line 1A authority will be issued when necessary to remove a track from service for testing purposes. The Form L authority will be issued to the Transportation Supervisor in charge. When a track has been removed from service for the purpose of testing, the rules in effect on the portion of track specified are also out of service. This form may be issued with the testing equipment standing within the limits designated in the Form L.

Unless so specified in the Form L Line 5, Timetable Special Instructions, interlocking, home, manual block and block-limit signals will remain in service.

The Form L must state: Speed will be determined by the Transportation Supervisor in charge.

2. Local Control (Signal Department ONLY)

The RWIC causes fixed signals at each entrance to the working limits to display an aspect indicating “Stop.”

3. Foul Time

In order to establish working limits using foul time, an RWIC must be qualified on the LIRR Book of Rules, Timetable, and Special Instructions as well as the physical characteristics of the territory on which they are serving as RWIC. This qualification is achieved and maintained through examination by the LIRR Transportation Department Office of the Rules Examiner. An RWIC may also be qualified to take foul time by attending annual RWIC Training class instructed by Employee Training and Corporate Development (ETCD) and successfully passing examination on

the On-Track Safety Manual, applicable roadway worker definitions, and the LIRR physical characteristics maps provided during the RWIC training. An RWIC qualified through ETCD is not qualified to take a track out of service.

Whenever foul time is requested by an RWIC, the Train Dispatcher and Block Operator(s) must determine that no trains have been authorized to move in the direction of the working limits. The Block Operator(s) must ensure that stop signal(s) have been displayed and effective blocking devices are applied to switch and signal controls leading to the affected track and the hold feature applied unless otherwise provided.

When authorized by the Train Dispatcher through the Block Operator, permission to foul must include:

a. The designation of the track to be fouled;
b. The location where the track will be fouled;
c. The time limits of the foul time.

The RWIC must communicate the scope and nature of the type of work to be performed. The scope and nature of the work must be repeated back to the RWIC. The RWIC must communicate any work that will interfere with the normal operation of Highway Crossing Warning Devices (*effective* 01/01/2018).

Each RWIC to whom foul time is given must repeat the information to the Train Dispatcher/Block Operator who must confirm its accuracy before the foul time becomes effective. Foul time becomes effective once the information has been correctly repeated to the Train Dispatcher/Block Operator.

Once protection is established, it must be maintained until the RWIC reports clear and releases the working limits. The roadway worker in charge shall not permit the movement of trains or other on-track equipment into or within working limits protected by foul time *(change effective April 01, 2017)*.

4. Inaccessible Track

Working limits on non-controlled track shall be established by rendering the track within working limits physically inaccessible to trains at each possible point of entry by one of the following features:

a. A flagman with instructions and capability to hold all trains and equipment clear of the working limits;
b. A switch or derail aligned to prevent access to the working limits and secured with an effective securing device by the RWIC of the working limits;
c. A discontinuity in the rail that precludes passage of trains or engines into the working limits;
d. Working limits on controlled track that connects directly with the inaccessible track, established by the RWIC of the working limits on the inaccessible track; or
e. A remotely controlled switch aligned to prevent access to the working limits and secured by the control operator of such remotely controlled switch by application of a locking or blocking device to the control of that switch, when:

1. The control operator has secured the remotely controlled switch by applying a locking or blocking device to the control of the switch, and
2. The control operator has notified the roadway worker who has established the working limits that the requested protection has been provided, and
3. The control operator is not permitted to remove the locking or blocking device from the control of the switch until receiving permission to do so from the roadway worker who established the working limits.

Trains and roadway maintenance machines within working limits established by means of inaccessible track shall move only under the direction of the EIC or RWIC of the working limits, and shall move at restricted speed.

No operable locomotives or other items of on-track equipment, except those present or moving under the direction of the EIC or RWIC of the working limits, shall be located within working limits established by means of inaccessible track.

When M of E uses Inaccessible Track and equipment is located within the limits, it must be made inoperable. Detailed information on this procedure is included in the M of E Addendum.

5. Train Approach Warning (Watchmen/Lookout)

Watchman/Lookout provides RWP by warning roadway workers of approaching trains or on track equipment so that roadway workers can be in a position of safety after clearing the track. Roadway workers must be clear of the track(s) at least 15 seconds before the trains reach the work site.

A Watchman provides RWP for two or more workers. A Lookout provides RWP for one other worker.

NOTE: Watchmen/Lookout must also be able to clear on the approach of trains or equipment.

Roadway workers in a roadway work group who foul any track outside of working limits shall be given warning of approaching trains by one or more watchmen/lookouts in accordance with the following provisions:

a. Train approach warning shall be given in sufficient time to enable each roadway worker to move to and occupy a previously arranged place of safety not less than 15 seconds before a train moving at the maximum authorized speed on that track can pass the location of the roadway worker.
b. Watchmen/lookouts assigned to provide train approach warning shall devote full attention to detecting the approach of trains and communicating a warning thereof. They shall not be assigned any other duties while functioning as watchmen/lookouts.
c. The means used by a watchman/lookout to communicate a train approach warning shall be distinctive and shall clearly signify to all recipients of the warning that a train or other on-track equipment is approaching.
d. Every roadway worker who depends upon train approach warning for on-track safety shall maintain a position that will enable him or her to receive a train approach warning communicated by a watchman/lookout at any time while on-track safety is provided by train approach warning.

e. Watchmen/lookouts shall communicate train approach warnings by a means that does not require a warned employee to be looking in any particular direction at the time of the warning, and that can be detected by the warned employee regardless of noise or distraction of work.
f. Every roadway worker who is assigned the duties of a watchman/lookout shall first be trained and qualified to do so.
g. Every watchman/lookout shall be provided by the employer with the equipment necessary for compliance with the on-track safety duties which the watchman/lookout will perform.
h. When an Advance Watchman signals the watchman/lookout of the approach of a train, or signals that a train is clear, the watchman/lookout must repeat the signal to the Advance Watchman and then signal the gang.

Signal roadway workers of an approaching train as follows:

a. Sound a warning whistle or horn.
b. Hold the Watchman's Disc at arm's length above your head.
c. Hold the Watchman's Disc horizontally at arm's length toward the place designated in the job briefing where roadway workers are to go to clear the tracks.
d. Hold Watchman's Disc at arm's length above head to signal train to blow rule 14 L.

Signal roadway workers that it is safe to resume work as follows:

a. Hold the Watchman's Disc horizontally at arm's length toward the work site.

Give full attention to detecting the approach of trains and warning roadway workers to clear the tracks. Do not perform any other duties, even momentarily.

Duties of Advance Watchmen

Advance Watchmen are responsible for watching for approaching trains and signaling the Watchmen when a train is approaching. The Watchman then acknowledges the signal by repeating it back to the Advance Watchman.

Follow these procedures when you are assigned the duties of an Advance Watchman:

Signal the Watchman of an approaching train as follows:

a. Sound a warning whistle or horn.
b. Hold the Watchman's Disc at arm's length above your head.

If your signal is not acknowledged by the Watchman, Signal the approaching train to stop.

Signal the Watchman that it is safe to resume work as follows:

a. Hold the Watchman's Disc horizontally at arms' length toward the work site.

NOTE: Advance Watchmen must also be able to clear on the approach of trains or equipment.

Watchman Attire and Equipment

Watchman and Advance Watchman, must have the appropriate attire and equipment to perform their duties. If you are a Watchman or an Advance Watchman, follow these procedures when you are protecting workers:

a. Keep your equipment in good condition and ready for use.
b. If you are a Watchman or Advance Watchman, you must have a standard LIRR Watchman's bag. Before performing your duties, check the bag's contents to make sure that all of the required equipment is in the bag and in good condition. See page 175 for contents.
c. Wear the warning whistle or horn outside your clothing so that you can use it quickly.

NOTE: A Lookout assigned to protect only one roadway worker does not need to be equipped with a watchman's disc since he is not pointing to a place of safety. A Lookout must have a warning whistle or horn as well as a red flag for day or white light for night to signal approaching trains as required. Maintenance of Equipment (M of E) Lookouts are not required to use fusees and only should do so with permission from an M of E Manager.

6. Individual Train Detection (Lone Worker)

Individual train detection (ITD) is a form of RWP but it is **NOT** a method of establishing working limits. ITD may be used under strictly defined circumstances by trained and qualified Lone Workers to provide RWP without established working limits.

NOTE: Lone Workers have the absolute right to use another form of RWP other than ITD and establish working limits if they feel it is necessary to perform the work safely.

The following rules provide procedures for using individual train detection (ITD):

a. Establishing Roadway Worker Protection
b. Individual Train Detection (Watching For Trains Yourself)
c. Working on Yard Tracks

Establishing Roadway Worker Protection

A Lone Worker who cannot comply with all the provisions of ITD must establish another form of RWP before fouling any track.

If you are a Lone Worker who fouls a track while performing routine inspection or minor correction work, you may watch for trains yourself only if the following seven conditions are met:

1. You are a Lone Worker who has been trained, qualified, and designated to do so by the LIRR.
2. When performing routine inspection and minor correction work, a Lone Worker using ITD for on-track safety when fouling a track 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 moving in either direction as prescribed in this section.
3. A Lone Worker is on track outside the limits of an interlocking including controlled siding.

4. Where the Lone Worker is able to visually detect the approach of a train moving at the maximum speed authorized on that track, and move to a previously determined place of safety, not less than 15 seconds before the train would arrive at the location of the Lone Worker.

NOTE: The place of safety occupied by a Lone Worker for an approaching train must not be on a track, unless working limits are established on that track.

5. Where no power-operated tools or roadway maintenance machines are in use within the hearing range of the Lone Worker.
6. Where the ability of the Lone Worker to hear and see approaching trains and other on-track equipment is not impaired by background noise, lights, precipitation, fog, passing trains, or any other physical conditions.
7. A Lone Worker who uses ITD to establish on-track safety shall first complete a written Statement of On-track Safety. The Statement shall designate the limits of the track for which it is prepared and the date and time for which it is valid. The Statement shall show the maximum authorized speed of trains within the limits for which it is prepared, and the sight distance that provides the required warning of approaching trains. The Lone Worker using ITD to establish on-track safety shall produce the Statement of On-track Safety when requested by a representative of the Federal Railroad Administration (FRA) or LIRR manager.

The Lone Worker must communicate this information to their supervisor or other designated individual (i.e. Train Dispatcher or Block Operator) prior to beginning inspection or minor correction.

Working on Yard Tracks

If you are a Lone Worker using ITD on yard track(s):

1. The place of safety cannot be on a track that is not shown on your Statement of On-track Safety, unless working limits are established on that track.
2. A maximum of three adjacent tracks may be shown on one Statement of On-track Safety.
3. You must always be prepared to clear all tracks if necessary.

Statement of On-Track Safety (ITD)

	The Long Island Rail Road Company Roadway Worker Protection Job Briefing Document	Document #: RWPJBCITD Rev. 17.01.01 Pg. 1 of 1	

Name _____

Date _____ Time _____

Supervisor's Name _____

Track Number _____ From M.P. _____ To M.P. _____

Branch _____ Track Number(s) _____

Instructions:
This form must be used by a Lone Worker when using ITD. Use your Timetable to determine the maximum speed authorized in the area you will be fouling. Place an X in the box adjacent to this maximum authorized speed. Determine that you have the required sight distance to clear the track 15 seconds prior to the arrival of the train. You must produce this form when requested by an FRA Representative or LIRR Supervisor.

Maximum Authorized Speed in MPH	Required Sight Distance in Feet	Maximum Authorized Speed In MPH	Required Sight Distance in Feet
5	110	45	990
10	220	50	1100
15	330	55	1210
20	440	60	1320
25	550	65	1430
30	660	70	1540
35	770	75	1650
40	880	80	1760

Step 7. Perform the work, then clear the track.

The following details procedures for clearing track(s) including special provisions for certain circumstances.

Safety Precautions for Clearing Tracks

Follow these safety precautions when clearing tracks:

1. When you are notified or become aware of the approach of a train, stop all work. Clear the tracks and be in the clear 15 seconds before the train reaches the location where you were working.
2. Report to the location designated by the RWIC during the job briefing.

NOTE: You may not clear onto another track unless working limits have been established on that track.

3. Stop all equipment and vehicles on the right of way while the train is passing.
4. Do not leave tools, objects, material, or equipment where they could be struck by the passing train.
5. Watch for projecting, dragging or falling objects.
6. Inspect all passing trains. If you detect a dangerous condition, use any available means to warn crew members on the passing train to stop. If the train does not stop at once, notify the Train Dispatcher/Movement Bureau.
7. Stay clear until you are notified that it is safe to resume work.

Special Considerations

1. Clearing a Track Specified with Train Order Form L

The EIC or RWIC for the working limits shall be responsible for ascertaining and notifying the Train Dispatcher through the Block Operator, that all roadway workers, roadway maintenance machines, and trains are clear of the working limits by the expiration time specified in the Form L. Additionally, the Train Dispatcher must be advised of any speed restrictions necessary for the safe passage of trains.

2. Clearing Main Track, Secondary Track or Sidings

To clear a Main Track, Secondary Track or Sidings, which is any track shown in the Timetable as being under the control of a Dispatcher or Block Operator:

a. Clear all tracks, keeping a minimum of four feet from the field side of rail. Do not clear onto another track.
b. If you are operating on-track equipment and you are within the gauge of the track, stay on your machine. If you are not within the gauge of the track, dismount the equipment and clear the track.
c.

3. Working On Yard Tracks

Follow these procedures when working on and clearing yard tracks (industrial, yard, or any other track not controlled by a Dispatcher or Block Operator):

<u>Working Limits Established</u>

If a train approaches on an adjacent track, stop work and stand in the center of the track where you are working.

<u>No Working Limits Established</u>

You must always be prepared to clear all tracks if necessary. Clear all tracks, keeping a minimum of four feet from the field side of rail. Do not clear onto another track**.**

If you are a Lone Worker using ITD on yard track:

a. The place of safety cannot be on a track that is not shown on your Statement of On-track Safety, unless working limits are established on that track.
b. A maximum of three adjacent tracks may be shown on one Statement of On-track Safety.
c. You must always be prepared to clear all tracks if necessary.

4. Clearing Under Platforms

Clearing under platforms should be the exception and not the norm. All other methods of protecting workers should be exhausted prior to its use. The regulations emphasize the use of the Hierarchy of Roadway Worker Protection. In the protection of a work gang, clearing under the platform is a method of last resort. Track out of service or foul time should be used first. Programmed maintenance should be done following the methods of protection outlined by the Hierarchy of Roadway Worker Protection.

If clearing under the platform must be used, roadway workers can clear under platforms as long as the minimum standard for clearing can be met. For field side platforms, that is moving to a point not less than four feet outside the field side of the rail. For island platforms, that is not between sets of tracks unless the track centers are greater than 25 feet.

NOTE: These are the minimal dimensions allowed under the regulation. Predetermined points of safety should be greater distances.

An RWIC should take into consideration certain factors when evaluating if the minimum standards for clearing are met. Factors that would preclude a roadway worker from clearing under a platform include but are not limited to: any obstruction that a worker would have to transverse in order to reach a safe clearing distance; platform supports; airlines; cable-runs; debris and individual ergonomic concerns.

In addition the Watchmen who will signal the roadway workers that the track is clear should be in a conspicuous position - not under the platform. Examples for conspicuous positioning include: adjacent to the platform on the right of way, above an adjacent platform, or at the edges of the platform. Since the minimum standards require an audible and visual warning, if the Watchmen is stationed above the platform that is being used to clear under; he is required to leave that area for a conspicuous position not under the platform in order to initiate the return to work signal.

JOB BRIEFING REQUIREMENTS

After assessing factors such as the tasks to be performed, who will be performing the tasks, the capabilities of the employees performing the tasks, as well as the location and conditions under which the tasks will be performed; the RWIC must develop and deliver a job briefing to ensure all roadway workers understand the work, the hazards they will encounter, how to protect themselves against those hazards, and what to do should conditions change.

The RWIC **must** conduct a job briefing before work begins and anytime conditions change. The briefing must inform roadway workers of the general plan and procedure that the job will follow and the RWP measures that will be used. This must be done through a documented job briefing that focuses on:

a. Importance of everyone's attention and participation.
b. Safety rule of the day.
c. Type of on-track protection.
d. Working limits and third rail limits if applicable.
e. Track speeds.
f. Where to clear the track.
g. Intended use and hazards of the roadway maintenance machine(s) within working limits.
h. Note any standing equipment on tracks they may have the potential to foul.
i. Hotspot areas and no-clearance zones.
j. Known hazards within the work area and how the hazards will be addressed.
k. Speed restrictions.
l. Adjacent track protection.
m. Where and how to get medical attention.
n. Placement of watchmen or lookouts and inspection of their equipment (if applicable).
o. Placement of flagmen and inspection of their equipment (if applicable).
p. Definite work assignment for each employee.
q. Personal protective equipment required for the tasks to be performed.
r. Rotation and relief policy if necessary.
s. Weather conditions and visibility.
t. What to do when changes occur.
u. Questions and comments to ensure that every worker understands the safety requirements.
v. The job briefing is not complete until **all** roadway workers acknowledge an understanding of the RWP being used.

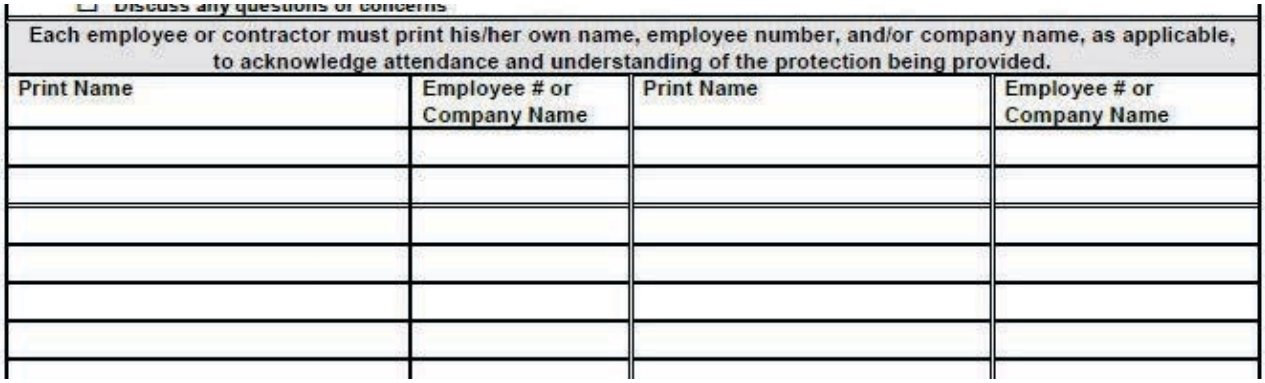
If the RWP will be changed, the RWIC must:

a. Immediately inform roadway workers to clear the track.
b. Conduct an additional job briefing before any roadway worker is allowed to return to the track.

EIC in charge of working limits

When a track is out of service and working limits have been established, the EIC in charge of the working limits must brief the RWICs for each individual gang or third party contractor working within the limits. This briefing may take place in person or over the phone or radio. The EIC in

charge of the working limits must add on page 2 of the LIRR Roadway Worker Protection Job Briefing Document Card, in the section below, the name of the RWIC for each individual gang or third party contractor he briefed. When the EIC in charge of the working limits is relieved, a face to face briefing must be held with the new EIC in charge of the working limits. The new EIC in charge of the working limits must fill out a new job briefing card and notify all RWICs working in the limits of the change. This notification can be done via phone or radio. The card must be retained by each RWIC in charge of the working limits for a minimum of ten days. The RWIC is required to have the completed job briefing card(s) available for presentation upon request.



☐ Discuss any questions or concerns

Each employee or contractor must print his/her own name, employee number, and/or company name, as applicable, to acknowledge attendance and understanding of the protection being provided.			
Print Name	Employee # or Company Name	Print Name	Employee # or Company Name

RWIC for individual gangs or third party contractors

When work spans multiple shifts, the RWIC being relieved is required to provide a face-to-face job briefing to his/her relief; addressing all requirements set forth in the LIRR Roadway Worker Protection On-Track Safety Manual and documented on the LIRR Job Briefing Document Card. The relief RWIC must document this briefing on a new LIRR Roadway Worker Protection Job Briefing Document Card. The new RWIC must also provide a briefing to all affected roadway workers under his/her protection with acknowledgement of the briefing recorded for each employee or third party contractor on Page 2 of the new Card (see above). This section must include the name of each employee and/or third party contractor and, if applicable, employee #. The individual RWICs must also communicate any changes to the RWIC in charge of the working limits. This Card must be retained by each RWIC for a minimum of ten days. The RWIC is required to have the completed job briefing card(s) available for presentation upon request.

Job Briefing Card

A Job Briefing Card is required to be filled out in its entirety prior to the start of any work. It is a form that will be used to plan all aspects of the job including hazards, the types of protection(s) that will be used, and emergency procedures that will be followed.

The EIC or RWIC is responsible for filling out the job briefing card and will not consider the job briefing complete until all roadway workers acknowledge understanding of the RWP to be used and have indicated this by printing their name on the job briefing card. Each employee must print his own name.

Instructions on completing the mandated Job Briefing Card is given during Employee Training and Corporate Development's (ETCD) Engineering, Stations, and M of E Roadway Worker in Charge classes or ETCD delivered Transportation On-Track Safety Class.

Procedure to complete the form:

1. The form must be completely filled out. Nothing will be left blank. If something is not applicable, circle or write N/A in the space provided.
2. The EIC/RWIC must complete the top portion of the card detailing his name, employee number, the date of the briefing, the location where the work will be done, the time the briefing is conducted, the branch where the work is taking place as well as on which track if applicable. Write the number of the Safety Rule(s) discussed.
3. The Type of protection used must include:
    a) Is the track out of service? If so, state the time and the limits.
    b) Is foul time being used? If so, state the time and the limits.
    c) Was the track made inaccessible? If so, state the time and the limits.
    d) Are watchmen being used?
    e) State the M.A.S. for the track that is being worked on, as well as the adjacent track. If a speed restriction is in place, state that speed.
    f) Is there equipment fouling the track?
    g) Is this a large-scale job?
    h) State what the lines of sight are for both directions.
    i) Is adjacent track protection required? If so, state which form is being used by circling whether it is Track Out of Service, Foul Time, Watchman, or by Inaccessible Track.
    j) State if there is a radio on-site.
    k) Are there any speed restrictions?
    l) State what the third rail limits are or if there is a third rail plan in effect and include the time that the third rail was de-energized.
    m) State what type of third rail protection is being used whether it is a third rail mat, a third rail blanket, or a third rail board. Record the expiration date of the mat or blanket.
    n) Are Flagmen utilized?
    o) Are crossing gates pinned?

p) Is there a catenary system in the work zone and list a contact name/phone number for such.

4. When receiving a job briefing from the EIC:
   a. State the EIC's name, department and cell phone number.
   b. State what the working limits are.
   c. State the time that you received the job briefing from the EIC.
5. 15 Second Travel Distance Chart will be used to calculate the minimum sight distance required for Watchman/Lookout to provide RWP by warning roadway workers of approaching trains or on track equipment so that roadway workers can be in a position of safety after clearing the track at least 15 seconds before the trains reach the work site as per the RWP On-Track Safety Manual. After determining the MAS, use the chart to determine the distance required.
6. **In the Emergency Contact Information section, the following must be included:**
   a. **Your location**, where the work is being performed.
   b. **The EMS Meeting Location**, include a specific address including Cross Streets and Intersections and be specific**. (This is where the Emergency Responders will meet you.)** If possible, have another employee meet them and bring them to the location of the accident.
7. The Job Briefing Discussion section shall be used by the EIC/RWIC for going over specific details and identifying possible hazards during the job briefing. Each box will be checked after discussion.
8. On the bottom of page 2 and on page 3 if necessary, each employee must print their own name and employee number to verify that they attended and understand all the different items covered in the job briefing including the scope of the work to be performed, the possible hazards that may exist, and the RWP procedures that have been put in place.
9. Each third party contractor must print their own name and include the name of the company that they are working for to verify that they were given a job briefing prior to the start of any work, and that they understand all the different items covered in the job briefing including the scope of the work to be performed, the possible hazards that may exist, and the RWP procedures that have been put in place.
10. Additional comments will be used to list any other concerns that weren't listed on the job briefing card or any further information that is required.

The job briefing form must be retained by the EIC/RWIC for a minimum of 10 days and must produce this card upon request from LIRR Management/Supervision or FRA Inspector.

Engineering, Transportation and Stations use the following three page briefing card:

Specifies who the RWIC is, what protection is being afforded, and Emergency Contact Information.

	The Long Island Rail Road Company Roadway Worker Protection Job Briefing Document	Document #: RWPJBC Rev. 20170101 Pg. 1 of 3

EIC/RWIC must fill out this card completely. If an item is not applicable, circle or write N/A in the box provided.							
Name:		Employee #:		Date:			
Work Location:							
Time Job Briefing Conducted:							
Branch:		Track:		Safety Rule:			
PROTECTION(S) USED							
Track Out of Service: Yes No N/A				Time:			
Limits:							
Foul Time: Yes No N/A				Time:			
Limits:							
Inaccessible Track: Yes No N/A				Time:			
Limits:							
Watchman: Yes No N/A		M.A.S.		Adjacent Track M.A.S.			
Fouling Equipment: Yes No N/A		Large Scale Job: Yes No N/A					
Line of Sight (WEST):		Line of Sight (EAST):					
Is Adjacent Track Protection Required? No Yes, if yes: Track OOS / Foul Time / Watchman / Inaccessible Track / Stop Work							
Radio On-Site: Yes No N/A		Speed Restrictions: Yes No N/A					
Third Rail Limits:				Time:			
Third Rail Protection being used if rail cannot be de-energized (circle below) Third Rail Mat (Expiration date) Third Rail Blanket (Expiration date) Board							
Transportation Flagman: Yes No N/A		Crossing Gates Pinned: Yes No N/A					
Catenary: Yes No N/A		Contact Name: Phone Number:					
When Receiving Job Briefing from EIC over Working Limits							
EIC Name:		EIC Department:					
EIC Cell Phone:							
Working Limits:							
Time of Briefing from EIC:							

15 Second Travel Distance Chart

Speed (MAS)	Distance (FT)	Speed (MAS)	Distance (FT)	Speed (MAS)	Distance (FT)	Speed (MAS)	Distance (FT)
10	220	30	660	50	1100	70	1540
15	330	35	770	55	1210	75	1650
20	440	40	880	60	1320	80	1760
25	550	45	990	65	1430		

EMERGENCY CONTACT INFORMATION			
Call 911	Your Location:		
EMS Meeting Location (Address, Cross Streets, Intersection, Be Specific):			
Movement Bureau	718.558.8204	Power Director	718.558.8285
MTA Police	800.836.6673	Track (Help Desk)	718.558.7711
Communications Control	718.558.8238	Signal Control	718.558.8331

This form must be retained by EIC or RWIC for minimum of 10 days

Specifies hazards related to the work being performed and the location it is being performed in as well as who attended the briefing (employees and third party contractors).

	The Long Island Rail Road Company Roadway Worker Protection Job Briefing Document	Document #: RWPJBC Rev. 20170101 Pg. 2 of 3

Job Briefing Discussion
By checking each box, the EIC/RWIC confirms the topic was reviewed and discussed.

- ☐ Discuss job scope
- ☐ Discuss form(s) of protection that will be utilized as listed above
- ☐ Discuss how many watchmen are needed; where they will be located; and the relief policy
- ☐ Discuss location to CLEAR
- ☐ Ensure all workers understand not to foul a track except in the performance of duty and only when on-track safety is established
- ☐ Inspect operating equipment /machines; verify operators are qualified
- ☐ Inspect tools and equipment; ensure they are in a good state of repair
- ☐ Discuss working safely around tools and equipment to be used
- ☐ Discuss PPE required and ensure PPE is available
- ☐ Discuss Housekeeping and clean up
- ☐ Identify all potential hazards: ☐ Electrical ☐ Fire ☐ Falls/Heights ☐ Falling Objects
  ☐ Chemical ☐ Public/Pedestrian ☐ Impact/Struck By ☐ None ☐ Other _____
- ☐ Identify significant objects and conditions in and around the work area:
  ☐ Utilities/Power Lines ☐ Building ☐ Bridge/Overpass ☐ Grade Crossing ☐ Switches
  ☐ Excavations ☐ None ☐ Other _____
- ☐ Discuss Safety precautions to be taken to address hazards and conditions identified above.
  Write out precautions to be taken below.
- ☐ Discuss Emergency Response procedures
- ☐ Discuss any questions or concerns

Each employee or contractor must print his/her own name, employee number, and/or company name, as applicable, to acknowledge attendance and understanding of the protection being provided.

Print Name	Employee # or Company Name	Print Name	Employee # or Company Name

Additional Comments Below

Name:	Employee #:	Date:

This form must be retained by EIC or RWIC for minimum of 10 days

Additional space to document who conducted the job briefing and who attended the job briefing. This is used during large scale jobs.

	The Long Island Rail Road Company Roadway Worker Protection Job Briefing Document	Document #: RWPJBC Rev. 20170101 Pg. 3 of 3

Work Location:		
Time Job Briefing Conducted:		
Branch:	Track:	Safety Rule:

Each employee or contractor must print his/her own name, employee number, and/or company name, as applicable, to acknowledge attendance and understanding of the protection being provided.			
Print Name	Employee # or Company Name	Print Name	Employee # or Company Name

This form must be retained by EIC or RWIC for minimum of 10 days

M of E uses the following two page briefing card:

	The Long Island Rail Road Company Roadway Worker Protection Job Briefing Document Maintenance of Equipment Department	Document: RWPJBCME Rev:4 17.01.01 Pg. 1 of 2

Name:	Employee #:	Date:
Work Location:		
Time Job Briefing Conducted:	Radio On-Site: Yes No Channel:	
Safety Rule of the Day:		
Nature of task(s) to perform:		
PROTECTION(S) USED		
☐ Inaccessible Track		
Track(s):		
Method rendering track(s) inaccessible:	☐ Switch	☐ Flagman
Locomotives or other equipment within limits? Yes No	Rendered Inoperative? Yes No	
☐ Train Approach Warning (Lookout) 15 Second Train Approach Distance for Yards is 330'		
Visibility Distance (WEST):	Visibility Distance (EAST):	
Lookout Proficiency Verified by RWIC: Yes No		
Blue RWP Bag and Contents Inspected for Contents and Condition: Yes No		
☐ Foul Time (Babylon & Ronkonkoma Car Wash Facilities Only)		
Tower contacted (circle one): BABYLON DIVIDE		
Request repeated and confirmed? Yes No		
Time granted: AM / PM		
Time duration granted:		
Third Rail De-Energized: Yes No		
Time Third Rail De-Energized:		
Track(s) With De-Energized Third Rail:		
RWP Job Briefing MUST be Performed Prior to Roadway Workers Fouling the Tracks.		

EMERGENCY CONTACT INFORMATION			
Call 911	Your Location:		
EMS Meeting Location: (Address, Cross Streets, Intersection, Be Specific):			
Movement Bureau	718.558.8204	Power Director	718.558.8285
MTA Police	800.836.6673	Track (Help Desk)	718.558.7711
Communications Control	718.558.8236	Signal Control	718.558.8331

This form must be retained by RWIC for minimum of 10 days

	The Long Island Rail Road Company Roadway Worker Protection Job Briefing Document Maintenance of Equipment Department	Document: RWPJBCME Rev:4 17.01.01 Pg. 2 of 2

Job Briefing Discussion
By checking each box, the EIC/RWIC confirms the topic was reviewed and discussed.

- ☐ Discuss job scope
- ☐ Discuss form(s) of protection that will be utilized as listed above
- ☐ Discuss how many watchmen are needed; where they will be located; and the relief policy
- ☐ Discuss location to CLEAR
- ☐ Ensure all workers understand not to foul a track except in the performance of duty and only when on-track safety is established
- ☐ Inspect operating equipment /machines; verify operators are qualified
- ☐ Inspect tools and equipment; ensure they are in a good state of repair
- ☐ Discuss working safely around tools and equipment to be used
- ☐ Discuss PPE required and ensure PPE is available
- ☐ Discuss Housekeeping and clean up
- ☐ Identify all potential hazards: ☐Electrical ☐Fire ☐Falls/Heights ☐Falling Objects ☐Chemical ☐Public/Pedestrian ☐Impact/Struck By ☐None ☐Other _____
- ☐ Identify significant objects and conditions in and around the work area: ☐Utilities/Power Lines ☐Bridge/Overpass ☐Grade Crossing ☐Switches ☐Excavations ☐None ☐Other _____
- ☐ Discuss Safety precautions to be taken to address hazards and conditions identified above. *Write out precautions to be taken below.*
- ☐ Discuss Emergency Response procedures
- ☐ Discuss any questions or concerns

Each employee or contractor must print his/her own name, employee number, and/or company name, as applicable, to acknowledge attendance and understanding of the protection being provided.

Name	Employee # or Company	Name	Employee # or Company

Additional Comments Below

This form must be retained by RWIC for minimum of 10 days

POLICY AND PROCEDURES FOR HANDLING ROADWAY WORKER PROTECTION CHALLENGE

These policies and procedures are written in accordance with the provisions of 49 CFR 214 and the Operating Rules of the Long Island Rail Road.

All LIRR employees must follow these policies and procedures when they challenge the Roadway Worker Protection Procedures in effect at a job location.

The RWP Procedure Challenge Form is provided to communicate and document the challenge. The form should be completed as follows:

a. The roadway worker making the challenge should fill out the employee section of the form and give it to his immediate RWIC.
b. The immediate RWIC will discuss the specific concerns and explain the RWP procedures in effect at the work site. The immediate RWIC will fill out the section of the form and indicate whether: the employee is satisfied with the explanation; if a change in on-site procedures is necessary; or, if a disagreement exists, then all employees will remain in the clear until a review by the Supervisor is complete.
c. The Supervisor will review the specific concerns of the roadway worker and the immediate RWIC. The Supervisor will fill out his/her section of the form and indicate whether: the employee is satisfied with the explanation; if a change in on-site procedures is necessary; or if a disagreement still exists.
d. The decision of the Supervisor is final and the challenge is considered resolved at this level. Upon explaining to the roadway workers what changes will be made at the work site or that the challenge is not valid, the Supervisor will direct the employee back to work.

Roadway Worker Protection Review Board

To ensure consistent application of the RWP Procedures, a Review Board will be established.

A representative of Corporate Safety will chair the Board. The Board will include the Chief Engineer (or representative), Chief Transportation Officer (or representative), Chief Mechanical Officer (or representative), Chief Stations Officer (or representative), and a representative for Labor.

The Review Board will evaluate all RWP Challenge Forms as necessary. Written report of their meetings will be provided to the Senior Vice President Engineering, Senior Vice President Operations, and the Vice President Corporate Safety.

Roadway Worker Protection Challenge Form

RWP PROCEDURES CHALLENGE FORM

This section is for the Roadway worker who is challenging the RWP Procedures

Roadway Worker Name	**Title/Job**	**Employee No.**
Headquarters	**RWIC**	**Time**
Weather Condition	**Supervisor**	**Date**

Work Conditions	**Track & Milepost**	**Station/Town**

In this section the Roadway Worker should describe their specific concerns regarding the RWP Procedures in effect at the location that that they are working. Indicate rule or page number if known.

Signature, Time, and Date required: **am pm / /**

In this section the RWIC at the location should indicate what actions they took regarding the concerns that the Roadway Worker indicated above. If the employee is still not satisfied with the explanation or action indicate what the disagreement is and refer the matter to the Supervisor. Until the evaluation by the Supervisor is complete, the employee remains in the clear at the work site.

Signature, Time, and Date required: **am pm / /**

In this section the Supervisor in charge of the location should indicate what actions he/she took regarding the concerns that the Roadway Worker indicated above. The decision of the Supervisor is final and the challenge is considered resolved at his level. Upon explaining to the employees what changes will be at the work site or that the challenge is not valid, the Supervisor will direct the employees back to work.

Signature, Time, and Date required: **am pm / /**

STANDARD OPERATING PROCEDURE
ENGINEERING WORK EQUIPMENT
Revision "C"

Introduction

The Long Island Rail Road established this Standard Operating Procedure (SOP) for the purpose of informing all drivers/operators of either hi-rail or rail bound vehicles as to their personal responsibilities related to Work Equipment. Work Equipment is defined by the LIRR as a Track Car or "a roadway maintenance machine, not classified as an engine, which is operated on track for inspection or maintenance. It may not shunt track circuits, or operate signals and will be governed by rules and special instructions for trains other than passenger trains." Work Equipment can be in the form of a hi-rail truck or a track surfacing machine.

Information covered in this procedure include areas of safety, preparation of equipment, and movement of equipment under various operating rules. Rules and regulations such as LIRR Rules of the Operating Department, LIRR Employee Timetable Special Instructions, LIRR Corporate Safety Rule Book for Employees, LIRR Roadway Worker Protection Program, Federal Railroad Administration 49 CFR Part 214 Subpart D—On-Track Roadway Maintenance Machines and Hi-Rail Vehicles, American Railway Engineering and Maintenance-of-Way Association (AREMA) and equipment manufacturer's recommended practices are applied within this procedure.

Not all drivers/operators are "Qualified" under the LIRR Rules of the Operating Department, therefore we must insure for their safety and the safety of others. Anyone who operates a piece of Work Equipment must have a general understanding of the environment in which they are working. As you read through this procedure, some of this information will "quote" regulations which at times will not involve an "unqualified" driver/operator, but do pertain to a "qualified" track car driver or pilot. This information should be understood by every driver/operator in order to have a better understanding of the work environment; however the track car driver or pilot is always in charge of the Work Equipment. This information will be in italics in order to highlight some important procedure or practice which all operators must follow.

As all LIRR employees know *"Safety is of the first importance in the discharge of duty. In cases of doubt or uncertainty, the safe course must be taken."*

Safety

The safety of everyone involved in the operation and maintenance of the roadway maintenance machine is the most important consideration.

a. Always watch for other workers working close to the machine.
b. Personal protective equipment (PPE) must be worn in accordance with railroad requirements (e.g. LIRR Roadway Worker Protection Program and MTA Long Island Rail Road Corporate Safety Rules for Employees, Section 400); federal and state regulations (e.g. Occupational Safety and Health – OSHA, NYS Public Employees Safety and Health – PESH, etc.); and industry standards (e.g. American National Standards Institute– ANSI).

c. It is the responsibility of the operator to obtain a job briefing prior to moving the roadway maintenance machine and he must fully understand the conditions which they might meet during the day, such as:
    i. Clearance.
    ii. Congestion.
    iii. Type of track:
        1. Main Track
        2. Secondary Track
        3. Siding
        4. Controlled Siding
        5. Single Track
        6. Two or More Tracks
        7. Yards
    iv. Work to be accomplished.
    v. Physical characteristics:
        1. Crossings
        2. Bridges
        3. Curves
        4. Stations
    vi. Distance to travel.
    vii. Speed of track.
        1. *Maximum Authorized Speed – The highest speed that is permitted over a specific portion of the railroad. It may be authorized by the Special Instructions of the current timetable, Rules of the Operating Department, or any other publication authorized by the General Superintendent – Transportation.*
        2. *Reduced Speed – A speed at which a train (roadway maintenance machine) can be stopped short of another train or obstruction.*
        3. *Slow Speed – a speed not exceeding 15 miles per hour.*
        4. *Restricted Speed – a mode of operation, at which a train can be stopped within one half the range of vision, short of the next signal, another train, obstruction, derail, or switch improperly lined, looking out for broken rail or crossing protection not functioning, not exceeding 15 miles per hour.*
    viii. Other roadway maintenance machines and equipment in vicinity.
    ix. Track protection provided.
        1. Placing a track out of service:
            a. Form L/ Form D
            b. General Notice
            c. Movement under Rules of the Operating Department
    x. Crossing Protection provided.
        1. Gates Working as Intended – Proceed 5 mph unless otherwise specified ensuring that vehicle is prepared to stop and warning signals are sounded
        2. Jumpers Applied to Crossing (Gates up)
            a. Appropriately equipped flagger for each direction of traffic or a Police Officer is present – roadway maintenance machines must come to a complete stop even if the crossing is protected by flagger or Police Officer, then proceed at 5 mph unless otherwise specified.

b. *No flagger or Police Officer present – proceed at restricted speed, but not to exceed 5 mph, stopping prior to crossing and arranging for proper flagging.*

xi. Weather Conditions for the day (Weather will have an effect as to the way a machine will stop or accelerate).

xii. Use appropriate channel for radio communication.

d. It is the responsibility of the driver/operator to read and understand the operator's manual(s) *before* operating any roadway maintenance machine. This SOP *does not* take the place of that manual, it is only to supplement that information and to convey any additional information which was not covered in the manual for the machine.

e. Keep the roadway maintenance machine clean. Remove accumulations of grease and oil, which could be a safety hazard.

f. Never bypass a safety feature on the roadway maintenance machine unless it is an emergency and this is only to be done under the direction of field supervision or Maintenance of Way (MW) Mechanic. Bypasses that have to be made because of an emergency must be corrected immediately thereafter.

g. Never leave a roadway maintenance machine running and unattended. If you must leave a machine, inform the employee in charge, shut down the machine and secure against movement.

Preparation of Equipment for Duty

Be familiar with the safety devices and instructions on your roadway maintenance machine. These are listed in the operator's manual. Protective devices must be secured and in place before machine is moved.

A fully equipped watchman's bag must be available when on-track roadway maintenance machines and hi-rail vehicles are operated over trackage subject to a railroad operating rule requiring a watchman. This requirement applies to each on-track roadway maintenance machine and hi-rail vehicle that is operated alone or as the leading or trailing piece of equipment in a roadway group operating under the same occupancy authority (49 CFR Part 214.521).

The driver/operator of an on-track roadway maintenance machine shall inspect the machine for compliance prior to using the machine at the start of the operator's work shift. Equipment must be inspected each day or shift it is in use as follows:

a. Hi-rail equipment (defined as a roadway maintenance machine that is manufactured to meet Federal Motor Vehicle Safety Standards and is equipped with retractable flanged wheels so that the vehicle may travel over the highway or on railroad tracks) must complete Work Vehicle Inspection Form TC-01.

b. Roadway maintenance machines designed for travel on rail only must complete Engineering Equipment Operator Daily Report Form MV-603.

c. Mobile cranes and booms must complete the Mobile Crane and Boom Truck Operators Inspection Form MV-607.

d. Any item found to be non-compliant must be indicated on the forms. If any non-compliant item is safety sensitive it must reported to the Supervisor or MW Mechanic who will make the determination if the equipment must be taken out of service.

e. The daily inspection forms shall be kept in the equipment with the previous day's inspection and then turned into the field office. It will then be forwarded to the MW Repair Shop.

Some items to inspect that are common to all equipment are:

a. Check all lights
b. Check horn
c. Check radio
d. Check all Guards
e. Check Back-Up Alarm
f. Check Mirrors
g. Check Fire Extinguisher
h. Check First Aid Kit
i. Check Fluid Levels
j. Check for leaks
k. Check brakes visually for performance

If towing a pushcart, you must insure that all material or tools are secured properly to the deck. No items should be hanging over the sides. Insure the weight limit of the cart has not been compromised.

Test brakes immediately after starting to travel.

Movement of Track Cars (adapted from LIRR Rules of the Operating Department)

Track Car Drivers or Pilot will be in charge of track cars. Track cars will be governed by rules and special instructions for trains other than passenger trains. Track cars must not trail, through spring switches, electric yard switches or automatic safety switches (**NOTE:** To trail through a switch, the direction of travel would be from heel of frog toward the point of switch).

a. Spring Switch – A switch equipped with a spring mechanism, which will restore the switch points to the normal position after having been trailed through (marked by a round disc with the letter "SS").
b. Automatic Safety Switch – A switch identified by a yellow switch stand. Trains may make a trailing point moves through the switch without previously aligning it by hand.
c. Manual Switch – A switch that must be aligned by hand before a train makes a trailing point movement through the switch.
d. Electric Lock Switch – A hand-operated switch equipped with an electrical device, which restricts the movement of the switch.

Track cars must not trail through electric yard switches unless aligned by Block Operator or manually aligned by track car driver.

Track Cars must not move greater than 1 MPH over the diverging route of *Spring Rail Movable Point Frogs.*

a. A *Spring Rail Movable Point Frog* is an appliance that contains, among other things, a fixed frog point, a moveable spring wing rail, a rigid wing rail, from hold-down assemblies, and spring box. The spring frog design provides a continuous bearing surface for the wheel tread as it traverses through the frog point area on the straight side of the turnout.

The Track Car Driver or Pilot must insure that the switch is properly lined before making a trailing point movement through the switch.

When a track car number exceeds four numerals, it will be designated by the last four numerals.

The following Rules with their subparts apply mostly to trains, but where reference is made to track cars, those rules applied to Work Equipment. Other rules are general in nature and apply to both trains and track cars.

Track cars, if equipped, will comply with Rules 17 and 19 (LIRR Operating Rules for equipment lighting requirements). Track cars that are not equipped to comply, will display a white light to the front and a red light to the rear at all times during operation.
Rule 17 – A bright headlight will be displayed to the front of all trains. It must be extinguished when a train turns out to meet another train and is stopped clear of the main track. It must be dimmed as follows:

a. While standing or passing through yards where other engines are working.
b. When approaching stations at which stops are to be made or at which other trains are receiving or discharging passengers.
c. When approaching a station where train orders are to be received or when on a main track at meeting points.
d. When approaching fixed signals, if the view of the fixed signal is thereby improved.
e. On two or more tracks, when approaching a train in the opposite direction.

NOTE: *When approaching or passing over public crossing at grade, the headlight must not be dimmed.*

If the headlight(s) fails en route, the operator must ensure that:

a. The Movement Bureau (in the case of a track car, the MW Repair Shop) is notified as soon as practicable.
b. A white light is substituted in place of the headlight.
c. The engine whistle or horn is sounded frequently.
d. If equipped, the engine bell is rung continuously.
e. Where necessary, the speed of the train is reduced.

Rule 19 – The following signals will be displayed on the rear of every train at all times as a marker:

a. A fixed electric marker illuminated to show red on each side of the rear of the train or an electric flasher illuminated to show amber to the rear of the train.
b. A train on which the markers become inoperative will display on the rear of the train by day, a red flag, and by night a red light. Night signals will be displayed on the rear of trains while passing through tunnels.

Rule 14L - All track cars must sound warning signals when approaching each highway crossing at grade. The signals prescribed are illustrated by “o” for short sounds and “-” for longer sounds. The sound of the horn should be distinct with intensity and duration proportionate to the distance the signal is to be conveyed. The signal for public crossing at grade, roadway workers on or near tracks, or approaching passenger stations is “- - o –”).

Track cars must stop short of the crossing:

a. If the grade crossing is not clear for movement.
b. If proper crossing protection is not working.
c. If a person or animal is in the path of travel.
d. If you are being flagged to stop.
e. If you are approaching a crossing and view highway traffic which is restricting in any way, stop your equipment clear of the crossing, and provide flagging protection, also warn any track cars which are following you to proceed with caution via radio.

If a person or animal is near the equipment:

a. Reduce speed.
b. Sound the horn as prescribed in Rule 14L.
c. Be Prepared to Stop.

Constantly look out for obstructions or unsafe conditions in the direction you are moving. If you cannot see ahead, designate another employee to keep a lookout.

Good communication between machines moving in a group is a must. Let other machines know when you are stopping or have cleared points of interest via fixed mount or hand held radio. Example: "Long Island TC038 to Long Island TC826, I have just cleared Smithtown Station proceeding west", or "Long Island TC038 to Long Island TC826, I am stopping at Smithtown Station, proceed with caution".

Operating Roadway Maintenance Machines

You must be qualified or qualifying under the supervision of a qualified individual. You must keep the Operator's Manual available on the equipment so you can refer to it to it to determine safe operating procedures. You must communicate with any individual(s) who are near the equipment regarding:

a. Normal equipment operating procedures.
b. Location of individuals working around or observing the equipment.
c. Operator's blind spots.
d. Signals warning that the equipment will move.
e. Do not get closer than 10 feet to individuals working on the track in front or behind your equipment unless:
    i. The operation requires individuals to be closer, and
    ii. You have communicated with the affected individuals.

Keep at least 30 feet between standing or working equipment to avoid collisions. Increase the distance between machine(s) when:

a. The Equipment is working on territory where grades or curves limit the sight distance, or
b. The rail is wet, icy, or oily.

EXCEPTION: When the operation requires, the 30 foot distance between equipment may be reduced after arrangements have been made with all affected individuals to ensure that no ground individuals are between the equipment.

Consider the following factors when determining a working speed for the equipment:

a. Location of individuals required to be on the track in the area.
b. Operator visibility.
c. Braking distances.
d. Speed required doing the job.
e. Physical characteristics of the track.
f. Environmental conditions.

Do not foul an adjacent track with any part of the equipment unless:

a. The adjacent track is a Main Track, Secondary Track or Siding and placing track out of service or foul time has been established on the track.
b. The adjacent track is a yard track and the track has been made inaccessible.

Test the brakes immediately after starting to travel.

When employees are getting on, getting off, or between self-propelled equipment, disengage the clutch or gears and set brakes to hold.

Do not allow anyone to distract you or interfere with your duties. If this happens, stop all movement.

Movement under Timetable Special Instructions

Track Car Drivers or Pilots must be qualified on the operating rules and physical characteristics of the territory over which they are to operate. Employees who are not qualified may operate track cars only when under the direct supervision of a qualified employee.

Track Car Drivers or Pilots must carry and be familiar with all rules and special instruction within the current timetable.

LIRR Special Instructions 1080-B Before permitting a track car (including SRS and TC82) to enter the main track where Rule 410 is in effect, the block operator, in addition to complying with the rules governing the movement of track cars, must know that the track to be used is clear of all trains to the next interlocking. Track cars (including SRS and TC82) must not exceed restricted speed when operating on a track where Rule 410 is in effect, unless an aspect of Absolute-Clear, Absolute-Medium-Clear, Absolute-Slow-Clear or an aspect specified in the timetable Special Instructions is received on the home signal. They will then operate in accordance with the signal indication, not exceeding 40 MPH, approaching the next home signal prepared to stop.

Restricted Speed – A mode of operation, at which a train can be stopped within one half the range of vision, short of the next signal, another train, obstruction, derail, or switch improperly lined, looking out for broken rail or crossing protection not functioning, not exceeding 15 miles per hour.

Operation of Maintenance of Way (MW) Machinery

Employees must:

a. Be sure all workheads, jackbeams, jackfeet, booms and any other major moving components are securely locked, chained and/or pinned in their safe position before traveling.
b. Have an understanding of any hand signals, which ground personnel might use during the day. These include LIRR Rules of the Operating Department Rule 12 for train and equipment communication; ANSI B30.5 or OSHA Title 29 CFR Part 1926 Appendix A to Subpart CC– Standard Hand Signals for crane and boom operations.
c. The operator must remain at his control station at all times while the machine is being operated.
d. The operator must not operate machine controls in an awkward position, such as cross-handed or cross-legged. Always operate in a comfortable and safe position.
e. Unless equipped to carry additional personnel, never use the deck or shroud of the machine for a work platform or personnel carrier.
f. Each roadway worker transported on an on-track roadway maintenance machine is required to have a safe and secure position with handholds, handrails, or a secure seat. Each position shall be protected from moving parts of the machine which could entangle clothing or body extremities.
g. Always look around before you back up. Be sure that everyone is in the clear.
h. Maintain a safe distance from other machines and vehicles.
i. Don't obstruct your vision when traveling or working.
j. Always know and maintain a safe stopping distance for all track conditions and travelling speeds.
k. Be extremely alert during any hazardous operating conditions. Operating conditions can vary as work progresses and as weather changes.
l. Be sure there is always easy access to the cab doors or exit. In case of a life threatening emergency, be sure you can quickly exit the machine in the safest manner.
m. Do not park or stand over open flame switch heaters or other burning heat source.
n. Dust, fog, heavy rain, etc., can reduce your visibility. Reduce your speed as visibility decreases. Always travel and work with the running lights on to provide maximum visibility for other traffic.
o. When operating on grades, do not allow machine to over speed. Select proper gear speed before starting downslope.
p. If you must tow a machine or other equipment, always refer to the manufacturer's recommendations before you start. You must know that braking capacity of the tow vehicle will handle the machine/cart being towed. If not then the tow vehicle must be equipped with a service connection to apply the brakes on the towed machine/cart. Use a tow bar of adequate capacity to safely start and stop the towing operation.
q. Do not leave one end of a tow bar coupled if the other end has been uncoupled.
r. Never leave a running machine unattended. If you must leave the machine, shut it down and set the brakes or chock the wheels.

Shutting Down the Machine

Follow the detailed shutdown procedure given in the operator's manual. The shutdown procedure should include:

a. Stop the machine – using service brake.
b. Set parking brake, or otherwise secure machine to prevent movement.
c. Stop the engine.
d. Bleed down the air system to assure the parking brakes are applied, or set manual parking brake.
e. Shut off master electric switch.
f. Lock all locking devices and remove keys to control vandalism.
g. Walk around machine to check for any condition, which might have developed during the day, such as leaks, broken welds, etc. If anything is found, note on daily inspection sheet.
h. Turn in inspection sheet to field supervisor, and if needed, inform mechanic of any problems that might need attention.
i. Maintain good housekeeping of machine; remove all garbage or debris from cab of machine and dispose of properly.
j. Before leaving machine, insure all lockable areas are secured and all brakes are applied and wheels chocked.

In Case of Emergency
Notify immediate supervision via radio or other form of communication. Take immediate action to protect other employees and commuting public.

Rule 703 Emergency radio transmissions will begin with the word "EMERGENCY" repeated three times to obtain use of radio channels for the initial report of conditions endangering train movements. These calls will only be used to cover reports of collisions, (including any impact between railroad on-track equipment and a motor vehicle at a rail-highway crossing), derailments, fires, storms, washouts, obstructions to tracks and other hazardous conditions which could result in death or injury, damage to railroad property or a disruption of railroad operations. Emergency calls must contain as much complete information about the incident as possible.

All employees must give absolute priority to an emergency communication. Unless they are answering or aiding the emergency call, employees must not send any communication until they are certain no interference will result.

Challenge Form

On-Track Roadway Maintenance Machines and Hi-Rail Vehicles Challenge Form

This section is for the Operator who is challenging On-Track or Hi-Rail Maintenance Machines under 49 CFR Part 214

Operator's Name	Title/Job	Employee No.
Headquarters	Supervisor	Time
Weather Condition	Type of Equipment	Machine No./ TC No.
Date of Inspection	Daily Inspection Form Attached	Location of Machine/Truck

In this section the Operator should describe their specific safety concerns regarding the On-Track Roadway Maintenance Machine or Hi-Rail Vehicle covered under 49 CFR Part 214.

Signature, Time and Date Required am pm / /

In this section the Supervisor at the location should indicate what actions were taken regarding the concerns of the Operator indicated above. If the Operator is still not satisfied with the results, or action taken, indicate what the disagreement is and refer the matter to the MW Machinery Supervisor. Until the evaluation by the MW Machinery Supervisor is completed, the machine remains in the clear at the work site.

Signature, Time and Date Required am pm / /

In this section the MW Machinery Supervisor should indicate what actions he/she took regarding the concerns that the Operator indicated above. The course of action that the MW Machinery Supervisor has taken is final and the challenge is considered resolved at his level. Upon explaining to the operator what actions will be or will not be taken, resulting from his/her challenge, the Supervisor will direct the employee back to work.

Signature, Time and Date Required am pm / /

RAILROAD COMMUNICATIONS

General Rules

Radio and Wireless Communication Rules and Procedures

(LIRR Rules of the Operating Department)

Rule 701 A working radio is one with an adequate power source, free of mechanical malfunctions, that can both transmit and receive communications to and from the railroad's control center (Movement Bureau or Block and/or Interlocking Stations) from any location within the system.

The Long Island Rail Road radio communication system consists of:

a. Fixed locations – Movement Bureau, Block and/or Interlocking Stations, Yard Offices and Wayside radio phones.
b. Mobile Units – Trains, Track Cars, Maintenance of Way equipment and Company vehicles.
c. Portable Units – Hand held portable units.

Radios are provided with multiple channels. The channels designated for use are as follows:

Train to Fixed Locations
CHANNEL ONE (1) or CHANNEL THREE (3)

Block and interlocking stations are equipped with Channel 1 or Channel 3 as specified on the station pages of the current timetable. The designated channel will permit a train to communicate with the Block Operator controlling the track on which it is operating. In addition, each channel will provide for communications between trains.

The fixed locations of wayside radio telephones and instructions governing their use are specified in the special instructions of the timetable.

Movement Bureau, Train Dispatchers
CHANNEL TWO (2)

Channel 2 is to be used only when it is necessary to contact the Movement Bureau for instructions or to report emergency conditions.

Yard and Freight Operations (Except Babylon Yard)
CHANNEL THREE (3)

Except as previously outlined, Channel 3 is also for the use of yardmasters and drill crewmembers while performing yard and terminal switching operations. It may also be used in road freight switching operations in conjunction with portable units assigned to freight crewmembers.

Maintenance of Equipment, Intra-Train and Babylon Yard
CHANNEL FOUR (4)

Channel 4 must be used for communications between Maintenance of Equipment car inspectors and others when making tests or repairs to equipment. It may also be used for communication between locomotive engineers and maintenance employees when maintenance is being performed on the train.

Channel 4 must be used for communication between crew members of multiple unit passenger trains instead of the public address system.

Channel 4 must be used for all radio transmissions with the Yardmaster, Babylon.

Rule 702 Each radio and all primary and redundant wireless communication equipment specified in sections (a), (b) and (c) of this rule shall be tested as soon as practicable to ensure that the equipment functions as intended prior to departure from a terminal. The following are exceptions to the testing requirement:

1. Crew Equipment turns – When a crew turns with its equipment and the working radio and communications redundancy are functioning as intended.
2. Crew Change Points – At any point where crews change equipment and a face to face verbal exchange of information between crews indicates that the working radio and communications redundancy are functioning as intended.

The test of the radio shall consist of an exchange of voice transmissions with another radio. The employee receiving the transmission shall advise the employee conducting the test of the clarity of the transmission.

Any radio or communications device found not to be functioning as intended when tested shall be removed from service and the Movement Bureau or designated representative of the General Superintendent – Transportation notified immediately.

a. The occupied controlling locomotive in a train must be equipped with a working radio. To allow for possible radio failure en route, the train also must have a form of redundant working wireless communications upon departure from a terminal. A communication redundancy means a working radio on another locomotive in the consist or other means of working wireless communication. In the event a radio fails on the controlling locomotive en-route, the train dispatcher must be notified as soon as practicable. Contacting the Block Operator (in compliance with Special Instruction 5000) will constitute a radio test for the purpose of this rule and a separate call need not be made.
b. Maintenance of Way equipment operating without locomotive assistance between work locations shall have a working radio on one such unit in each multiple piece of Maintenance of Way equipment traveling together under the same movement authority. A unit of Maintenance of Way equipment traveling alone must be similarly equipped.
c. Roadway workers (RWIC) designated to provide on-track safety for a roadway work group or groups and each lone worker shall be provided and where practicable, shall maintain access to a working radio. When immediate access to a working radio is not available, the employee responsible for on-track safety or lone worker shall be equipped with a portable unit capable of monitoring transmissions from train movements in the vicinity.

Rule 703 Emergency radio transmissions will begin with the word “EMERGENCY” repeated three times to obtain use of radio channels for the initial report of conditions endangering train movements. These calls will only be used to cover reports of collisions, (including any impact between railroad on-track equipment and a motor vehicle at a rail-highway crossing),

derailments, fires, storms, washouts, obstructions to tracks and other hazardous conditions which could result in death or injury, damage to railroad property or a disruption of railroad operations. Emergency calls must contain as much complete information about the incident as possible.

All employees must give absolute priority to an emergency communication. Unless they are answering or aiding the emergency call, employees must not send any communication until they are certain no interference will result.

Rule 704 When their duties involve the use of a radio, employees must have the radio on and tuned to the proper channel at all times. The volume must be adjusted so that all transmissions can be heard.

Rule 705 Prior to transmitting by radio, an employee must listen to ensure that the channel on which he intends to transmit is not in use. All transmissions must be repeated by the employee receiving them except:

1. Transmissions related to yard switching operations.
2. Transmissions that are general in nature and do not contain any information, instruction or advice, which could affect the safety of railroad operation.

Employees must ensure that radio communication with the proper persons 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 requirements of these rules, except EMERGENCY communications, shall not be acted upon and shall be treated as though not sent.
An employee receiving a radio call must acknowledge the call immediately unless doing so would interfere with safety.

Rule 706 Employees shall not knowingly transmit:

1. Any false distress communication.
2. Any unnecessary, irrelevant or unidentified communication.
3. Any obscene, indecent or profane remark.

Rule 707 The following procedures will govern identification and content of messages when using the radio.

When originating or initially responding to a radio call, the employee must:

1. Identify their employing railroad, i.e. Long Island or New York and Atlantic.
2. Identify their base station, wayside station or yard station by name or other designation of station and location, i.e., Long Island Hall Tower.
3. Identify their mobile radio unit by:
    a. Schedule number if on a scheduled train, i.e., Long Island Train 2710.
    b. Engine number and direction if on an extra train, i.e., Long Island Extra 420 East. If the engine belongs to another company, that company's initials must precede the engine number, i.e., NYAR Extra 153 East.
    c. Other appropriate mobile unit designation, i.e., Long Island Unit 20.

Communication must be as brief as possible and must use these key words:
"ROGER" – to signify that the message was received and understood. When required by Rule 705, "ROGER" also means that you have repeated the information correctly.
"OVER" – except for transmissions relating to yard switching operations, at the close of each transmission to which a response is expected, the transmitting employee shall say "OVER" to indicate to the receiving employee that the transmission is ended.
"OUT" – except for transmissions relating to yard switching operations, at the close of each transmission to which no response is expected, the transmitting employee shall state the employee's identification followed by the word "OUT" to indicate to the receiving employee that the exchange of transmission is complete.

Telephone Use

Rule 712 Wayside telephones are located at or near block signals, except between Nassau and Locust and at home signals. Instructions pertaining to their use are indicated in the special instructions of the timetable.

Before using a wayside telephone employees must listen to assure themselves that the telephone line is not already in use. Employees using telephone lines must yield promptly for calls pertaining to EMERGENCIES and train movement

Rule 713 All telephone communications relating to block operations, the movement of trains or on-track equipment or the transmitting of Form L's must conform with established radio communication procedures and be as brief as possible.

The Conductor (or qualified crewmember designated by the conductor), Engineer, roadway worker designated to provide on-track safety or other qualified employees must personally receive all Form L's transmitted over the telephone and make all verbal arrangements pertaining to the movement of the train or on-track equipment.

When contacting the Block Operator or Train Dispatcher by telephone, employees must identify themselves providing their name, occupation and all relevant information regarding the movement of the train or on-track equipment.

The Block Operator or Train Dispatcher must identify themselves by name and station.

All verbal arrangements and instructions regarding the movement of trains or on-track equipment must be repeated by the employee receiving them. This includes instructions pertaining to requesting permission to occupy or report clear of a track and the request for Foul Time.

TRANSPORTATION EMPLOYEE ADDENDUM

All Transportation Department personnel responsible for the on-track safety of others shall be familiar with the contents of this manual. Questions concerning the application and/or interpretation of any of the procedures contained herein should be directed to the Superintendent - Operating Rules, Safety, and Regulatory Compliance at (718) 558-3068.

All questions relating to the administrative section of flag protection procedures will be addressed by the Transportation Flag Office at (631) 893-2789/2799 between 7:00 a.m. and 3:00 p.m. weekdays.

General Information

The Long Island Rail Road will not require or permit a roadway worker who is a member of a roadway work group to foul a track unless on-track safety is provided.

The Rules of the Operating Department requires working limits to be established by one of the procedures indicated below whenever a track is fouled by either employees and/or equipment.

Flag protection must be provided whenever a third party contractor encroaches within 15 feet of the centerline of track. This also applies or is working with equipment or materials that have the potential to get within 15 feet of the centerline.

Assignment of Roadway Worker in Charge

Under normal circumstances the senior conductor, who is also a qualified Roadway Worker in Charge (RWIC), assigned to a project will be designated as the RWIC. The RWIC is generally responsible for the establishment of working limits, conducting or ensuring that the job briefing was performed and the supervision of all other matters related to the protection of the employees and the railroad on the assigned job/project. The employee designated as RWIC will report 30 minutes earlier than the balance of the train service protection personnel in order to coordinate the work assignments with the contractor and determine the appropriate working limits and communicate that information to the train dispatcher and or console operator. Please see page 18 for circumstances and procedures related to Employee in Charge requirements.

Designation and Selection of the RWIC

The senior employee on regular assignments where three or more employees report to the same flagging site, will be designated the RWIC.

At the creation of the road and yard crew board the system will generate a listing (R.W.I.C. site listing) of all road and yard flag assignments by location, and those employees that work at each location in seniority order.

Covering a regular crew book RWIC flagging assignment

At the creation of the road and yard crew board, the dispatcher will ascertain if any RWIC in from the sites with 3 or more flagmen are scheduled (i.e. RFC 103 J. Doe D/S).

The dispatcher will then check the RWIC site listing for the next senior working employee at that site, verify he is available to work, with proper rest for the 30 minute early report, and notify this employee that he will be the RWIC for that day.

Attempts to notify the RWIC will be made up to 4 hours prior to the report of the RWIC assignment. In the event the dispatcher cannot notify this employee, by this time, a determination will be made of the next eligible RWIC, and he will be called. Upon being contacted, the RWIC must accept the position as per the collective bargaining.

Upon notification, a notation of such will be made on the RWIC site listing. This listing will be forwarded to the payroll section at the completion of each day. In the event the new RWIC is subsequently placed off duty, the dispatcher will ascertain the next senior employee on the site, and repeat the above procedures.

If there are no regular flag employees to move into the RWIC position, due to rest, availability etc., the RWIC assignment will be covered by normal reassignment processing.

Covering extra RWIC flagging assignments

When the road and yard requests for flag assignments are received by the dispatcher, a determination will be made as to which sites will need a RWIC.

The dispatcher will then show the report of the RWIC assignment 30 minutes earlier than the scheduled report of the location, and enter as such into the computer system.

Marking up of the crew board will be handled the same as is done currently. In the event that an extra flagging RWIC position is not covered on the mark-up of the crew board, the assignment will go to the reassignment process and be called accordingly.

If an employee assigned to an extra flagging RWIC position should lay off, the job will go to reassignment, and be covered using standard procedure.

Administrative Instructions to Flag Crews

If for any reason, the RWIC must shut down a contractor's job site, the flagmen will remain at the work location for the full eight-hour tour to ensure the contractor does not re-enter the track area, unless otherwise directed by Transportation supervision. This action must be reported to the Movement Bureau and appropriate Transportation Department supervision as soon as possible.

Employees will be required to take their contractual meal allowance, whenever possible.

Prior to leaving the job site at the conclusion of the contractor's work, the train service protection personnel must inspect the track area to ensure that tools, equipment and other obstructions are clear. If this activity results in an overtime claim, the "details of claim" section on the time slip must include the exact time the contractor completed construction activity. A maximum of 30 minutes inspection time will be allowed for the time the contractor ceased operation. **NOTE:** This is not the time the contractor cleared the right of way.

If contractor's equipment becomes disabled or fouls and cannot be moved, the RWIC and flag personnel assigned will provide protection. This situation must be reported to the Movement Bureau immediately. The Movement Bureau will arrange for relief protection personnel upon notification of obstruction or fouling condition. When the equipment is removed by the contractor, the RWIC will notify the Movement Bureau. Only those flagmen necessary to protect the safe movement of trains will remain with the equipment; all others will be released by the RWIC. The "details of claim" section on the time slip must indicate the type of equipment and any identifying markings such as truck or contractor's identification.

In the event any flagman becomes ill or must otherwise leave the job site, it is the responsibility of the RWIC to notify the proper authority as soon as possible.

If because of illness, injury, or other circumstances a train service employee assigned to protection must depart from the work site, if the remaining train service personnel cannot safely protect the contractor and/or roadway workers assigned, on the job/project must cease until such time as adequate protection can be provided.

At no time will a train service employee leave the contractor working without protection.

If a group of train service personnel providing on-track safety to contractors or roadway workers is being relieved by another crew, the senior conductor serving as RWIC from each crew must communicate all details of roadway worker protection, railroad protection activity, including third rail and block status, scope of contractor activities and anticipated duration of work. In addition, an additional Job Briefing must be held by the RWIC to ensure that all reporting workers are familiar with the protection provided and the working limits.

Employees providing on-track safety are strictly prohibited from wearing sneakers or other non-approved footwear, under any conditions. The wearing of high visibility attire (vest or jacket) and other personal protective equipment while on duty is required. Employees must devote strict attention to their primary function and avoid unnecessary conversation and assembly with others while on duty.

Compliance with Hours of Service (HOS) Requirements

Flag protection crews on duty more than ten hours, in addition to compliance with Special Instructions 100-R, 100-R-1; must report anticipated duration of contractor work activities. This report will be made by the RWIC at the work site. Contractor activities may continue while the report is made if remaining personnel can adequately protect the right of way. The conductor may restrict the work zone during the absence for tenth hour notification. The RWIC will use their company issued cell phone if they are off of active track, the nearest block phone or the nearest public telephone to contact the Movement Bureau at (718) 558-8204 or (800) 462-7156 to report the tenth hour on duty. When one flagman is assigned to a location, that flagman will be relieved of this requirement unless it is known that the contractor will be on the right of way in excess of 90 minutes beyond ten hours.

If one RWIC is assigned to flag protect, work must stop within the right of way while the conductor informs the Movement Bureau of the need to be relieved as soon as possible.

At no time will flag personnel remain on duty beyond 11 hours and 59 minutes unless authorized. If necessary, all contractor activity will cease until relief personnel arrives at the site.

Hours of Service cards, must be completed in blue or black ink and submitted weekly. Cards must not be mutilated or bent. Corrections must be legible and initialed. Pre-printed cards are to be used when possible. If necessary to use a blank card, the top of the card must be filled out completely. Hours of work must be reported accurately and exclude deadhead time.

Time Slip Preparation

At the start of work, the RWIC at the job site will communicate with the contractor superintendent, or the contractor foreman, to determine the anticipated work hours for the day's activities. If it is known that construction will exceed eight hours total, including clearing the track area, the time slip must indicate the name of the superintendent/foreman who required the overtime and the company he represents. The time the contractor cleared the track area must appear in the "details of claim".

Claim for overtime payment must be completely explained in the "details of claim" section of the timecard. If overtime results from returning to the initial reporting location, mile post numbers, signal locations, station names or other physical characteristics must be referenced between the two points:

There will be 40 minutes walking time allowed per mile traveled. Walking time relates to the locations of contractor personnel and/or equipment. When a location is inaccessible, an approved access point will be designated.

If flag crews claim a deadhead train back to the original report location, train number and times must appear in the "details of claim" portion of the time card.

Time slips are subject to inspection. Each employee must accurately fill out his/her time slip. Any deviation from contractor's hours of work must be fully explained on the timecard.

Procedures for Providing Protection for Third Party Contractors

The following procedures will apply for providing Protection to Third Party Contractors. These procedures will be used in conjunction with the current LIRR RWP On-Track Safety Manual and Amtrak RWP safety manual, for work being performed on or adjacent to areas of tracks, third rail power supplies, overhead Catenary Lines and other facilities or utilities which are controlled by the LIRR, Amtrak or areas with joint responsibilities.

Working limits within LIRR Territory

Job briefings will be held by the RWIC prior to each shift and must include but not limited to the following:

a. A daily work plan detailing all activities scheduled to be performed.
b. A daily roster containing names of ALL third party contractors scheduled to work that shift will be provided.
c. Identifying the RWIC and Transportation Flagmen assigned to that day's work.
d. Identifying the work activity and locations at which each activity will take place.

e. Identifying the type of protection (foul time, track out of service, train approach warning, inaccessible track) to be afforded for each type of work.
f. Identifying hazards around the assigned work areas (active tracks, third rail power.)
g. Identify procedures to be followed in case of injury or other emergency.
h. This information is to be entered on the Job Briefing Protection Card. Each employee or contractor must print his name on the card and provide his employee# or company name.

1. If any changes are made after the initial Job briefing (work location, type of work being performed, type of protection afforded or RWIC), all work in the area MUST be stopped by the RWIC and a new job briefing held, and all issues resolved with the affected groups.
2. Third party workers will not be allowed to perform **ANY ACTIVITY** without a valid contractor Safety/RWP training card in his or her possession, unless otherwise provided. Service/delivery personnel must always be escorted within Working Limits.
3. Employees providing on-track safety will sound air horns when workers are fouling the tracks or working outside the Working Limits to warn workers of an approaching train (as prescribed in the Title 49 CFR Part 214.329).

On rail track equipment, including trains/engines/track cars/cranes when approaching roadway workers on or adjacent to tracks will sound audible warnings (whistle(s), horns, and bells) as prescribed in Title 49 CFR Part 249.339.

4. If any worker or anyone providing protection feels that a construction activity is creating an unsafe protection situation, he has the right to stop **ALL** work and restrict further activities until a supervisor resolves the situation, consistent with LIRR RWP Challenge Procedures.

LIRR Engineering Forces and Third Party Contractors working within the same working Limits

1. Job briefings will be held by the EIC or RWIC prior to each shift and must include but not limited to the following:
   a. A daily work plan detailing all activities scheduled to be performed.
   b. A daily roster containing names of ALL third party contractors scheduled to work that shift will be provided.
   c. Identifying the EIC, RWIC(s) and Transportation Flagmen assigned to that day's work.
   d. Identifying the work activity and locations at which each activity will take place.
   e. Identifying the type of protection (foul time, track out of service, train approach warning, inaccessible track) to be afforded for each type of work.
   f. Identifying hazards around the assigned work areas (active tracks, third rail power.)
   g. Identify procedures to be followed in case of injury or other emergency.
   h. This information is to be entered on the Job Briefing Protection Card. Each employee or contractor must print his name on the card and provide his employee# or company name.
2. The Transportation RWIC if not in charge of the overall work activities will be **directly** responsible for the third party contractors under his control, and will report to the agreed upon EIC or RWIC for instructions on which type(s) of protection is being afforded to **ALL** groups working within the area.
3. Watchmen will provide train approach warning. Transportation flagmen working in conjunction with Engineering forces will provide additional flag protection to the third party contractor.

4. Transportation flagmen assigned to the third party contractor may be utilized to provide for additional protection (working in conjunction with Engineering Watchmen) for the entire outage except where their absence may restrict the third party contractor from performing tasks away from the established working limits. This will be discussed at the Job Briefing prior to any activities being performed.
5. Employees providing on-track safety will sound air horns when workers are fouling the tracks or working outside the working limits to warn workers of an approaching train (as prescribed in the Title 49 CFR Part 214.329).
6. On rail track equipment including trains, engines, track cars/cranes when approaching roadway workers on or adjacent to tracks will sound audible warnings (whistle(s) horns and bells) as prescribed in Title 49 CFR Part 249.339).
7. If any worker or anyone providing protection feels that a construction activity is creating an unsafe protection situation, he has the right to stop **ALL** work and restrict further activities until a supervisor resolves the situation, consistent with LIRR RWP Challenge Procedures.

Working limits within Zone A or adjacent to Amtrak Territory

1. A combined Job Briefing will be held by the EIC or RWIC prior to each shift and must include but is not limited to the following info:
    a. Identification of which EIC or RWIC will be in charge and means at which protection will be afforded.
    b. Discussion of how workers will move to and from the shared work location.
    c. A daily roster containing names of ALL third party contractors scheduled to work.
    d. Identification of the LIRR Transportation Flagmen, and or Amtrak Watchman, "A" men or any other personnel assigned to provide protection for the activity(s).
    e. Identification of hazards surrounding the assigned work areas (active tracks, third rail or catenary power.)
    f. Identification of the procedures to be followed in case of injury or other emergency.

This information is to be entered on the Job Briefing Protection Card. Each LIRR employee, Amtrak personnel and third party contractor attending the job briefing must print his name on the card and provide his employee# or company name.

2. LIRR EIC or RWIC will meet with the Amtrak Foreman/Supervisor and third party contractor's supervisor at a designated location and discuss the activities to be performed within the shared areas.
3. The LIRR EIC or RWIC and Amtrak Foreman/Supervisor will jointly determine who will have jurisdiction over the work to be performed and how RWP will be afforded.
4. Once Jurisdiction over the work location is established and the means by which protection will be afforded to the third party contractor (LIRR, Amtrak or both), a joint job briefing by both the LIRR EIC or RWIC and Amtrak Foreman/Supervisor will be held at the work location(s).
5. No worker will be allowed to perform ANY ACTIVITY (s) within the shared territory without a valid Contractor Safety/RWP training card in his possession as issued by either the LIRR or Amtrak.
6. Employees providing on-track safety will sound air horns when workers are fouling the tracks or working outside the working limits to warn workers of approaching trains (as prescribed in Title 49 CFR Part 214.329)

7. On rail track equipment including trains/engines/track cars/cranes when approaching roadway workers on or adjacent to tracks will sound audible warnings (whistle(s) horns and bells) as prescribed in Title 49 CFR Part 249.339).
8. If any worker or anyone providing protection feels that a construction activity is creating an unsafe protection situation, he has the right to stop **ALL** work and restrict further activities until a supervisor resolves the situation consistent with established RWP Challenge Procedures.

Personal Protective Equipment

Individuals while performing flagging duties for outside contractors working on or near the LIRR right of way must have the following flagging equipment in their possession and in good working order as applicable:

1. Approved High Visibility Attire (Vest or Jacket)
2. Eye Protection
3. Helmet
4. Foot Protection
5. Red Flag by day
6. Whistle
7. White Light by night
8. Fusees – Minimum of Five **(5)** Required

MAINTENANCE OF EQUIPMENT EMPLOYEE ADDENDUM

All Maintenance of Equipment Department personnel responsible for the on-track safety of others shall be familiar with the contents of this manual. Questions concerning the application and/or interpretation of any of the procedures contained herein should be directed to the General Manager – Fleet Operations (718) 558-7642.

The procedures in this addendum are established for M of E employees when engaged in tasks considered "roadway work." These tasks include, but are not limited to: snow removal (including salting), yard clean-up tasks and certain Plant Equipment Maintenance Department (PEMD) tasks such as working on fueling equipment, shop blue flag lamps, car wash facilities, etc. The procedures included in this on-track safety manual, this addendum and M of E Quality Work Instruction CC 9.3 shall be used jointly to ensure full compliance and worker safety.

These tasks shall only be performed by personnel that have successfully completed either RWP or RWIC training.

Roadway worker protection must be established whenever these tasks are performed within four feet of the field side of the running rail.

The methods of protection utilized will be Inaccessible Track, as defined by Title 49 CFR Part 214.327, and Train Approach Warning, provided by a Lookout, as defined by Title 49 CFR Part 214.329, and Foul Time, as defined by Title 49 CFR Part 214.323.

The required tag (referenced in this manual) shall be red in color, state its function for providing RWP for M of E and that the secured switch or device is not to be operated.

Designating the Roadway Worker in Charge (RWIC)

The RWIC will be the M of E Supervisor in charge of the workers performing the covered tasks.

Responsibilities of the Roadway Worker in Charge

1. Ensure all applicable safety rules are followed
2. Ensure all roadway workers are using Personal Protective Equipment as required
3. Discuss any potential jobsite hazards
4. Discuss Emergency Response Procedures
5. Conduct Job Briefing prior to starting roadway work

6. Complete M of E Job Briefing card as required and retain for ten (10) days
7. RWIC must have immediate access to a working radio at all times while providing roadway worker protection
8. Radio usage must comply with all applicable parts of Title 49 CFR Part 220, and LIRR radio rules, found earlier in this manual.

M of E RWP Job Briefing Card

The current M of E Job Briefing Card is available (printable) on the M of E – Fleet Operations Intranet Page.

Roadway Worker's Right to Challenge

A roadway worker has the right to challenge, in good faith any directive that would violate a RWP procedure. Refer to and follow the challenge procedure on page 46 of this manual.

Concurrent Protections

RWP and Blue Signal Protection

If it is necessary to perform both on-equipment maintenance and roadway maintenance, Blue Signal Protection and Roadway Worker Protection may both be applied. However, roadway work cannot be performed under Blue Signal Protection and train maintenance may not be performed under RWP. To ensure switches remain properly aligned, clear communication is CRITICAL when removing one form of protection and leaving the other.

Inaccessible Track

A track will be rendered inaccessible by usage of a switch, lined and locked against movement into the working limits, a derail set to prevent a train's entry into working limits, or a Flagman positioned at the working limit to signal an approaching train to stop.

NOTE: A flagman is not to be used to provide inaccessible track protection without the approval of an M of E Manager.

Equipment within Working Limits

Equipment on the tracks being protected (by inaccessible track) shall be made inoperable prior to performing any roadway work, as per 214.327(c).

M7 equipment shall be made inoperable by de-energizing and tagging CB20 in each head-out cab on the track(s) being protected. CB shall be tagged with a red RWP-Do Not Operate tag.

M3 equipment shall be made inoperable by de-energizing and tagging the door control circuit breaker in each head-out car on the track(s) being protected. Door control breaker shall be tagged with a red RWP-Do Not Operate tag.

DE/DM/C3 equipment shall be made inoperable by de-energizing and tagging Generator Field Switch in each head-out cab on the track(s) being protected. Switch shall be tagged with a red RWP-Do Not Operate tag.

Work engines (E10 & E15) shall be made inoperable by placing the automatic brake valve handle to EMERGENCY and tagging with a red RWP-Do Not Operate tag.

Train Approach Warning

When an RWIC deems that using Train Approach Warning is prudent to operational needs and will provide an adequate level of protection, he will dispatch two employees to perform a task:

1. One employee will be designated the role of Lookout, and will perform ONLY that function.
2. One employee will perform the roadway work task (repair, maintenance, correction, etc.).

The RWIC will perform the job briefing before dispatching the two employees.

Assigning Lookout Duties

The RWIC must ascertain that the Lookout is qualified to perform the required duties. The Lookout must demonstrate the flag/lantern signals for STOP and PROCEED, as well as verbalize the maximum train speed for the location, and minimum approach distance required. The Lookout will be provided with, and inspect before use, the equipment in the blue RWP bag.

NOTE: The Lookout is not required to utilize the yellow 'Watchman's Disc'.

When the Lookout determines a train is approaching (within the minimum approach distance), he will signal the employee working to stop the performance of the task, and move to (or remain in) a place of safety until movement is clear.

The Train Engineer will sound the locomotive horn upon approach of the workgroup, (14L) the Lookout MUST acknowledge this signal.

Foul Time

This only applies to Babylon and Ronkonkoma Car Wash Facilities. The Richmond Hill Car Wash Facility is within the confines of a yard and work on such will utilize inaccessible track as the method of protection.

When M of E forces are to perform tasks on either the Babylon or Ronkonkoma car wash facility, they must request foul time from the appropriate tower:

Babylon Car Wash – Babylon Tower
Ronkonkoma Car Wash – Divide Tower

Requesting Foul Time

The RWIC will identify himself to the operator by name and occupation, then request foul time on the appropriate [car wash] track, with an estimated duration.

The RWIC will also inform the operator if any special equipment will be used that would interfere with the safe passage of trains (i.e. scaffolding or other apparatus).

The Train Dispatcher (through the Block Operator) will authorize (or deny) the foul time request.

The Block Operator will provide instruction to the RWIC as to the limits of protection, and that no trains will enter these limits during the time granted.

The RWIC must repeat these instructions to the Block Operator.

NOTE: Foul time not considered granted until this information is repeated by the RWIC.

Reporting Clear and Releasing Working Limits

Once the required tasks are completed on the car wash equipment and all roadway workers are clear, the RWIC will contact the same tower that established the protection to release the working limits.

The RWIC will: identify his name and occupation; inform the operator that all roadway workers are clear of the track; state that the working limits are released back to the operator, and that it is ok to resume normal train service (OK MAS).

The operator will repeat this information back to the RWIC.

STATIONS ADDENDUM

All Stations Department personnel responsible for the roadway worker protection of others shall be familiar with the contents of this manual. Questions concerning the application and/or interpretation of any of the procedures contained herein should be directed to the Manager Stations Safety and Training at (718) 558-7623. The procedures in this addendum are established for Stations employees when engaged in snow removal on platforms. The procedures included in this Manual shall be used to ensure full compliance and worker safety.

These tasks shall only be performed by personnel that have successfully completed either Roadway Worker Protection or Roadway Worker In Charge training.

Roadway Worker Protection must be established whenever snow removal is performed within four feet of the field side of the running rail.

The method of protection utilized will be Train Approach Warning.

NEW YORK AND ATLANTIC (NYAR) ADDENDUM

The NYAR will accept LIRR RWP and RWIC qualification in lieu of NYAR qualification. When working in NYAR territory (Zone D) you must follow NYAR's established procedures.

LIRR RWP Rule Inaccessible Track

LIRR's Working on Yard Tracks is consistent with NYAR (GCOR) and is accepted as is. There are limitations and modifications to this rule in NYAR Freight only territory.

This method establishes Working Limits on tracks not controlled by the Train Dispatcher or Block Operator by physically preventing entry and movement of trains. Inaccessible track establishes Working Limits on yard track to prevent access to Working Limit.

Working on Yard Tracks

When Roadway Worker Protection is required on yard track, each end of the Working Limits must be protected by one of the following methods:

1. A switch or derail aligned to prevent access to the Working Limits and secured with an effective securing device.
2. A switch lined, effectively secured, and effectively tagged with a "Do Not Operate" tag in one of the following ways:
   - Private lock on switches that will accommodate them
   - Properly secured switch point clamp
   - Properly driven spikes and wedges that require appropriate tools to remove them.
3. A disconnected rail applies only for such work that disturbs the roadbed or renders it in an unsafe condition.
4. Flagman assigned to hold trains and equipment clear of the Working Limits.

A track barricade, tie bumper, is not permissible on NYA Freight only territory. The preferred method of establishing working limits and for protecting adjacent tracks is by utilizing Working Limits established between switches lined to prevent access.

The use of derails to establish working limits should be coordinated in advance (before 1500 hours or 3pm the previous day) so that appropriate yard bulletins (Form B-Y) may be issued.

Individual Train Detection (ITD) is not authorized. The NYAR recommends the use of Watchmen/Lookout for such roadway workers and in the interest of maximizing safety would prefer to establish Working Limits using Inaccessible Track on account of the lower traffic density on Freight Only territory.

Most details regarding the establishment of Working Limits via Inaccessible Track and/or the use of Watchmen/Lookouts and/or Flagmen can be readily determined and clarified by written correspondence prior to fouling the track or via on site Job Briefing.

In order to establish working limits, contact the Fresh Pond Yardmaster:
(718) 928-2320
(718) 928-2318
NYACustomerService@anacostia.com

Title 49 CFR Part 218 Subpart F LIRR ADDENDUM

Rules and Procedures for Operation of Switches, Derails, Shoving/Pushing Equipment and Clearance Point Identification

Definitions

Clearance Point - The location near a turnout beyond which it is unsafe for passage on an adjacent track.
Derail - A non-interlocked derail, hand operated or motor powered, which is affixed to the rail in a permanent nature, as opposed to a portable device.
Equipment - Railroad cars, engines, or track cars.
Effective Securing Device - A vandal and tamper resistant device applied to a manually operated switch or derail for the protection of roadway workers. This device must be secured, uniquely tagged and removed only by the class, craft or group of employees for whom the protection is being provided.
Fouling a Track - Having the end of equipment in such proximity to a connecting track that insufficient clearance exists between tracks, and movement on connecting track would result in collision.
Job Briefing - When reporting for duty, employees whose duties require coordination with other employees must hold a job briefing to review operational and safety conditions. If these conditions change, employees must hold an additional job briefing to discuss the new conditions.
Qualified Employee – An employee who has successfully completed all instruction, training and examination programs required by the railroad and this part and that person, therefore, has actual knowledge or may reasonably be expected to have knowledge of the subject on which the person is expected to be competent.
Rolling Equipment - Locomotives, railroad cars, and one or more locomotives coupled to one or more cars.
Safety Stop – A stop made two cars from a fixed obstruction before final placement of equipment.
Switch - Mechanical portion of track used to allow equipment to be diverted from one track to another. May be power (electric or pneumatic) or manually operated.

Pushing/Shoving Movements

Pushing and Shoving are the same. Equipment is to be considered pushed or shoved any time the employee operating the controls of the equipment is not located on the leading unit. A Job Briefing must be held before movement is made and must include each employees responsibilities and the type of communication to be used throughout entire move.

Except as provided by Point Protection on yard tracks, pushing or shoving movements must be made with an Operating Rules, Physical Characteristic and Airbrake qualified employee on leading end of the equipment directing movement. This also applies to M of E Car Movers and Track Car Drivers and Pilots.

The employee directing movement must not engage in any task unrelated to directing the movement of the equipment. The employee directing the movement of the equipment must be prepared to stop the movement at once. If, at any time, the employee directing the movement cannot ascertain that the track is clear, the movement must be stopped.

The following procedure will be in effect for all moves that are operated from other than the leading end:

1. When moves are made with a qualified employee on the leading end, and the movement is being made against a fixed obstruction, including, but not limited to a bumping block, standing equipment or derail; the employee controlling the movement must signal the engineer to make a SAFETY STOP two car lengths from the fixed obstruction before final placement of the equipment.
2. When movement is resumed after making a SAFETY STOP, the speed of the train must not exceed two (2) miles per hour.
3. The employee controlling the movement must be prepared stop the movement by operating the communicating signal and/or emergency brake valve should conditions require.
4. When making a move against a fixed object the employee controlling the movement must have their hand on the emergency brake valve.
5. Before movement is made, crew members must establish a means of communication.

Point Protection

Qualified employee(s) determining that the *track is clear* can provide point protection for rolling equipment for a pushing/shoving movement on a yard track.

Track is Clear

The portion of the track to be used for the intended movement is unoccupied by rolling equipment, on-track maintenance of way equipment, and conflicting on-track movements; intervening public highway-rail grade crossings, private highway-rail grade crossings outside the physical confines of a railroad yard, pedestrian crossings outside of the physical confines of a railroad yard, and yard access crossings are protected as follows:

1. Crossing gates are in the fully lowered position, and are not known to be malfunctioning; or
2. A designated and qualified employee is stationed at the crossing and has the ability to communicate with trains; or
3. At crossings equipped only with flashing lights or passive warning devices, when it is clearly seen that no traffic is approaching or stopped at the crossing and the leading end of the movement over the crossing does not exceed 15 miles per hour;
4. Intervening switches and fixed derails are properly lined for the intended movement; and
5. The portion of the track to be used for the intended movement has sufficient room to contain the rolling equipment being shoved or pushed.

Operation of Switches, Derails, & Clearance Point Identification

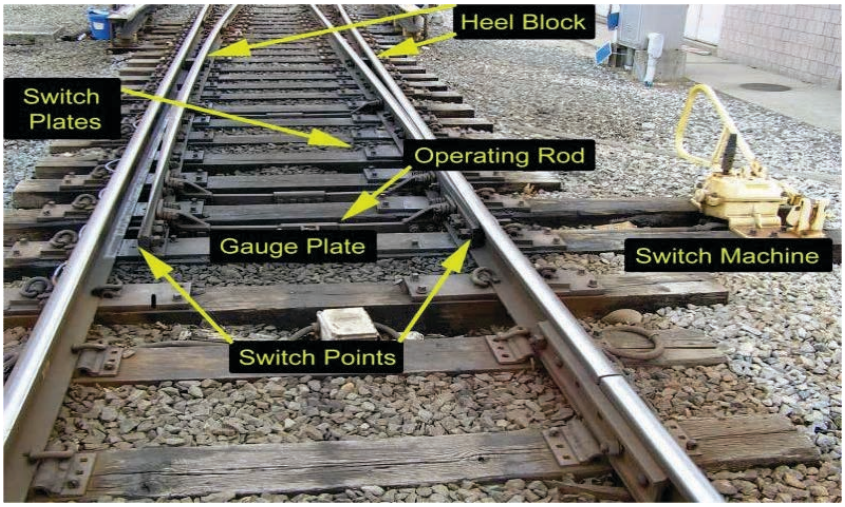
Hand Operated Switches and Derails

Employees operating or verifying the position of switches and derails must be qualified on their use, and are individually responsible for the position of switches and derails used. Additionally, before a train crew leaves the location where a main track switch was operated, all crew members must communicate with each other to confirm that the switch, and derail, if any, is locked in the normal position.

What is meant by “All Crew Members”? The rule requires all Train and Engine Service employees on the train, even those who did not participate in the move, to communicate that they are aware of the position of the switch and derail before the train departs. If equipment is to be laid up employees must be aware of the position of the switch and derail before they depart the area. This rule also applies to M of E Car Movers and Track Car Drivers and Pilots.

Anatomy of a Switch

Gauge Plate – Maintains the exact width between rails at the switch point location.
Heel Block – The “Hinge” of the switch where the switch meets the stock rail.
Operating Rod – Connects the switch machine to the switch points and moves the switch points in either position.
Switch Machine – Device that moves the operating rod laterally thereby aligning the switch points.
Switch Plates- Hold the rail to the ties.
Switch Points – Tapered ended rail that guides wheels from one track to another.



Switches connecting main tracks with sidings or yard tracks are considered to be in the normal position when lined for movement on the main track.

A train clearing the main track at a hand-operated switch must not report clear until the switch is lined normal and locked.

When operating switches, employees must ensure that the switch lever is seated correctly in its keeper, they must examine the switch points and know that they fit the rail properly. Where derails are in service, employees must observe that they are in the proper position before and after operation.

Which switch point below is not properly lined?

Switch A

Switch B

Answer: In Switch A, the point does not properly fit the rail and therefore may cause a derailment.

Switches and derails equipped with locks must be locked at all times except when in immediate use. After locking switch or derail, lock must be tested to ensure switch or derail is secured.

Leaving Equipment in the Clear

Equipment must not foul a track until it is determined that no other equipment is fouling the intended route and that all switches and derails connected with the movement are properly lined. After movement has been made, switches and derails must not be operated until equipment has passed the clearance point of the track.

A switch must not be operated while equipment is moving toward it or fouling, standing or moving over it, nor shall movement be made over a derail in derailing position.

On a main track or siding, if any part of a switch or derail is found to be defective, movement must not be made over the switch and an immediate report must be made to the Movement Bureau. In yards this report will be made to the Yardmaster.

Equipment on a siding or yard track must not be left standing at a location where such equipment fouls a track.

Clearance Point Identification

On tracks where clearance point is indicated, leave equipment beyond the clearance point. If clearance point is not indicated or visible, determine the clearance point by standing outside the rail of adjacent track and extend arm towards the equipment. When unable to touch equipment, leave equipment a sufficient distance beyond that point to ensure equipment is behind the clearance point.

If clearance point is not indicated or visible, determine the clearance point by standing outside the rail of adjacent track and extend arm towards the equipment. When unable to touch equipment, leave equipment a sufficient distance beyond that point to ensure equipment is behind the clearance point.

Summary

Operation of Switches, Derails, Shoving/Pushing Equipment and Clearance Point Identification

- A job briefing must be held before a shoving or pushing movement is made and must include the type of communication to be used throughout entire move.
- You are individually responsible for the position of switches and derails used.
- When not in use, switches and derails must be in normal position and locked, if so equipped.
- Check switch points to see if they fit the rail properly. Check the position of derails.
- Never operate a switch or derail when equipment is moving toward it, fouling, standing or moving over it.
- Protect and report defective switches or derails.
- Never leave equipment beyond the clearance point.

Title 49 CFR Part 214 ADDENDUM
Railroad Workplace Safety

Subpart A—General

§214.1 Purpose and scope.

(a) The purpose of this part is to prevent accidents and casualties to employees involved in certain railroad inspection, maintenance and construction activities.

(b) This part prescribes minimum Federal safety standards for the railroad workplace safety subjects addressed herein. This part does not restrict a railroad or railroad contractor from adopting and enforcing additional or more stringent requirements not inconsistent with this part.

§214.3 Application.

This part applies to railroads that operate rolling equipment on track that is part of the general railroad system of transportation.

§214.5 Responsibility for compliance.

Any person (an entity of any type covered under 1 U.S.C. 1, including but not limited to the following: a railroad; a manager, supervisor, official, or other employee or agent of a railroad; any owner, manufacturer, lessor, or lessee of railroad equipment, track, or facilities; any independent contractor providing goods or services to a railroad; and any employee of such owner, manufacturer, lessor, lessee, or independent contractor) who violates any requirement of this part or causes the violation of any such requirement is subject to a civil penalty of at least $650 and not more than $25,000 per violation, except that penalties may be assessed against individuals only for willful violations, and where a grossly negligent violation or a pattern of repeated violations has created an imminent hazard of death or injury, or has caused death or injury, a penalty not to exceed $105,000 per violation may be assessed. See appendix A to this part for a statement of agency civil penalty policy.

§214.7 Definitions.

Unless otherwise provided, as used in this part—

Adjacent tracks mean two or more tracks with track centers spaced less than 25 feet apart.

Anchorage means a secure point of attachment for lifelines, lanyards or deceleration devices that is independent of the means of supporting or suspending the employee.

Body belt means a strap that can be secured around the waist or body and attached to a lanyard, lifeline, or deceleration device.

Body harness means a device with straps that is secured about the person in a manner so as to distribute the fall arrest forces over (at least) the thighs, shoulders, pelvis, waist, and chest and that can be attached to a lanyard, lifeline, or deceleration device.

Class I, Class II, and Class III have the meaning assigned by, Title 49 Code of Federal Regulations part 1201, General Instructions 1-1.

Competent person means one who is capable of identifying existing and predictable hazards in the workplace and who is authorized to take prompt corrective measures to eliminate them.

Control operator means the railroad employee in charge of a remotely controlled switch or derail, an interlocking, or a controlled point, or a segment of controlled track.

Controlled track means track upon which the railroad's operating rules require that all movements of trains must be authorized by a train dispatcher or a control operator.

Deceleration device means any mechanism, including, but not limited to, rope grabs, ripstitch lanyards, specially woven lanyards, tearing or deforming lanyards, and automatic self-retracting lifelines/lanyards that serve to dissipate a substantial amount of energy during a fall arrest, or otherwise limit the energy on a person during fall arrest.

Definite train location means a system for establishing on-track safety by providing roadway workers with information about the earliest possible time that approaching trains may pass specific locations as prescribed in §214.331 of this part.

Designated official means any person(s) designated by the employer to receive notification of non-complying conditions on on-track roadway maintenance machines and hi-rail vehicles.

Effective securing device when used in relation to a manually operated switch or derail means one which is:

(a) Vandal resistant;

(b) Tamper resistant; and

(c) Designed to be applied, secured, uniquely tagged and removed only by the class, craft or group of employees for whom the protection is being provided.

Employee means an individual who is engaged or compensated by a railroad or by a contractor to a railroad to perform any of the duties defined in this part.

Employer means a railroad, or a contractor to a railroad, that directly engages or compensates individuals to perform any of the duties defined in this part.

Equivalent means alternative designs, materials, or methods that the railroad or railroad contractor can demonstrate will provide equal or greater safety for employees than the means specified in this part.

Exclusive track occupancy means a method of establishing working limits on controlled track in which movement authority of trains and other equipment is withheld by the train dispatcher or control operator, or restricted by flagmen, as prescribed in §214.321 of this part.

Flagman when used in relation to roadway worker safety means an employee designated by the railroad to direct or restrict the movement of trains past a point on a track to provide on-track safety for roadway workers, while engaged solely in performing that function.

Foul time is a method of establishing working limits on controlled track in which a roadway worker is notified by the train dispatcher or control operator that no trains will operate within a specific segment of controlled track until the roadway worker reports clear of the track, as prescribed in §214.323 of this part.

Fouling a track means the placement of an individual or an item of equipment in such proximity to a track that the individual or equipment could be struck by a moving train or on-track equipment, or in any case is within four feet of the field side of the near running rail.

Free fall means the act of falling before the personal fall arrest system begins to apply force to arrest the fall.

Free fall distance means the vertical displacement of the fall arrest attachment point on a person's body harness between onset of the fall and the point at which the system begins to apply force to arrest the fall. This distance excludes deceleration distance and lifeline and lanyard elongation, but includes any deceleration device slide distance or self-retracting lifeline/lanyard **extension before they operate and fall arrest forces occur.**

Hi-rail vehicle means a roadway maintenance machine that is manufactured to meet Federal Motor Vehicle Safety Standards and is equipped with retractable flanged wheels so that the vehicle may travel over the highway or on railroad tracks.

Hi-rail vehicle, new means a hi-rail vehicle that is ordered after December 26, 2003 or completed after September 27, 2004.

Inaccessible track means a method of establishing working limits on non-controlled track by physically preventing entry and movement of trains and equipment.

Individual train detection means a procedure by which a lone worker acquires on-track safety by seeing approaching trains and leaving the track before they arrive and which may be used only under circumstances strictly defined in this part.

Informational line-up of trains means information provided in a prescribed format to a roadway worker by the train dispatcher regarding movements of trains authorized or expected on a specific segment of track during a specific period of time.

Lanyard means a flexible line of rope, wire rope, or strap that is used to secure a body harness to a deceleration device, lifeline, or anchorage.

Lifeline means a component of a fall arrest system consisting of a flexible line that connects to an anchorage at one end to hang vertically (vertical lifeline) or to an anchorage at both ends to stretch horizontally (horizontal lifeline), and that serves as a means for connecting other components of a personal fall arrest system to the anchorage.

Lone worker means 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.

Non-controlled track means track upon which trains are permitted by railroad rule or special instruction to move without receiving authorization from a train dispatcher or control operator.

On-track roadway maintenance machine means a self-propelled, rail-mounted, non-highway, maintenance machine whose light weight is in excess of 7,500 pounds, and whose purpose is not for the inspection of railroad track.

On-track roadway maintenance machine, existing means any on-track roadway maintenance machine that does not meet the definition of a “new on-track roadway maintenance machine.”

On-track roadway maintenance machine*, new* means an on-track roadway maintenance machine that is ordered after December 26, 2003, and completed after September 27, 2004.

On-track safety means a state of freedom from the danger of being struck by a moving railroad train or other railroad equipment, provided by operating and safety rules that govern track occupancy by personnel, trains and on-track equipment.

Personal fall arrest system means a system used to arrest the fall of a person from a working level. It consists of an anchorage, connectors, body harness, lanyard, deceleration device, lifeline, or combination of these.

Qualified means a status attained by an employee who has successfully completed any required training for, has demonstrated proficiency in, and has been authorized by the employer to perform the duties of a particular position or function.

Railroad means all forms of non-highway ground transportation that run on rails or electro-magnetic guideways, including (1) commuter or other short-haul rail passenger service in a metropolitan or suburban area, and (2) high-speed ground transportation systems that connect metropolitan areas, without regard to whether they use new technologies not associated with traditional railroads. Such term does not include rapid transit operations within an urban area that are not connected to the general railroad system of transportation.

Railroad bridge means a structure supporting one or more railroad tracks above land or water with a span length of 12 feet or more measured along the track centerline. This term applies to the entire structure between the faces of the backwalls of abutments or equivalent components, regardless of the number of spans, and includes all such structures, whether of timber, stone, concrete, metal, or any combination thereof.

Railroad bridge worker or bridge worker means any employee of, or employee of a contractor of, a railroad owning or responsible for the construction, inspection, testing, or maintenance of a bridge whose assigned duties, if performed on the bridge, include inspection, testing, maintenance, repair, construction, or reconstruction of the track, bridge structural members, operating mechanisms and water traffic control systems, or signal, communication, or train control systems integral to that bridge.

Restricted speed means a speed that will permit a train or other equipment to stop within one-half the range of vision of the person operating the train or other equipment, but not exceeding 20 miles per hour, unless further restricted by the operating rules of the railroad.

Roadway maintenance machine means a device powered by any means of energy other than hand power which is being used on or near railroad track for maintenance, repair, construction or inspection of track, bridges, roadway, signal, communications, or electric traction systems. Roadway maintenance machines may have road or rail wheels or may be stationary.

Roadway maintenance machines equipped with a crane means any roadway maintenance machine equipped with a crane or boom that can hoist, lower, and horizontally move a suspended load.

Roadway work group means two or more roadway workers organized to work together on a common task.

Roadway worker means any employee of a railroad, or of a contractor to a railroad, whose duties include inspection, construction, maintenance or repair of railroad track, bridges, roadway, signal and communication systems, electric traction systems, roadway facilities or roadway maintenance machinery on or near track or with the potential of fouling a track, and flagmen and watchmen/lookouts as defined in this section.

Self-retracting lifeline/lanyard means a deceleration device that contains a drum-wound line that may be slowly extracted from, or retracted onto, the drum under slight tension during normal employee movement, and which, after onset of a fall, automatically locks the drum and arrests the fall.

Snap-hook means a connector comprised of a hook-shaped member with a normally closed keeper, that may be opened to permit the hook to receive an object and, when released, automatically closes to retain the object.

Train approach warning means a method of establishing on-track safety by warning roadway workers of the approach of trains in ample time for them to move to or remain in a place of safety in accordance with the requirements of this part.

Train coordination means a method of establishing working limits on track upon which a train holds exclusive authority to move whereby the crew of that train yields that authority to a roadway worker.

Train dispatcher means the railroad employee assigned to control and issue orders governing the movement of trains on a specific segment of railroad track in accordance with the operating rules of the railroad that apply to that segment of track.

Watchman/lookout means an employee who has been annually trained and qualified to provide warning to roadway workers of approaching trains or on-track equipment. Watchmen/lookouts shall be properly equipped to provide visual and auditory warning such as whistle, air horn, white disk, red flag, lantern, fusee. A watchman/lookout's sole duty is to look out for approaching trains/on-track equipment and provide at least fifteen seconds advanced warning to employees before arrival of trains/on-track equipment.

Working limits means a segment of track with definite boundaries established in accordance with this part upon which trains and engines may move only as authorized by the roadway worker having control over that defined segment of track. Working limits may be established through “exclusive track occupancy,” “inaccessible track,” “foul time” or “train coordination” as defined herein.

[57 FR 28127, June 24, 1992, as amended at 61 FR 65975, Dec. 16, 1996; 67 FR 1906, Jan. 15, 2002; 68 FR 44407, July 28, 2003; 76 FR 74614, Nov. 30, 2011; 79 FR 66500, Nov. 7, 2014]

Subpart B—Bridge Worker Safety Standards

§214.101 Purpose and scope.

(a) The purpose of this subpart is to prevent accidents and casualties arising from the performance of work on railroad bridges.

(b) This subpart prescribes minimum railroad safety rules for railroad employees performing work on bridges. Each railroad and railroad contractor may prescribe additional or more stringent operating rules, safety rules, and other special instructions not inconsistent with this subpart.

(c) These provisions apply to all railroad employees, railroads, and railroad contractors performing work on railroad bridges.

(d) Any working conditions involving the protection of railroad employees working on railroad bridges not within the subject matter addressed by this chapter, including respiratory protection, hazard communication, hearing protection, welding and lead exposure standards, shall be governed by the regulations of the U.S. Department of Labor, Occupational Safety and Health Administration.

§214.103 Fall protection, generally.

(a) Except as provided in paragraphs (b) through (d) of this section, when bridge workers work twelve feet or more above the ground or water surface, they shall be provided and shall use a personal fall arrest system or safety net system. All fall protection systems required by this section shall conform to the standards set forth in §214.105 of this subpart.

(b) (1) This section shall not apply if the installation of the fall arrest system poses a greater risk than the work to be performed. In any action brought by FRA to enforce the fall protection requirements, the railroad or railroad contractor shall have the burden of proving that the installation of such device poses greater exposure to risk than performance of the work itself.

(2) This section shall not apply to bridge workers engaged in inspection of railroad bridges conducted in full compliance with the following conditions:

(i) The railroad or railroad contractor has a written program in place that requires training in, adherence to, and use of safe procedures associated with climbing techniques and procedures to be used;

(ii) The bridge worker to whom this exception applies has been trained and qualified according to that program to perform bridge inspections, has been previously and voluntarily designated to perform inspections under the provision of that program, and has accepted the designation;

(iii) The bridge worker to whom this exception applies is familiar with the appropriate climbing techniques associated with all bridge structures the bridge worker is responsible for inspecting;

(iv) The bridge worker to whom this exception applies is engaged solely in moving on or about the bridge or observing, measuring and recording the dimensions and condition of the bridge and its components; and

(v) The bridge worker to whom this section applies is provided all equipment necessary to meet the needs of safety, including any specialized alternative systems required.

(c) This section shall not apply where bridge workers are working on a railroad bridge equipped with walkways and railings of sufficient height, width, and strength to prevent a fall, so long as bridge workers do not work beyond the railings, over the side of the bridge, on ladders or other elevation devices, or where gaps or holes exist through which a body could fall. Where used in place of fall protection as provided for in §214.105, this paragraph (c) is satisfied by:

(1) Walkways and railings meeting standards set forth in the American Railway Engineering Association's Manual for Railway Engineering; and

(2) Roadways attached to railroad bridges, provided that bridge workers on the roadway deck work or move at a distance six feet or more from the edge of the roadway deck, or from an opening through which a person could fall.

(d) This section shall not apply where bridge workers are performing repairs or inspections of a minor nature that are completed by working exclusively between the outside rails, including but not limited to, routine welding, spiking, anchoring, spot surfacing, and joint bolt replacement.

[67 FR 1906, Jan. 15, 2002]

§214.105 Fall protection systems standards and practices.

(a) *General requirements.* All fall protection systems required by this subpart shall conform to the following:

(1) Fall protection systems shall be used only for personal fall protection.

(2) Any fall protection system subjected to impact loading shall be immediately and permanently removed from service unless fully inspected and determined by a competent person to be undamaged and suitable for reuse.

(3) All fall protection system components shall be protected from abrasions, corrosion, or any other form of deterioration.

(4) All fall protection system components shall be inspected prior to each use for wear, damage, corrosion, mildew, and other deterioration. Defective components shall be permanently removed from service.

(5) Prior to use and after any component or system is changed, bridge workers shall be trained in the application limits of the equipment, proper hook-up, anchoring and tie-off techniques, methods of use, and proper methods of equipment inspection and storage.

(6) The railroad or railroad contractor shall provide for prompt rescue of bridge workers in the event of a fall.

(7) Connectors shall have a corrosion-resistant finish, and all surfaces and edges shall be smooth to prevent damage to interfacing parts of the system.

(8) Connectors shall be drop forged, pressed or formed steel, or made of equivalent-strength materials.

(9) Anchorages, including single- and double-head anchors, shall be capable of supporting at least 5,000 pounds per bridge worker attached, or shall be designed, installed, and used under supervision of a qualified person as part of a complete personal fall protection system that maintains a safety factor of at least two.

(b) *Personal fall arrest systems.* All components of a personal fall arrest system shall conform to the following standards:

(1) Lanyards and vertical lifelines that tie off one bridge worker shall have a minimum breaking strength of 5,000 pounds.

(2) Self-retracting lifelines and lanyards that automatically limit free fall distance to two feet or less shall have components capable of sustaining a minimum static tensile load of 3,000 pounds applied to the device with the lifeline or lanyard in the fully extended position.

(3) Self-retracting lifelines and lanyards that do not limit free fall distance to two feet or less, ripstitch, and tearing and deformed lanyards shall be capable of withstanding 5,000 pounds applied to the device with the lifeline or lanyard in the fully extended position.

(4) Horizontal lifelines shall be designed, installed, and used under the supervision of a competent person, as part of a complete personal fall arrest system that maintains a safety factor of at least two.

(5) Lifelines shall not be made of natural fiber rope.

(6) Body belts shall not be used as components of personal fall arrest systems.

(7) The personal fall arrest system shall limit the maximum arresting force on a bridge worker to 1,800 pounds when used with a body harness.

(8) The personal fall arrest system shall bring a bridge worker to a complete stop and limit maximum deceleration distance a bridge worker travels to 3.5 feet.

(9) The personal fall arrest system shall have sufficient strength to withstand twice the potential impact energy of a bridge worker free falling a distance of six feet, or the free fall distance permitted by the system, whichever is less.

(10) The personal fall arrest system shall be arranged so that a bridge worker cannot free fall more than six feet and cannot contact the ground or any lower horizontal surface of the bridge.

(11) Personal fall arrest systems shall be worn with the attachment point of the body harness located in the center of the wearer's back near shoulder level, or above the wearer's head.

(12) When vertical lifelines are used, each bridge worker shall be provided with a separate lifeline.

(13) Devices used to connect to a horizontal lifeline that may become a vertical lifeline shall be capable of locking in either direction.

(14) Dee-rings and snap-hooks shall be capable of sustaining a minimum tensile load of 3,600 pounds without cracking, breaking, or taking permanent deformation.

(15) Dee-rings and snap-hooks shall be capable of sustaining a minimum tensile load of 5,000 pounds.

(16) Snap-hooks shall not be connected to each other.

(17) Snap-hooks shall be dimensionally compatible with the member to which they are connected to prevent unintentional disengagement, or shall be a locking snap-hook designed to prevent unintentional disengagement.

(18) Unless of a locking type, snap-hooks shall not be engaged:

(i) Directly, next to a webbing, rope, or wire rope;

(ii) To each other;

(iii) To a dee-ring to which another snap-hook or other connector is attached;

(iv) To a horizontal lifeline; or

(v) To any object that is incompatibly shaped or dimensioned in relation to the snap-hook so that unintentional disengagement could occur.

(c) *Safety net systems.* Use of safety net systems shall conform to the following standards and practices:

(1) Safety nets shall be installed as close as practicable under the walking/working surface on which bridge workers are working, but shall not be installed more than 30 feet below such surface.

(2) If the distance from the working surface to the net exceeds 30 feet, bridge workers shall be protected by personal fall arrest systems.

(3) The safety net shall be installed such that any fall from the working surface to the net is unobstructed.

(4) Except as provided in this section, safety nets and net installations shall be drop-tested at the jobsite after initial installation and before being used as a fall protection system, whenever relocated, after major repair, and at six-month intervals if left in one place. The drop-test shall consist of a 400-pound bag of sand 30 inches, plus or minus two inches, in diameter dropped into

the net from the highest (but not less than 3½ feet) working surface on which bridge workers are to be protected.

(i) When the railroad or railroad contractor demonstrates that a drop-test is not feasible and, as a result, the test is not performed, the railroad or railroad contractor, or designated competent person, shall certify that the net and its installation are in compliance with the provisions of this section by preparing a certification record prior to use of the net.

(ii) The certification shall include an identification of the net, the date it was determined that the net was in compliance with this section, and the signature of the person making this determination. Such person's signature shall certify that the net and its installation are in compliance with this section. The most recent certification for each net installation shall be available at the jobsite where the subject net is located.

(5) Safety nets and their installations shall be capable of absorbing an impact force equal to that produced by the drop test specified in this section.

(6) The safety net shall be installed such that there is no contact with surfaces or structures below the net when subjected to an impact force equal to the drop test specified in this section.

(7) Safety nets shall extend outward from the outermost projection of the work surface as follows:

(i) When the vertical distance from the working level to the horizontal plane of the net is 5 feet or less, the minimum required horizontal distance of the outer edge of the net beyond the edge of the working surface is 8 feet.

(ii) When the vertical distance from the working level to the horizontal plane of the net is 5 feet, but less than 10 feet, the minimum required horizontal distance of the outer edge of the net beyond the edge of the working surface is 10 feet.

(iii) When the vertical distance from the working level to the horizontal plane of the net is more than 10 feet, the minimum required horizontal distance of the outer edge of the net beyond the edge of the working surface is 13 feet.

(8) Defective nets shall not be used. Safety nets shall be inspected at least once a week for mildew, wear, damage, and other deterioration. Defective components shall be removed permanently from service.

(9) Safety nets shall be inspected after any occurrence that could affect the integrity of the safety net system.

(10) Tools, scraps, or other materials that have fallen into the safety net shall be removed as soon as possible, and at least before the next work shift.

(11) Each safety net shall have a border rope for webbing with a minimum breaking strength of 5,000 pounds.

(12) The maximum size of each safety net mesh opening shall not exceed 36 square inches and shall not be longer than 6 inches on any side measured center-to-center of mesh ropes or webbing. All mesh crossing shall be secured to prevent enlargement of the mesh opening.

(13) Connections between safety net panels shall be as strong as integral net components and shall be spaced not more than 6 inches apart.

[67 FR 1906, Jan. 15, 2002; 67 FR 11055, Mar. 12, 2002]

§214.107 Working over or adjacent to water.

(a) Bridge workers working over or adjacent to water with a depth of four feet or more, or where the danger of drowning exists, shall be provided and shall use life vests or buoyant work vests in compliance with U.S. Coast Guard requirements in 46 CFR 160.047, 160.052, and 160.053. Life preservers in compliance with U.S. Coast Guard requirements in 46 CFR 160.055 shall also be

within ready access. This section shall not apply to bridge workers using personal fall arrest systems or safety nets that comply with this subpart or to bridge workers who are working under the provisions of §214.103(b)(2), (c) or (d) of this subpart.
(b) Prior to each use, all flotation devices shall be inspected for defects that reduce their strength or buoyancy by designated individuals trained by the railroad or railroad contractor. Defective units shall not be used.
(c) Where life vests are required by paragraph (a) of this section, ring buoys with at least 90 feet of line shall be provided and readily available for emergency rescue operations. Distance between ring buoys shall not exceed 200 feet.
(d) Where life vests are required, at least one lifesaving skiff, inflatable boat, or equivalent device shall be immediately available. If it is determined by a competent person that environmental conditions, including weather, water speed, and terrain, merit additional protection, the skiff or boat shall be manned.
[70 FR 7050, Feb. 10, 2005]

§214.109 Scaffolding.

(a) Scaffolding used in connection with railroad bridge maintenance, inspection, testing, and construction shall be constructed and maintained in a safe condition and meet the following minimum requirements:

(1) Each scaffold and scaffold component, except suspension ropes and guardrail systems, but including footings and anchorage, shall be capable of supporting, without failure, its own weight and at least four times the maximum intended load applied or transmitted to that scaffold or scaffold component.

(2) Guardrail systems shall be capable of withstanding, without failure, a force of at least 200 pounds applied within two inches of the top edge, in any outward or downward direction, at any point along the top edge.

(3) Top edge height of toprails, or equivalent guardrail system member, shall be 42 inches, plus or minus three inches. Supports shall be at intervals not to exceed eight feet. Toeboards shall be a minimum of four inches in height.

(4) Midrails, screens, mesh, intermediate vertical members, solid panels, and equivalent structural members shall be capable of withstanding, without failure, a force of at least 150 pounds applied in any downward or outward direction at any point along the midrail or other member.

(5) Midrails shall be installed at a height midway between the top edge of the guardrail system and the walking/working level.

(b) Scaffolds shall not be altered or moved while they are occupied. This paragraph does not apply to vertical movements of mobile scaffolds that are designed to move vertically while occupied.
(c) An access ladder or equivalent safe access shall be provided.
(d) All exposed surfaces shall be prepared and cleared to prevent injury due to laceration, puncture, tripping, or falling hazard.
(e) All scaffold design, construction, and repair shall be completed by competent individuals trained and knowledgeable about design criteria, intended use, structural limitations, and procedures for proper repair.
(f) Manually propelled mobile ladder stands and scaffolds shall conform to the following:

(1) All manually propelled mobile ladder stands and scaffolds shall be capable of carrying the design load.

(2) All ladder stands, scaffolds, and scaffold components shall be capable of supporting, without failure, displacement, or settlement, its own weight and at least four times the maximum intended load applied or transmitted to that ladder stand, scaffold, or scaffold component.

(3) All exposed surfaces shall be free from sharp edges or burrs.

(4) The maximum work level height shall not exceed four times the minimum or least base dimensions of any mobile ladder stand or scaffold. Where the basic mobile unit does not meet this requirement, suitable outrigger frames shall be employed to achieve this least base dimension, or equivalent provisions shall be made to guy or brace the unit against tipping.

(5) The minimum platform width for any work level shall not be less than 20 inches for mobile scaffolds (towers). Ladder stands shall have a minimum step width of 16 inches. The steps of ladder stands shall be fabricated from slip resistant treads.

(6) Guardrails and midrails shall conform to the requirements listed in paragraph (a) of this section.

(7) A climbing ladder or stairway shall be provided for proper access and egress, and shall be affixed or built into the scaffold and so located that in its use it will not have a tendency to tip the scaffold.

(8) Wheels or casters shall be capable of supporting, without failure, at least four times the maximum intended load applied or transmitted to that component. All scaffold casters shall be provided with a positive wheel and/or swivel lock to prevent movement. Ladder stands shall have at least two of the four casters and shall be of the swivel type.

§214.111 Personal protective equipment, generally.

With the exception of foot protection, the railroad or railroad contractor shall provide and the bridge worker shall use appropriate personal protective equipment described in this subpart in all operations where there is exposure to hazardous conditions, or where this subpart indicates the need for using such equipment to reduce the hazards to railroad bridge workers. The railroad or railroad contractor shall require the use of foot protection when the potential for foot injury exists.

[67 FR 1908, Jan. 15, 2002]

§214.113 Head protection.

(a) Railroad bridge workers working in areas where there is a possible danger of head injury from impact, or from falling or flying objects, or from electrical shock and burns, shall be provided and shall wear protective helmets.

(b) Helmets for the protection of railroad bridge workers against impact and penetration of falling and flying objects, or from high voltage electrical shock and burns shall conform to the national consensus standards for industrial head protection (American National Standards Institute, Z89.1-1986, Protective Headwear for Industrial Workers). This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from the American National Standards Institute, 25 West 43rd Street, New York, NY 10036. Copies may be inspected at the Federal Railroad Administration, Docket Clerk, 1200 New Jersey Avenue, SE., Washington, DC, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:*http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.*

[67 FR 1908, Jan. 15, 2002, as amended at 74 FR 25172, May 27, 2009]

§214.115 Foot protection.

(a) The railroad or railroad contractor shall require railroad bridge workers to wear foot protection equipment when potential foot injury may result from impact, falling or flying objects, electrical shock or burns, or other hazardous condition.

(b) Safety-toe footwear for railroad bridge workers shall conform to the national consensus standards for safety-toe footwear (American National Standards Institute, American National Standard Z41-1991, Standard for Personal Protection-Protective Footwear). This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from American National Standards Institute, 25 West 43rd Street, New York, NY 10036. Copies may be inspected at the Federal Railroad Administration, Docket Clerk, 1200 New Jersey Avenue, SE., Washington, DC, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:*http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.*

[67 FR 1908, Jan. 15, 2002, as amended at 74 FR 25172, May 27, 2009]

§214.117 Eye and face protection.

(a) Railroad bridge workers shall be provided and shall wear eye and face protection equipment when potential eye or face injury may result from physical, chemical, or radiant agents.

(b) Eye and face protection equipment required by this section shall conform to the national consensus standards for occupational and educational eye and face protection (American National Standards Institute, Z87.1-1989, Practice for Occupational and Educational Eye and Face Protection). This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from the American National Standards Institute, 25 West 43rd Street, New York, NY 10036. Copies may be inspected at the Federal Railroad Administration, Docket Clerk, 1200 New Jersey Avenue, SE., Washington, DC, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:*http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.*

(c) Face and eye protection equipment required by this section shall be kept clean and in good repair. Use of equipment with structural or optical defects is prohibited.

(d) Railroad bridge workers whose vision requires the use of corrective lenses, when required by this section to wear eye protection, shall be protected by goggles or spectacles of one of the following types:

(i) Spectacles whose protective lenses provide optical correction the, frame of which includes shielding against objects reaching the wearer's eyes around the lenses;

(ii) Goggles that can be worn over corrective lenses without disturbing the adjustment of the lenses; or

(iii) Goggles that incorporate corrective lenses mounted behind the protective lenses.

[67 FR 1908, Jan. 15, 2002; 67 FR 11055, Mar. 12, 2002, as amended at 74 FR 25172, May 27, 2009]

Subpart C—Roadway Worker Protection

SOURCE: 61 FR 65976, Dec. 16, 1996, unless otherwise noted.

§214.301 Purpose and scope.

(a) The purpose of this subpart is to prevent accidents and casualties caused by moving railroad cars, locomotives or roadway maintenance machines striking roadway workers or roadway maintenance machines.

(b) This subpart prescribes minimum safety standards for roadway workers. Each railroad and railroad contractor may prescribe additional or more stringent operating rules, safety rules, and other special instructions that are consistent with this subpart.

(c) This subpart prescribes safety standards related to the movement of roadway maintenance machines where such movements affect the safety of roadway workers. This subpart does not otherwise affect movements of roadway maintenance machines that are conducted under the authority of a train dispatcher, a control operator, or the operating rules of the railroad.

§214.302 Information collection requirements.

(a) The information collection requirements of this part were reviewed by the Office of Management and Budget pursuant to the Paperwork Reduction Act of 1995, Public Law 104-13, §2, 109 Stat.163 (1995) (codified as revised at 44 U.S.C. §§3501-3520), and are assigned OMB control number 2130-0539. FRA may not conduct or sponsor and a respondent is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

(b) The information collection requirements are found in the following sections: §§214.303, 214.307, 214.309, 214.311, 214.313, 214.315, 214.319, 214.321, 214.323, 214.325, 214.327, 214.329, 214.331, 214.335, 214.341.

§214.303 Railroad on-track safety programs, generally.

(a) Each railroad to which this part applies shall adopt and implement a program that will afford on-track safety to all roadway workers whose duties are performed on that railroad. Each such program shall provide for the levels of protection specified in this subpart.

(b) Each on-track safety program adopted to comply with this part shall include procedures to be used by each railroad for monitoring effectiveness of and compliance with the program.

§214.305 Compliance dates.

Each program adopted by a railroad shall comply not later than the date specified in the following schedule:

(a) For each Class I railroad (including National Railroad Passenger Corporation) and each railroad providing commuter service in a metropolitan or suburban area, March 15, 1997.

(b) For each Class II railroad, April 15, 1997.

(c) For each Class III railroad, switching and terminal railroad, and any railroad not otherwise classified, May 15, 1997.

(d) For each railroad commencing operations after the pertinent date specified in this section, the date on which operations commence.

§214.307 Review and approval of individual on-track safety programs by FRA.

(a) Each railroad shall notify, in writing, the Associate Administrator for Safety, Federal Railroad Administration, RRS-15, 1200 New Jersey Avenue, SE., Washington, DC 20590, not less than one month before its on-track safety program becomes effective. The notification shall include the effective date of the program, the address of the office at which the program documents are available for review and photocopying by representatives of the Federal Railroad Administrator, and the name, title, address and telephone number of the primary person to be contacted with

regard to review of the program. This notification procedure shall also apply to subsequent changes to a railroad's on-track safety program.
(b) After receipt of the notification from the railroad, the Federal Railroad Administration will conduct a formal review of the on-track safety program. The Federal Railroad Administration will notify the primary railroad contact person of the results of the review, in writing, whether the on-track safety program or changes to the program have been approved by the Administrator, and if not approved, the specific points in which the program or changes are deficient.
(c) A railroad's on-track safety program will take effect by the established compliance dates in §214.305, without regard to the date of review or approval by the Federal Railroad Administration. Changes to a railroad's program will take effect on dates established by each railroad without regard to the date of review and approval by the Federal Railroad Administration.
[61 FR 65976, Dec. 16, 1996, as amended at 74 FR 25172, May 27, 2009]

§214.309 On-track safety program documents.

Rules and operating procedures governing track occupancy and protection shall be maintained together in one manual and be readily available to all roadway workers. Each roadway worker responsible for the on-track safety of others, and each lone worker, shall be provided with and shall maintain a copy of the program document.

§214.311 Responsibility of employers.

(a) Each employer is responsible for the understanding and compliance by its employees with its rules and the requirements of this part.
(b) Each employer shall guarantee each employee the absolute right to challenge in good faith whether the on-track safety procedures to be applied at the job location comply with the rules of the operating railroad, and to remain clear of the track until the challenge is resolved.
(c) Each employer shall have in place a written procedure to achieve prompt and equitable resolution of challenges made in accordance with §§214.311(b) and 214.313(d).

§214.313 Responsibility of individual roadway workers.

(a) Each roadway worker is responsible for following the on-track safety rules of the railroad upon which the roadway worker is located.
(b) A roadway worker shall not foul a track except when necessary for the performance of duty.
(c) Each roadway worker is responsible to ascertain that on-track safety is being provided before fouling a track.
(d) Each roadway worker may refuse any directive to violate an on-track safety rule, and shall inform the employer in accordance with §214.311 whenever the roadway worker makes a good faith determination that on-track safety provisions to be applied at the job location do not comply with the rules of the operating railroad.

§214.315 Supervision and communication.

(a) When an employer assigns a duty to a roadway worker that calls for that employee to foul a track, the employer shall provide the employee with an on-track safety job briefing that, at a minimum, includes the following:

(1) Information on the means by which on-track safety is to be provided for each track identified to be fouled;

(2) Instruction on each on-track safety procedure to be followed;

(3) Information about any adjacent tracks, on-track safety for such tracks, if required by this subpart or deemed necessary by the roadway worker in charge, and identification of any roadway maintenance machines that will foul such tracks; and

(4) A discussion of the nature of the work to be performed and the characteristics of the work location to ensure compliance with this subpart.

(b) A job briefing for on-track safety shall be deemed complete only after the roadway worker has acknowledged understanding of the on-track safety procedures and instructions presented.

(c) Every roadway work group whose duties require fouling a track shall have one roadway worker designated by the employer to provide on-track safety for all members of the group. The designated person shall be qualified under the rules of the railroad that conducts train operations on those tracks to provide the protection necessary for on-track safety of each individual in the group. The responsible person may be designated generally, or specifically for a particular work situation.

(d) Before any member of a roadway work group fouls a track, the designated person providing on-track safety for the group under paragraph (c) of this section shall inform each roadway worker of the on- track safety procedures to be used and followed during the performance of the work at that time and location. Each roadway worker shall again be so informed at any time the on-track safety procedures change during the work period. Such information shall be given to all roadway workers affected before the change is effective, except in cases of emergency. Any roadway workers who, because of an emergency, cannot be notified in advance shall be immediately warned to leave the fouling space and shall not return to the fouling space until on-track safety is re-established.

(e) Each lone worker shall communicate at the beginning of each duty period with a supervisor or another designated employee to receive a job briefing and to advise of his or her planned itinerary and the procedures that he or she intends to use for on-track safety. When communication channels are disabled, the job briefing shall be conducted as soon as possible after the beginning of the work period when communications are restored.

[61 FR 65976, Dec. 16, 1996, as amended at 76 FR 74614, Nov. 30, 2011]

EFFECTIVE DATE NOTE: At 76 FR 74614, Nov. 30, 2011, §214.315 is amended by revising paragraph (a), effective May 1, 2012. At 77 FR 13978, Mar. 8, 2012, the effective date was delayed until July 1, 2013. At 78 FR 33754, June 5, 2013, it was further delayed until July 1, 2014. For the convenience of the user, the new text is set forth as follows:

§214.317 On-track safety procedures, generally.

Each employer subject to the provisions of this part shall provide on-track safety for roadway workers by adopting a program that contains specific rules for protecting roadway workers that comply with the provisions of §§214.319 through 214.337 of this part.

§214.319 Working limits, generally.

Working limits established on controlled track shall conform to the provisions of §214.321 Exclusive track occupancy, or §214.323 Foul time, or §214.325 Train coordination. Working limits established on non-controlled track shall conform to the provision of §214.327 Inaccessible track. Working limits established under any procedure shall, in addition, conform to the following provisions:

(a) Only a roadway worker who is qualified in accordance with §214.353 of this part shall establish or have control over working limits for the purpose of establishing on-track safety.

(b) Only one roadway worker shall have control over working limits on any one segment of track.

(c) All affected roadway workers shall be notified before working limits are released for the operation of trains. Working limits shall not be released until all affected roadway workers have either left the track or have been afforded on-track safety through train approach warning in accordance with §214.329 of this subpart.

§214.321 Exclusive track occupancy.

Working limits established on controlled track through the use of exclusive track occupancy procedures shall comply with the following requirements:

(a) The track within working limits shall be placed under the control of one roadway worker by either:

(1) Authority issued to the roadway worker in charge by the train dispatcher or control operator who controls train movements on that track,

(2) Flagmen stationed at each entrance to the track within working limits and instructed by the roadway worker in charge to permit the movement of trains and equipment into the working limits only as permitted by the roadway worker in charge, or

(3) The roadway worker in charge causing fixed signals at each entrance to the working limits to display an aspect indicating “Stop.”

(b) An authority for exclusive track occupancy given to the roadway worker in charge of the working limits shall be transmitted on a written or printed document directly, by relay through a designated employee, in a data transmission, or by oral communication, to the roadway worker by the train dispatcher or control operator in charge of the track.

(1) Where authority for exclusive track occupancy is transmitted orally, the authority shall be written as received by the roadway worker in charge and repeated to the issuing employee for verification.

(2) The roadway worker in charge of the working limits shall maintain possession of the written or printed authority for exclusive track occupancy while the authority for the working limits is in effect.

(3) The train dispatcher or control operator in charge of the track shall make a written or electronic record of all authorities issued to establish exclusive track occupancy.

(c) The extent of working limits established through exclusive track occupancy shall be defined by one of the following physical features clearly identifiable to a locomotive engineer or other person operating a train or railroad equipment:

(1) A flagman with instructions and capability to hold all trains and equipment clear of the working limits;

(2) A fixed signal that displays an aspect indicating “Stop”;

(3) A station shown in the time-table, and identified by name with a sign, beyond which train movement is prohibited by train movement authority or the provisions of a direct train control system.

(4) A clearly identifiable milepost sign beyond which train movement is prohibited by train movement authority or the provisions of a direct train control system; or

(5) A clearly identifiable physical location prescribed by the operating rules of the railroad that trains may not pass without proper authority.

(d) Movements of trains and roadway maintenance machines within working limits established through exclusive track occupancy shall be made only under the direction of the roadway worker having control over the working limits. Such movements shall be restricted speed unless a higher speed has been specifically authorized by the roadway worker in charge of the working limits.

§214.323 Foul time. *(changes in red effective April 01, 2017)*

Working limits established on controlled track through the use of foul time procedures shall comply with the following requirements:

(a) Foul time may be given orally or in writing by the train dispatcher or control operator only after that employee has withheld the authority of all trains *or other on-track equipment* to move into or within the working limits during the foul time period.

(b) Each roadway worker *in charge* to whom foul time is transmitted orally shall repeat the track number, track limits and time limits of the foul time to the issuing employee for verification before the foul time becomes effective.

(c) The train dispatcher or control operator shall not permit the movement of trains or other on-track equipment onto the working limits protected by foul time until the roadway worker who obtained the foul time has reported clear of the track.

(d) The roadway worker in charge shall not permit the movement of trains or other on-track equipment into or within working limits protected by foul time.

§214.325 Train coordination.

Working limits established by a roadway worker through the use of train coordination shall comply with the following requirements:

(a) Working limits established by train coordination shall be within the segments of track or tracks upon which only one train holds exclusive authority to move.

(b) The roadway worker who establishes working limits by train coordination shall communicate with a member of the crew of the train holding the exclusive authority to move, and shall determine that:

(1) The train is visible to the roadway worker who is establishing the working limits,

(2) The train is stopped,

(3) Further movements of the train will be made only as permitted by the roadway worker in charge of the working limits while the working limits remain in effect, and

(4) The crew of the train will not give up its exclusive authority to move until the working limits have been released to the train crew by the roadway worker in charge of the working limits.

§214.327 Inaccessible track.

(a) Working limits on non-controlled track shall be established by rendering the track within working limits physically inaccessible to trains at each possible point of entry by one of the following features:

(1) A flagman with instructions and capability to hold all trains and equipment clear of the working limits;

(2) A switch or derail aligned to prevent access to the working limits and secured with an effective securing device by the roadway worker in charge of the working limits;

(3) A discontinuity in the rail that precludes passage of trains or engines into the working limits;

(4) Working limits on controlled track that connects directly with the inaccessible track, established by the roadway worker in charge of the working limits on the inaccessible track; or

(5) A remotely controlled switch aligned to prevent access to the working limits and secured by the control operator of such remotely controlled switch by application of a locking or blocking device to the control of that switch, when:

(i) The control operator has secured the remotely controlled switch by applying a locking or blocking device to the control of the switch, and

(ii) The control operator has notified the roadway worker who has established the working limits that the requested protection has been provided, and

(iii) The control operator is not permitted to remove the locking or blocking device from the control of the switch until receiving permission to do so from the roadway worker who established the working limits.

(b) Trains and roadway maintenance machines within working limits established by means of inaccessible track shall move only under the direction of the roadway worker in charge of the working limits, and shall move at restricted speed.

(c) No operable locomotives or other items of on-track equipment, except those present or moving under the direction of the roadway worker in charge of the working limits, shall be located within working limits established by means of inaccessible track.

§214.329 Train approach warning provided by watchmen/lookouts.

Roadway workers in a roadway work group who foul any track outside of working limits shall be given warning of approaching trains by one or more watchmen/lookouts in accordance with the following provisions:

(a) Train approach warning shall be given in sufficient time to enable each roadway worker to move to and occupy a previously arranged place of safety not less than 15 seconds before a train moving at the maximum speed authorized on that track can pass the location of the roadway worker.

(b) Watchmen/lookouts assigned to provide train approach warning shall devote full attention to detecting the approach of trains and communicating a warning thereof, and shall not be assigned any other duties while functioning as watchmen/lookouts.

(c) The means used by a watchman/lookout to communicate a train approach warning shall be distinctive and shall clearly signify to all recipients of the warning that a train or other on-track equipment is approaching.

(d) Every roadway worker who depends upon train approach warning for on-track safety shall maintain a position that will enable him or her to receive a train approach warning communicated by a watchman/lookout at any time while on-track safety is provided by train approach warning.

(e) Watchmen/lookouts shall communicate train approach warnings by a means that does not require a warned employee to be looking in any particular direction at the time of the warning, and that can be detected by the warned employee regardless of noise or distraction of work.

(f) Every roadway worker who is assigned the duties of a watchman/lookout shall first be trained, qualified and designated in writing by the employer to do so in accordance with the provisions of §214.349.

(g) Every watchman/lookout shall be provided by the employer with the equipment necessary for compliance with the on-track safety duties which the watchman/lookout will perform.

§214.331 Definite train location.

A roadway worker may establish on-track safety by using definite train location only where permitted by and in accordance with the following provisions:

(a) A Class I railroad or a commuter railroad may only use definite train location to establish on-track safety at points where such procedures were in use on January 15, 1997.
(b) Each Class I or commuter railroad shall include in its on-track safety program for approval by FRA in accordance with §214.307 of this part a schedule for phase-out of the use of definite train location to establish on-track safety.
(c) A railroad other than a Class I or commuter railroad may use definite train location to establish on-track safety on subdivisions only where:

(1) Such procedures were in use on January 15, 1997, or

(2) The number of trains operated on the subdivision does not exceed:

(i) Three during any nine-hour period in which roadway workers are on duty, and

(ii) Four during any twelve-hour period in which roadway workers are on duty.

(d) Definite train location shall only be used to establish on-track safety according to the following provisions:

(1) Definite train location information shall be issued only by the one train dispatcher who is designated to authorize train movements over the track for which the information is provided.

(2) A definite train location list shall indicate all trains to be operated on the track for which the list is provided, during the time for which the list is effective.

(3) Trains not shown on the definite train location list shall not be operated on the track for which the list is provided, during the time for which the list is effective, until each roadway worker to whom the list has been issued has been notified of the train movement, has acknowledged the notification to the train dispatcher, and has canceled the list. A list thus canceled shall then be invalid for on-track safety.

(4) Definite train location shall not be used to establish on-track safety within the limits of a manual interlocking, or on track over which train movements are governed by a Traffic Control System or by a Manual Block System.

(5) Roadway workers using definite train location for on-track safety shall not foul a track within ten minutes before the earliest time that a train is due to depart the last station at which time is shown in approach to the roadway worker's location nor until that train has passed the location of the roadway worker.

(6) A railroad shall not permit a train to depart a location designated in a definite train location list before the time shown therein.

(7) Each roadway worker who uses definite train location to establish on-track safety must be qualified on the relevant physical characteristics of the territory for which the train location information is provided.

§214.333 Informational line-ups of trains.

(a) A railroad is permitted to include informational line-ups of trains in its on-track safety program for use only on subdivisions of that railroad upon which such procedure was in effect on March 14, 1996.
(b) Each procedure for the use of informational line-ups of trains found in an on-track safety program shall include all provisions necessary to protect roadway workers using the procedure against being struck by trains or other on-track equipment.
(c) Each on-track safety program that provides for the use of informational line-ups shall include a schedule for discontinuance of the procedure by a definite date.

§214.335 On-track safety procedures for roadway work groups, general.

(a) No employer subject to the provisions of this part shall require or permit a roadway worker who is a member of a roadway work group to foul a track unless on-track safety is provided by either working limits, train approach warning, or definite train location in accordance with the

applicable provisions of §§214.319, 214.321, 213.323, 214.325, 214.327, 214.329 and 214.331 of this part.
(b) No roadway worker who is a member of a roadway work group shall foul a track without having been informed by the roadway worker responsible for the on-track safety of the roadway work group that on-track safety is provided.
[61 FR 65976, Dec. 16, 1996, as amended at 76 FR 74614, Nov. 30, 2011]
§214.336 On-track safety procedures for certain roadway work groups and adjacent tracks.
(a) *Procedures; general.* (1) *General rule.* Except as provided in paragraph (e) of this section, on-track safety is required for each adjacent controlled track when a roadway work group with at least one of the roadway workers on the ground is engaged in a common task with on-track, self-propelled equipment or coupled equipment on an occupied track. The required on-track safety shall be established through §214.319 (Working limits, generally) or §214.329 (Train approach warning provided by watchmen/lookouts) and as more specifically described in this section.

(2) *Special circumstance arising in territories with at least three tracks, if an occupied track is between two adjacent controlled tracks.* If an occupied track has two adjacent controlled tracks, and one of these adjacent controlled tracks has one or more train or other on-track equipment movements authorized or permitted at a speed of 25 mph or less (or 40 mph or less for one or more passenger train or other passenger on-track equipment movements), and the other adjacent controlled track has one or more concurrent train or other on-track equipment movements authorized or permitted at a speed over 25 mph (or over 40 mph for one or more passenger train or other passenger on-track equipment movements), the more restrictive procedures in paragraph (b) of this section apply.
(3) ***Definitions.*** As used in this section—
Adjacent controlled track means a controlled track whose track center is spaced 19 feet or less from the track center of the occupied track.
Adjacent track means a controlled or non-controlled track whose track center is spaced less than 25 feet from the track center of the occupied track.
Inter-track barrier means a continuous barrier of a permanent or semi-permanent nature that spans the entire work area, that is at least four feet in height, and that is of sufficient strength to prevent a roadway worker from fouling the adjacent track.
Minor correction means one or more repairs of a minor nature, including, but not limited to, welding, spiking, anchoring, hand tamping, and joint bolt replacement, that are accomplished with hand tools or handheld, hand-supported, or hand-guided power tools. The term does not include machine spiking, machine tamping, or any similarly distracting repair.
Occupied track means a track on which on-track, self-propelled equipment or coupled equipment is authorized or permitted to be located while engaged in a common task with a roadway work group with at least one of the roadway workers on the ground.
(b) *Procedures for adjacent-controlled-track movements over 25 mph (or over 40 mph if passenger movements).* If a train or other on-track equipment is authorized to move on an adjacent controlled track at a speed greater than 25 mph, or at a speed greater than 40 mph for a passenger train or other passenger on-track equipment movement, each roadway worker in the roadway work group that is affected by such movement must comply with the following procedures:

(1) *Ceasing work and occupying a predetermined place of safety.* Except for the work activities as described in paragraph (e) of this section, each affected roadway worker shall, as described in Table 1 of this section, cease all on-ground work and equipment movement that is being performed on or between the rails of the occupied track or on one or both sides of the

occupied track, and occupy a predetermined place of safety upon receiving either a watchman/lookout warning or, alternatively, a notification that the roadway worker in charge intends to permit one or more train or other on-track equipment movements through the working limits on the adjacent controlled track.

(2) *Resuming work.* (i) An affected roadway worker may resume on-ground work and equipment movement (on or between the rails of the occupied track or on one or both sides of the occupied track as described in Table 1 of this section) only after the trailing-end of all trains or other on-track equipment moving on the adjacent controlled track (for which a warning or notification has been received in accordance with paragraph (b)(1) of this section) has passed and remains ahead of that roadway worker.

(ii) If the train or other on-track equipment stops before its trailing-end has passed all of the affected roadway workers in the roadway work group, the work to be performed (on or between the rails of the occupied track or on one or both sides of the occupied track as described in Table 1 of this section) ahead of the trailing-end of the train or other on-track equipment on the adjacent controlled track may resume only—

(A) If on-track safety through train approach warning (§214.329) has been established on the adjacent controlled track; or

(B) After the roadway worker in charge has communicated with a member of the train crew or the on-track equipment operator and established that further movements of such train or other on-track equipment shall be made only as permitted by the roadway worker in charge.

(c) *Procedures for adjacent-controlled-track movements 25 mph or less (or 40 mph or less if passenger movements).*If a train or other on-track equipment is authorized or permitted to move on an adjacent controlled track at a speed of 25 mph or less, or at a speed of 40 mph or less for a passenger train or other passenger on-track equipment movement, each roadway worker in the roadway work group that is affected by such movement must comply with the procedures listed in paragraph (b) of this section, except that equipment movement on the rails of the occupied track and on-ground work performed exclusively between the rails (*i.e.,* not breaking the plane of the rails) of the occupied track may continue, provided that no on-ground work is performed within the areas 25 feet in front of and 25 feet behind any on-track, self-propelled equipment or coupled equipment permitted to move on the occupied track.

(d) *Discretion of roadway worker in charge.* Nothing in this subpart prohibits the roadway worker in charge from establishing on-track safety on one or more adjacent tracks as he or she deems necessary consistent with both the purpose and requirements of this subpart.

(e) *Exceptions to certain requirements for adjacent-controlled-track on-track safety.* No on-track safety (other than that required by paragraph (f) of this section or provided under paragraph (d) of this section) is required by paragraphs (a) through (c) of this section for an adjacent controlled track during the times that the roadway work group is exclusively performing one or more of the following work activities:

(1) *On-ground work performed on a side of the occupied track meeting specified condition(s).* A roadway work group with all of its on-ground roadway workers (other than those performing work in accordance with another exception in paragraph (e) of this section) performing work while exclusively positioned on a side of the occupied track as follows and as further specified in Table 1 of this section:

(i) The side with no adjacent track;

(ii) The side with one or more adjacent tracks, the closest of which has working limits on it and no movements permitted within such working limits by the roadway worker in charge; or

(iii) The side with one or more adjacent tracks, provided that that it has an inter-track barrier between the occupied track and the closest adjacent track on that side.

(2) *Maintenance or repairs performed either alongside, or within the perimeter of, a roadway maintenance machine or coupled equipment on the occupied track.* (i) One or more roadway workers performing maintenance or repairs alongside a roadway maintenance machine or coupled equipment, provided that such machine or equipment would effectively prevent the worker from fouling the adjacent controlled track on the other side of such equipment, and that such maintenance or repairs are performed while positioned on a side of the occupied track as described in paragraph (e)(1)(i), (ii), or (iii) and Table 1 of this section.

(ii) One or more roadway workers on or under a roadway maintenance machine or coupled equipment performing maintenance or repairs within the perimeter of the machine or equipment, provided that no part of their person breaks the plane of the rail of the occupied track except when toward one of the sides of the occupied track as described in paragraph (e)(1)(i), (ii), or (iii) and Table 1 of this section. A boom or other equipment extending beyond the body of a roadway maintenance machine or coupled equipment toward an adjacent controlled track is not considered to be within the perimeter of the machine or coupled equipment.

(3) *Work activities involving certain equipment and purposes.* One or more on-ground roadway workers engaged in a common task on an occupied track with on-track, self-propelled equipment or coupled equipment consisting exclusively of one or more of the types of equipment described in paragraphs (e)(3)(i) through (iii) of this section. If such a roadway work group ("excepted group") is authorized or permitted to operate on the same occupied track and within the working limits of a separate roadway work group performing work that is subject to the requirements of this section ("non-excepted group") or vice versa (*i.e.,* a non-excepted group is authorized or permitted to operate on the same occupied track and within the working limits of an excepted group), the groups must conduct an on-track safety job briefing to determine if adjacent-controlled-track on-track safety is necessary for the excepted group. Such determination shall be made by the roadway worker in charge of the working limits; however, if the groups are in such proximity where the ability of the roadway workers in the excepted group to hear or see approaching trains and other on-track equipment is impaired by background noise, lights, sight obstructions or any other physical conditions caused by the equipment, then this exception does not apply, and adjacent-controlled-track on-track safety must be provided to both groups. This exception otherwise applies to work activities involving one or more of the following types of equipment:

(i) A hi-rail vehicle or other rail-bound vehicle (other than a catenary maintenance tower vehicle) being used for inspection or minor correction purposes, provided that such vehicle is not coupled to one or more railroad cars. In accordance with §214.315(a), where multiple hi-rail or rail-bound vehicles being used for inspection or minor correction are engaged in a common task, the on-track safety job briefing shall include discussion of the nature of the work to be performed to determine if adjacent-controlled-track on-track safety is necessary.

(ii) An automated inspection car being used for inspection or minor correction purposes.

(iii) A catenary maintenance tower car or vehicle, provided that all of the on-ground workers engaged in the common task (other than those performing work in accordance with another exception in paragraph (e) of this section) are positioned within the gage of the occupied track for the sole purpose of applying or removing grounds.

(f) *Procedures for components of roadway maintenance machines fouling an adjacent controlled track.* Except as provided for in §214.341(c), a component of a roadway maintenance machine shall not foul an adjacent controlled track unless working limits have been established on the adjacent-controlled-track and there are no movements permitted within the working limits by

the roadway worker in charge that would affect any of the roadway workers engaged in a common task with such machine.

TABLE 1—SUMMARY OF ON-TRACK SAFETY PROCEDURES FOR CERTAIN ROADWAY WORK GROUPS AND ADJACENT TRACKS

Example No./ Diagram No. (see Figure 1)	**"Side A" of the Occupied Track—the side from the vertical plane of the near running rail of the occupied track extending outward through to the fouling space of the adjacent controlled track ("'No. 1' Track" or "No. 1")**		**On or Between the Rails of the Occupied Track ("'No. 2' Track" or "No. 2"), where On-Track Safety Is Established through Working Limits**	**"Side B" of the Occupied Track—either (1) the side with no adjacent track or (2) the side from the vertical plane of the near running rail of the occupied track extending outward through to the fouling space of the adjacent controlled track ("'No. 3' Track" or "No. 3")**	
	Method of On-Track Safety on Side A	Requirements	Requirements	Requirements	Method of On-Track Safety on Side B
1	Working limits or train approach warning	Upon receiving a notification or warning for movement(s) ("movement notification or warning") for No. 1, cease work and occupy a predetermined place of safety ("PPOS"). [1]	Upon movement notification or warning for No. 1, cease work and occupy a PPOS, except work may continue during movement(s) on No. 1 auth'd. at 25 mph or less (or 40 mph or less for passenger train movements) if maintain 25' spacing.[2]	Work[3] is not required to cease during movement(s) on No. 1.	Not applicable (N/A), because there is no adjacent track
2	Working limits	Upon movement notification for No. 1, cease work and occupy a PPOS. Work[3] is not required to cease during movement(s) on No. 3.	Upon movement notification for No. 1 or No. 3, cease work and occupy a PPOS, except work may continue during movement(s) on No. 1 or No. 3 auth'd. at 25 mph or less (or at 40 mph or less for passenger train movements) if maintain 25' spacing.[2]	Upon movement notification for No. 3, cease work and occupy a PPOS. Work[3] is not required to cease during movement(s) on No. 1.	Working limits
3	Working limits	Upon movement notification for No. 1, cease work and occupy a PPOS. Work[3] is not required to cease during movement(s) on No. 3.	Upon movement notification for No. 1 or warning for No. 3, cease work and occupy a PPOS, except work may continue during movement(s) on No. 1 or No. 3 auth'd. at 25 mph or less (or at 40 mph or less for passenger train movements) if maintain 25' spacing.[2]	Upon movement warning for No. 3 or notification for No. 1, cease work and occupy a PPOS.	Train approach warning

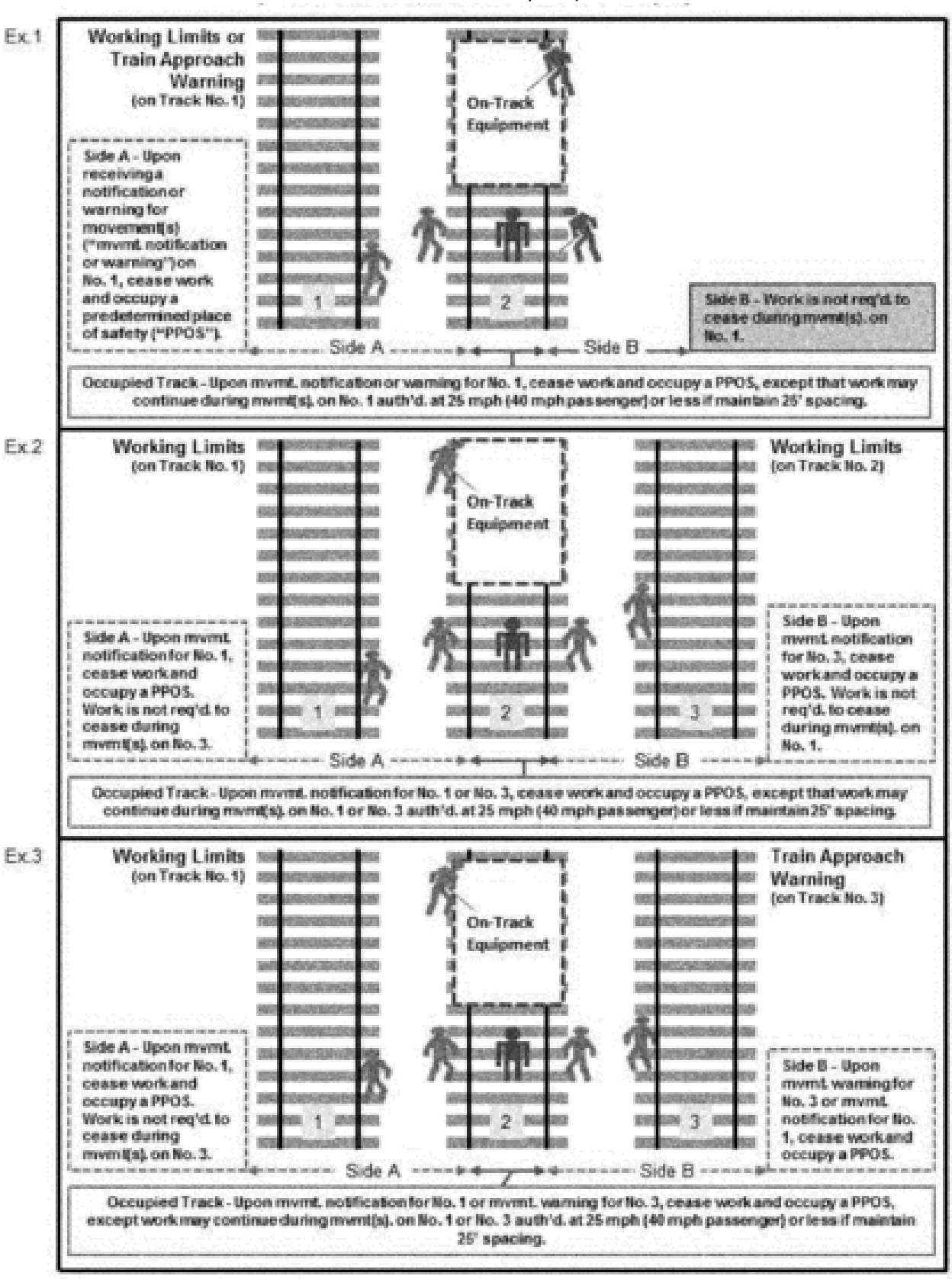
Example No./ Diagram No. (see Figure 1)	**"Side A" of the Occupied Track—the side from the vertical plane of the near running rail of the occupied track extending outward through to the fouling space of the adjacent controlled track ("'No. 1' Track" or "No. 1")**		**On or Between the Rails of the Occupied Track ("'No. 2' Track" or "No. 2"), where On-Track Safety Is Established through Working Limits**	**"Side B" of the Occupied Track—either (1) the side with no adjacent track or (2) the side from the vertical plane of the near running rail of the occupied track extending outward through to the fouling space of the adjacent controlled track ("'No. 3' Track" or "No. 3")**	
	Method of On-Track Safety on Side A	Requirements	Requirements	Requirements	Method of On-Track Safety on Side B
4	**Train approach warning**	**Upon movement warning for No. 1 or No. 3, cease work and occupy a PPOS.**	**Upon movement warning for No. 1 or No. 3, cease work and occupy a PPOS, except work may continue during movement(s) on No. 1 or No. 3 auth'd. at 25 mph or less (or at 40 mph or less for passenger train movements) if maintain 25' spacing.[2]**	**Upon movement warning for No. 3 or No. 1, cease work and occupy safety PPOS.**	**Train approach warning**
5	None, but with inter-track barrier	Work is prohibited on No. 1 and up to barrier ("Side A1"). Work is not required to cease btwn. barrier and near running rail of occupied track ("Side A2") during movement(s) on No. 1.	Work is not required to cease during movement(s) on No. 1.	Work is not required to cease during movement(s) on No. 1.	N/A, because there is no adjacent track
6	None, but with inter-track barrier	Work is prohibited on Side A1. Work[3] is not required to cease on Side A2 during movement(s) on No. 1 or No. 3.	Work is not required to cease during movement(s) on No. 1. Upon movement notification or warning for No. 3, cease work and occupy a PPOS, except work may continue during movement(s) on No. 3 auth'd. at 25 mph or less (or at 40 mph or less for passenger trains) if maintain 25' spacing.[2]	Upon movement notification or warning for No. 3, cease work and occupy a PPOS. Work[3] is not required to cease during movement(s) on No. 1.	Working limits or train approach warning

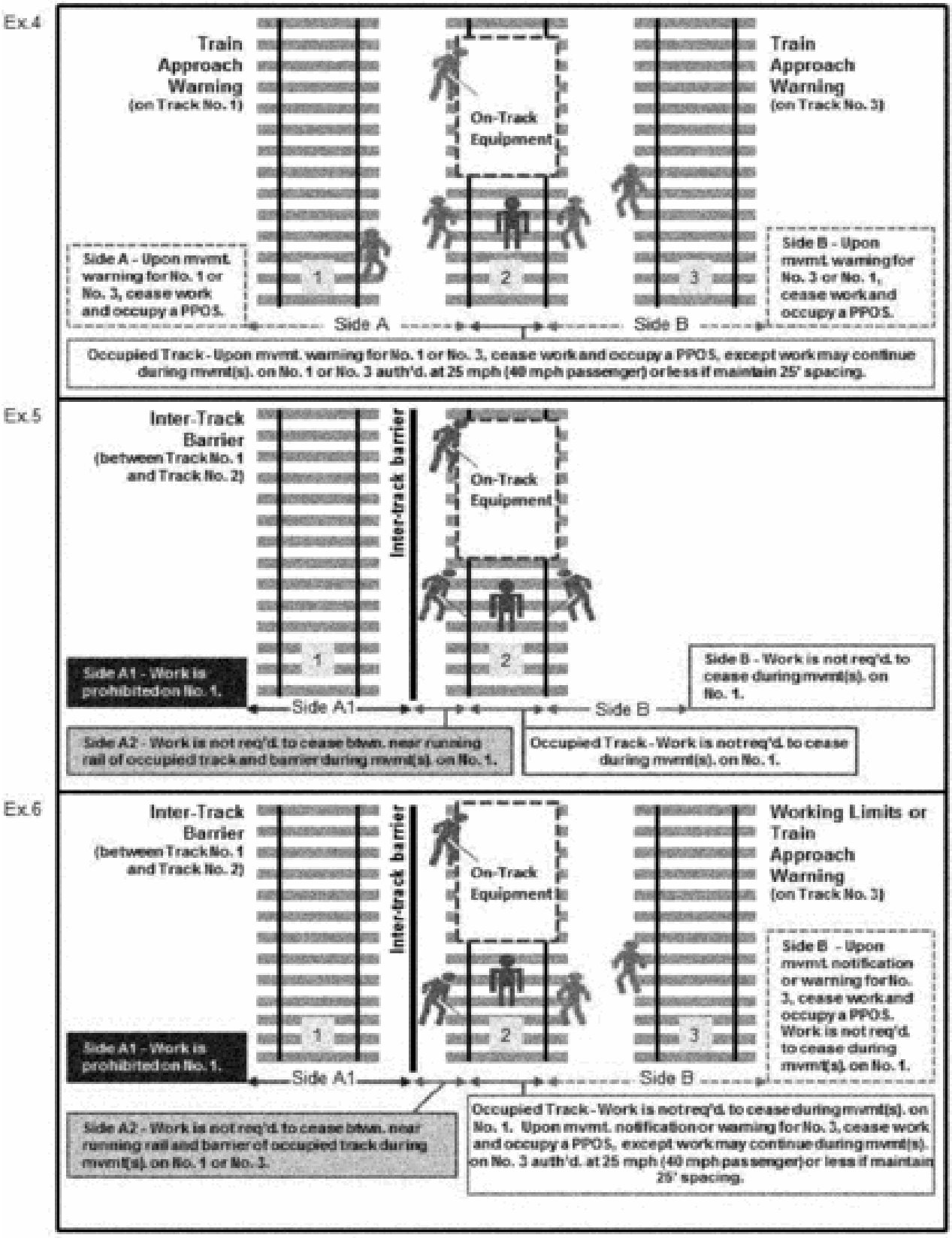
[1]As used in the above table, a “predetermined place of safety” (or “PPOS”) means a specific location that an affected roadway worker must occupy upon receiving a watchman/lookout's warning of approaching movement(s) (“warning”) or a roadway worker in charge's (“RWIC's”) notification of pending movement(s) on an adjacent track (“notification”), as designated during the on-track safety job briefing required by §214.315. The PPOS may not be on a track, unless the track has working limits on it and no movements permitted within such working limits by the RWIC. Thus, under these circumstances, the space between the rails of the occupied track (No. 2 in this table) may be designated as a place to remain in position or to otherwise occupy upon receiving a warning or notification. The RWIC must determine any change to a PPOS, and communicate such change to all affected roadway workers through an updated on-track safety job briefing.

[2]On-ground work is prohibited in the areas 25’ in front of and 25’ behind equipment on the occupied track (No. 2), and must not break the plane of a rail on No. 2 towards a side of No. 2 unless work is permitted on that side. Note, however, that per §214.336(a)(2), work would no longer be permitted to continue on or between the rails of the occupied track during movement(s) on an adjacent controlled track at 25 mph or less (or at 40 mph or less for passenger trains or other passenger on-track equipment movements) if there is a simultaneous movement on the other adjacent controlled track at more than 25 mph (or at more than 40 mph per hour for passenger train movements or other passenger on-track equipment movements).

[3]Work that does not break the plane of the near running rail of the occupied track (No. 2) is not required to cease during such movements; work that breaks the plane of the near running rail of the occupied track may also continue: 1) during the times that work is permitted on or between the rails of the occupied track in accordance with §214.336(c) (Procedures for adjacent-controlled-track movements 25 mph or less, or 40 mph or less for passenger train movements or other passenger on-track equipment movements); or 2) if such work is performed alongside or within the perimeter of a roadway maintenance machine or coupled equipment in accordance with §214.336(e)(2).

FIGURE 1 – EXAMPLES APPLYING §214.336 ON-TRACK SAFETY PROCEDURES FOR CERTAIN ROADWAY WORK GROUPS AND ADJACENT TRACKS (All tracks are controlled with centerlines less than 19 feet apart.)





[76 FR 74615, Nov. 30, 2011, as amended at 79 FR 1766, Jan. 10, 2014]

§214.337 On-track safety procedures for lone workers.

(a) A lone worker who fouls a track while performing routine inspection or minor correction may use individual train detection to establish on-track safety only where permitted by this section and the on-track safety program of the railroad.

(b) A lone worker retains an absolute right to use on-track safety procedures other than individual train detection if he or she deems it necessary, and to occupy a place of safety until such other form of on-track safety can be established.
(c) Individual train detection may be used to establish on-track safety only:

(1) By a lone worker who has been trained, qualified, and designated to do so by the employer in accordance with §214.347 of this subpart;

(2) While performing routine inspection and minor correction work;

(3) On track outside the limits of a manual interlocking, a controlled point, or a remotely controlled hump yard facility;

(4) Where the lone worker is able to visually detect the approach of a train moving at the maximum speed authorized on that track, and move to a previously determined place of safety, not less than 15 seconds before the train would arrive at the location of the lone worker;

(5) Where no power-operated tools or roadway maintenance machines are in use within the hearing of the lone worker; and

(6) Where the ability of the lone worker to hear and see approaching trains and other on-track equipment is not impaired by background noise, lights, precipitation, fog, passing trains, or any other physical conditions.
(d) The place of safety to be occupied by a lone worker upon the approach of a train may not be on a track, unless working limits are established on that track.
(e) A lone worker using individual train detection for on-track safety while fouling a track 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 moving in either direction as prescribed in this section.
(f) A lone worker who uses individual train detection to establish on-track safety shall first complete a written Statement of On-track Safety. The Statement shall designate the limits of the track for which it is prepared and the date and time for which it is valid. The statement shall show the maximum authorized speed of trains within the limits for which it is prepared, and the sight distance that provides the required warning of approaching trains. The lone worker using individual train detection to establish on-track safety shall produce the Statement of On-track Safety when requested by a representative of the Federal Railroad Administrator.

§214.339 Audible warning from trains.

Each railroad shall require that the locomotive whistle be sounded, and the locomotive bell be rung, by trains approaching roadway workers on or about the track. Such audible warning shall not substitute for on-track safety procedures prescribed in this part.

§214.341 Roadway maintenance machines.

(a) Each employer shall include in its on-track safety program specific provisions for the safety of roadway workers who operate or work near roadway maintenance machines. Those provisions shall address:

(1) Training and qualification of operators of roadway maintenance machines.

(2) Establishment and issuance of safety procedures both for general application and for specific types of machines.

(3) Communication between machine operators and roadway workers assigned to work near or on roadway maintenance machines.

(4) Spacing between machines to prevent collisions.

(5) Space between machines and roadway workers to prevent personal injury.

(6) Maximum working and travel speeds for machines dependent upon weather, visibility, and stopping capabilities.
(b) Instructions for the safe operation of each roadway machine shall be provided and maintained with each machine large enough to carry the instruction document.

(1) No roadway worker shall operate a roadway maintenance machine without having been trained in accordance with §214.355.

(2) No roadway worker shall operate a roadway maintenance machine without having knowledge of the safety instructions applicable to that machine. For purposes of this paragraph, the safety instructions applicable to that machine means:

(i) The manufacturer's instruction manual for that machine; or

(ii) The safety instructions developed to replace the manufacturer's safety instructions when the machine has been adapted for a specific railroad use. Such instructions shall address all aspects of the safe operation of the crane and shall be as comprehensive as the manufacturer's safety instructions they replace.

(3) No employer shall assign roadway workers to work near roadway machines unless the roadway worker has been informed of the safety procedures applicable to persons working near the roadway machines and has acknowledged full understanding.

(c) Components of roadway maintenance machines shall be kept clear of trains passing on adjacent tracks. Where operating conditions permit roadway maintenance machines to be less than four feet from the rail of an adjacent track, the on-track safety program of the railroad shall include the procedural instructions necessary to provide adequate clearance between the machine and passing trains.

[61 FR 65976, Dec. 16, 1996, as amended at 79 FR 66501, Nov. 7, 2014]

§214.343 Training and qualification, general.

(a) No employer shall assign an employee to perform the duties of a roadway worker, and no employee shall accept such assignment, unless that employee has received training in the on-track safety procedures associated with the assignment to be performed, and that employee has demonstrated the ability to fulfill the responsibilities for on-track safety that are required of an individual roadway worker performing that assignment.

(b) Each employer shall provide to all roadway workers in its employ initial or recurrent training once every calendar year on the on-track safety rules and procedures that they are required to follow.

(c) Railroad employees other than roadway workers, who are associated with on-track safety procedures, and whose primary duties are concerned with the movement and protection of trains, shall be trained to perform their functions related to on-track safety through the training and qualification procedures prescribed by the operating railroad for the primary position of the employee, including maintenance of records and frequency of training.

(d) Each employer of roadway workers shall maintain written or electronic records of each roadway worker qualification in effect. Each record shall include the name of the employee, the type of qualification made, and the most recent date of qualification. These records shall be kept available for inspection and photocopying by the Federal Railroad Administrator during regular business hours.

§214.345 Training for all roadway workers.

The training of all roadway workers shall include, as a minimum, the following:

(a) Recognition of railroad tracks and understanding of the space around them within which on-track safety is required.

(b) The functions and responsibilities of various persons involved with on-track safety procedures.

(c) Proper compliance with on-track safety instructions given by persons performing or responsible for on-track safety functions.

(d) Signals given by watchmen/lookouts, and the proper procedures upon receiving a train approach warning from a lookout.

(e) The hazards associated with working on or near railroad tracks, including review of on-track safety rules and procedures.

§214.347 Training and qualification for lone workers.

Each lone worker shall be trained and qualified by the employer to establish on-track safety in accordance with the requirements of this section, and must be authorized to do so by the railroad that conducts train operations on those tracks.

(a) The training and qualification for lone workers shall include, as a minimum, consideration of the following factors:

(1) Detection of approaching trains and prompt movement to a place of safety upon their approach.

(2) Determination of the distance along the track at which trains must be visible in order to provide the prescribed warning time.

(3) Rules and procedures prescribed by the railroad for individual train detection, establishment of working limits, and definite train location.

(4) On-track safety procedures to be used in the territory on which the employee is to be qualified and permitted to work alone.

(b) Initial and periodic qualification of a lone worker shall be evidenced by demonstrated proficiency.

§214.349 Training and qualification of watchmen/lookouts.

(a) The training and qualification for roadway workers assigned the duties of watchmen/lookouts shall include, as a minimum, consideration of the following factors:

(1) Detection and recognition of approaching trains.

(2) Effective warning of roadway workers of the approach of trains.

(3) Determination of the distance along the track at which trains must be visible in order to provide the prescribed warning time.

(4) Rules and procedures of the railroad to be used for train approach warning.

(b) Initial and periodic qualification of a watchman/lookout shall be evidenced by demonstrated proficiency.

§214.351 Training and qualification of flagmen.

(a) The training and qualification for roadway workers assigned the duties of flagmen shall include, as a minimum, the content and application of the operating rules of the railroad pertaining to giving proper stop signals to trains and holding trains clear of working limits.

(b) Initial and periodic qualification of a flagman shall be evidenced by demonstrated proficiency.

§214.353 Training and qualification of roadway workers who provide on-track safety for roadway work groups.

(a) The training and qualification of roadway workers who provide for the on-track safety of groups of roadway workers through establishment of working limits or the assignment and supervision of watchmen/lookouts or flagmen shall include, as a minimum:

(1) All the on-track safety training and qualification required of the roadway workers to be supervised and protected.

(2) The content and application of the operating rules of the railroad pertaining to the establishment of working limits.

(3) The content and application of the rules of the railroad pertaining to the establishment or train approach warning.

(4) The relevant physical characteristics of the territory of the railroad upon which the roadway worker is qualified.

(b) Initial and periodic qualification of a roadway worker to provide on track safety for groups shall be evidenced by a recorded examination.

§214.355 Training and qualification in on-track safety for operators of roadway maintenance machines.

(a) The training and qualification of roadway workers who operate roadway maintenance machines shall include, as a minimum:

(1) Procedures to prevent a person from being struck by the machine when the machine is in motion or operation.

(2) Procedures to prevent any part of the machine from being struck by a train or other equipment on another track.

(3) Procedures to provide for stopping the machine short of other machines or obstructions on the track.

(4) Methods to determine safe operating procedures for each machine that the operator is expected to operate.

(b) Initial and periodic qualification of a roadway worker to operate roadway maintenance machines shall be evidenced by demonstrated proficiency.

§214.357 Training and qualification for operators of roadway maintenance machines equipped with a crane.

(a) In addition to the general training and qualification requirements for operators of roadway maintenance machines set forth in §§214.341 and 214.355 of this subpart, each employer shall adopt and comply with a training and qualification program for operators of roadway maintenance machines equipped with a crane to ensure the safe operation of such machines.

(b) Each employer's training and qualification program for operators of roadway maintenance machines equipped with a crane shall require initial and periodic qualification of each operator of a roadway maintenance machine equipped with a crane and shall include:

(1) Procedures for determining that the operator has the skills to safely operate each machine the person is authorized to operate; and

(2) Procedures for determining that the operator has the knowledge to safely operate each machine the person is authorized to operate. Such procedures shall determine that either:

(i) The operator has knowledge of the safety instructions (*i.e.,* the manufacturer's instruction manual) applicable to that machine; or

(ii) The operator has knowledge of the safety instructions developed to replace the manufacturer's safety instructions when the machine has been adapted for a specific railroad use. Such instructions shall address all aspects of the safe operation of the crane and shall be as comprehensive as the manufacturer's safety instructions they replace.

(c) Each employer shall maintain records that form the basis of the training and qualification determinations of each operator of roadway maintenance machines equipped with a crane that it employs.

(d) Availability of records: Each employer required to maintain records under this part shall make all records available for inspection and copying/photocopying to representatives of FRA, upon request during normal business hours.

(e) Training conducted by an employer in accordance with operator qualification and certification required by the Department of Labor (29 CFR 1926.1427) may be used to satisfy the training and qualification requirements of this section.

[79 FR 66501, Nov. 7, 2014]

Subpart D—On-Track Roadway Maintenance Machines and Hi-Rail Vehicles

SOURCE: 68 FR 44407, July 28, 2003, unless otherwise noted.

§214.501 Purpose and scope.

(a) The purpose of this subpart is to prevent accidents and casualties caused by the lawful operation of on-track roadway maintenance machines and hi-rail vehicles.

(b) This subpart prescribes minimum safety standards for on-track roadway maintenance machines and hi-rail vehicles. An employer may prescribe additional or more stringent standards that are consistent with this subpart.

(c) Any working condition that involves the protection of employees engaged in roadway maintenance duties covered by this subpart but is not within the subject matter addressed by this subpart, including employee exposure to noise, shall be governed by the regulations of the U.S. Department of Labor, Occupational Safety and Health Administration.

§214.503 Good-faith challenges; procedures for notification and resolution.

(a) An employee operating an on-track roadway maintenance machine or hi-rail vehicle shall inform the employer whenever the employee makes a good-faith determination that the machine or vehicle does not comply with FRA regulations or has a condition that inhibits its safe operation.

(b) Any employee charged with operating an on-track roadway maintenance machine or hi-rail vehicle covered by this subpart may refuse to operate the machine or vehicle if the employee makes a good-faith determination that it does not comply with the requirements of this subpart or has a condition that inhibits its safe operation. The employer shall not require the employee to operate the machine or vehicle until the challenge resulting from the good-faith determination is resolved.

(c) Each employer shall have in place and follow written procedures to assure prompt and equitable resolution of challenges resulting from good-faith determinations made in accordance with this section. The procedures shall include specific steps to be taken by the employer to investigate each good-faith challenge, as well as procedures to follow once the employer finds a challenged machine or vehicle does not comply with this subpart or is otherwise unsafe to operate. The procedures shall also include the title and location of the employer's designated official.

§214.505 Required environmental control and protection systems for new on-track roadway maintenance machines with enclosed cabs.

(a) The following new on-track roadway maintenance machines shall be equipped with enclosed cabs with operative heating systems, operative air conditioning systems, and operative positive pressurized ventilation systems:

(1) Ballast regulators;

(2) Tampers;

(3) Mechanical brooms;

(4) Rotary scarifiers;

(5) Undercutters; and

(6) Functional equivalents of any of the machines identified in paragraphs (a)(1) through (a)(5) of this section.

(b) New on-track roadway maintenance machines, and existing on-track roadway maintenance machines specifically designated by the employer, of the types identified in paragraphs (a)(1) through (a)(5) of this section, or functionally equivalent thereto, shall be capable of protecting

employees in the cabs of the machines from exposure to air contaminants, in accordance with 29 CFR 1910.1000.
(c) An employer shall maintain a list of new and designated existing on-track roadway maintenance machines of the types identified in paragraphs (a)(1) through (a)(5) of this section, or functionally equivalent thereto. The list shall be kept current and made available to the Federal Railroad Administration and other Federal and State agencies upon request.
(d) An existing roadway maintenance machine of the type identified in paragraphs (a)(1) through (a)(5) of this section, or functionally equivalent thereto, becomes "designated" when the employer adds the machine to the list required in paragraph (c) of this section. The designation is irrevocable, and the designated existing roadway maintenance machine remains subject to paragraph (b) of this section until it is retired or sold.
(e) If the ventilation system on a new on-track roadway maintenance machine or a designated existing on-track roadway maintenance machine of the type identified in paragraphs (a)(1) through (a)(5) of this section, or functionally equivalent thereto, becomes incapable of protecting an employee in the cab of the machine from exposure to air contaminants in accordance with 29 CFR 1910.1000, personal respiratory protective equipment shall be provided for each such employee until the machine is repaired in accordance with §214.531.
(f) Personal respiratory protective equipment provided under paragraph (e) of this section shall comply with 29 CFR 1910.134.
(g) New on-track roadway maintenance machines with enclosed cabs, other than the types identified in paragraphs (a)(1) through (a)(5) of this section or functionally equivalent thereto, shall be equipped with operative heating and ventilation systems.
(h) When new on-track roadway maintenance machines require operation from non-enclosed stations outside of the main cab, the non-enclosed stations shall be equipped, where feasible from an engineering standpoint, with a permanent or temporary roof, canopy, or umbrella designed to provide cover from normal rainfall and midday sun.

§214.507 Required safety equipment for new on-track roadway maintenance machines.

(a) Each new on-track roadway maintenance machine shall be equipped with:

(1) A seat for each operator, except as provided in paragraph (b) of this section;

(2) A safe and secure position with handholds, handrails, or a secure seat for each roadway worker transported on the machine. Each position shall be protected from moving parts of the machine;

(3) A positive method of securement for turntables, on machines equipped with a turntable, through engagement of pins and hooks that block the descent of turntable devices below the rail head when not in use;

(4) A windshield with safety glass, or other material with similar properties, if the machine is designed with a windshield. Each new on-track roadway maintenance machine designed with a windshield shall also have power windshield wipers or suitable alternatives that provide the machine operator an equivalent level of vision if windshield wipers are incompatible with the windshield material;

(5) A machine braking system capable of effectively controlling the movement of the machine under normal operating conditions;

(6) A first-aid kit that is readily accessible and complies with 29 CFR 1926.50(d)(2); and

(7) An operative and properly charged fire extinguisher of 5 BC rating or higher which is securely mounted and readily accessible to the operator from the operator's work station.

(b) Each new on-track roadway maintenance machine designed to be operated and transported by the operator in a standing position shall be equipped with handholds and handrails to provide the operator with a safe and secure position.
(c) Each new on-track roadway maintenance machine that weighs more than 32,500 pounds light weight and is operated in excess of 20 mph shall be equipped with a speed indicator that is accurate within ±5 mph of the actual speed at speeds of 10 mph and above.
(d) Each new on-track roadway maintenance machine shall have its as-built light weight displayed in a conspicuous location on the machine.
[68 FR 44407, July 28, 2003, as amended at 69 FR 8839, Feb. 26, 2004]

§214.509 Required visual illumination and reflective devices for new on-track roadway maintenance machines.

Each new on-track roadway maintenance machine shall be equipped with the following visual illumination and reflective devices:
(a) An illumination device, such as a headlight, capable of illuminating obstructions on the track ahead in the direction of travel for a distance of 300 feet under normal weather and atmospheric conditions;
(b) Work lights, if the machine is operated during the period between one-half hour after sunset and one-half hour before sunrise or in dark areas such as tunnels, unless equivalent lighting is otherwise provided;
(c) An operative 360-degree intermittent warning light or beacon mounted on the roof of the machine. New roadway maintenance machines that are not equipped with fixed roofs and have a light weight less than 17,500 pounds are exempt from this requirement;
(d) A brake light activated by the application of the machine braking system, and designed to be visible for a distance of 300 feet under normal weather and atmospheric conditions; and
(e) Rearward viewing devices, such as rearview mirrors.

§214.511 Required audible warning devices for new on-track roadway maintenance machines.

Each new on-track roadway maintenance machine shall be equipped with:
(a) A horn or other audible warning device that produces a sound loud enough to be heard by roadway workers and other machine operators within the immediate work area. The triggering mechanism for the device shall be clearly identifiable and within easy reach of the machine operator; and
(b) An automatic change-of-direction alarm which provides an audible signal that is at least three seconds long and is distinguishable from the surrounding noise. Change of direction alarms may be interrupted by the machine operator when operating the machine in the work mode if the function of the machine would result in a constant, or almost constant, sounding of the device. In any action brought by FRA to enforce the change-of-direction alarm requirement, the employer shall have the burden of proving that use of the change-of-direction alarm in a particular work function would cause a constant, or almost constant, sounding of the device.

§214.513 Retrofitting of existing on-track roadway maintenance machines; general.

(a) Each existing on-track roadway maintenance machine shall have a safe and secure position with handholds, handrails, or a secure seat or bench position for each roadway worker transported on the machine. Each position shall be protected from moving parts of the machine.
(b) By March 28, 2005, each existing on-track roadway maintenance machine shall be equipped with a permanent or portable horn or other audible warning device that produces a sound loud enough to be heard by roadway workers and other machine operators within the immediate work area. The triggering mechanism for the device shall be clearly identifiable and within easy reach of the machine operator.

(c) By March 28, 2005, each existing on-track roadway maintenance machine shall be equipped with a permanent illumination device or a portable light that is securely placed and not hand-held. The illumination device or portable light shall be capable of illuminating obstructions on the track ahead for a distance of 300 feet under normal weather and atmospheric conditions when the machine is operated during the period between one-half hour after sunset and one-half hour before sunrise or in dark areas such as tunnels.
[68 FR 44407, July 28, 2003, as amended at 69 FR 8839, Feb. 26, 2004]

§214.515 Overhead covers for existing on-track roadway maintenance machines.

(a) For those existing on-track roadway maintenance machines either currently or previously equipped with overhead covers for the operator's position, defective covers shall be repaired, and missing covers shall be reinstalled, by March 28, 2005 and thereafter maintained in accordance with the provisions of
§214.531.

(b) For those existing on-track roadway maintenance machines that are not already equipped with overhead covers for the operator's position, the employer shall evaluate the feasibility of providing an overhead cover on such a machine if requested in writing by the operator assigned to operate the machine or by the operator's designated representative. The employer shall provide the operator a written response to each request within 60 days. When the employer finds the addition of an overhead cover is not feasible, the response shall include an explanation of the reasoning used by the employer to reach that conclusion.

(c) For purposes of this section, overhead covers shall provide the operator's position with cover from normal rainfall and midday sun.

§214.517 Retrofitting of existing on-track roadway maintenance machines manufactured on or after January 1, 1991.

In addition to meeting the requirements of §214.513, after March 28, 2005 each existing on-track roadway maintenance machine manufactured on or after January 1, 1991, shall have the following:

(a) A change-of-direction alarm or rearview mirror or other rearward viewing device, if either device is feasible, given the machine's design, and if either device adds operational safety value, given the machine's function. In any action brought by FRA to enforce this requirement, the employer shall have the burden of proving that neither device is feasible or adds operational safety value, or both, given the machine's design or work function.

(b) An operative heater, when the machine is operated at an ambient temperature less than 50 degrees Fahrenheit and is equipped with, or has been equipped with, a heater installed by the manufacturer or the railroad.

(c) The light weight of the machine stenciled or otherwise clearly displayed on the machine, if the light weight is known.

(d) Reflective material, or a reflective device, or operable brake lights.

(e) Safety glass when its glass is normally replaced, except that replacement glass that is specifically intended for on-track roadway maintenance machines and is in the employer's inventory as of September 26, 2003 may be utilized until exhausted.

(f) A turntable restraint device, on machines equipped with a turntable, to prevent undesired lowering, or a warning light indicating that the turntable is not in the normal travel position.
[68 FR 44407, July 28, 2003, as amended at 69 FR 8839, Feb. 26, 2004]

§214.518 Safe and secure positions for riders.

On or after March 1, 2004, a roadway worker, other than the machine operator, is prohibited from riding on any on-track roadway maintenance machine unless a safe and secure position for

each roadway worker on the machine is clearly identified by stenciling, marking, or other written notice.
[69 FR 8839, Feb. 26, 2004]
§214.519 Floors, decks, stairs, and ladders of on-track roadway maintenance machines.
Floors, decks, stairs, and ladders of on-track roadway maintenance machines shall be of appropriate design and maintained to provide secure access and footing, and shall be free of oil, grease, or any obstruction which creates a slipping, falling, or fire hazard.
§214.521 Flagging equipment for on-track roadway maintenance machines and hi-rail vehicles.
Each on-track roadway maintenance machine and hi-rail vehicle shall have on board a flagging kit that complies with the operating rules of the railroad if:
(a) The equipment is operated over trackage subject to a railroad operating rule requiring flagging; and
(b)(1) The equipment is not part of a roadway work group; or
(2) The equipment is the lead or trailing piece of equipment in a roadway work group operating under the same occupancy authority.
[69 FR 8839, Feb. 26, 2004]
§214.523 Hi-rail vehicles.
(a) The hi-rail gear of all hi-rail vehicles shall be inspected for safety at least annually and with no more than 14 months between inspections. Tram, wheel wear, and gage shall be measured and, if necessary, adjusted to allow the vehicle to be safely operated.
(b) Each employer shall keep records pertaining to compliance with paragraph (a) of this section. Records may be kept on forms provided by the employer or by electronic means. The employer shall retain the record of each inspection until the next required inspection is performed. The records shall be made available for inspection and copying during normal business hours by representatives of FRA and States participating under part 212 of this chapter. The records may be kept on the hi-rail vehicle or at a location designated by the employer.
(c) A new hi-rail vehicle shall be equipped with:
(1) An automatic change-of-direction alarm or backup alarm that provides an audible signal at least three seconds long and distinguishable from the surrounding noise; and
(2) An operable 360-degree intermittent warning light or beacon mounted on the outside of the vehicle.
(d)(1) The operator of a hi-rail vehicle shall check the vehicle for compliance with this subpart, prior to using the vehicle at the start of the operator's work shift.
(2) A non-complying condition that cannot be repaired immediately shall be tagged and dated in a manner prescribed by the employer and reported to the designated official.
(3) Non-complying automatic change-of-direction alarms, backup alarms, and 360-degree intermittent warning lights or beacons shall be repaired or replaced as soon as practicable within seven calendar days.
§214.525 Towing with on-track roadway maintenance machines or hi-rail vehicles.
(a) When used to tow pushcars or other maintenance-of-way equipment, each on-track roadway maintenance machine or hi-rail vehicle shall be equipped with a towing bar or other coupling device that provides a safe and secure attachment.
(b) An on-track roadway maintenance machine or hi-rail vehicle shall not be used to tow pushcars or other maintenance-of-way equipment if the towing would cause the machine or hi-rail vehicle to exceed the capabilities of its braking system. In determining the limit of the braking system, the employer must consider the track grade (slope), as well as the number and weight of pushcars or other equipment to be towed.

§214.527 On-track roadway maintenance machines; inspection for compliance and schedule for repairs.

(a) The operator of an on-track roadway maintenance machine shall check the machine components for compliance with this subpart, prior to using the machine at the start of the operator's work shift.

(b) Any non-complying condition that cannot be repaired immediately shall be tagged and dated in a manner prescribed by the employer and reported to the designated official.

(c) The operation of an on-track roadway maintenance machine with a non-complying condition shall be governed by the following requirements:

(1) An on-track roadway maintenance machine with headlights or work lights that are not in compliance may be operated for a period not exceeding 7 calendar days and only during the period between one-half hour before sunrise and one-half hour after sunset;

(2) A portable horn may be substituted for a non-complying or missing horn for a period not exceeding seven calendar days;

(3) A fire extinguisher readily available for use may temporarily replace a missing, defective or discharged fire extinguisher on a new on-track roadway maintenance machine for a period not exceeding 7 calendar days, pending the permanent replacement or repair of the missing, defective or used fire extinguisher;

(4) Non-complying automatic change-of-direction alarms, backup alarms, and 360-degree intermittent warning lights or beacons shall be repaired or replaced as soon as practicable within 7 calendar days; and

(5) A structurally defective or missing operator's seat shall be replaced or repaired within 24 hours or by the start of the machine's next tour of duty, whichever is later. The machine may be operated for the remainder of the operator's tour of duty if the defective or missing operator's seat does not prevent its safe operation.

§214.529 In-service failure of primary braking system.

(a) In the event of a total in-service failure of its primary braking system, an on-track roadway maintenance machine may be operated for the remainder of its tour of duty with the use of a secondary braking system or by coupling to another machine, if such operations may be done safely.

(b) If the total in-service failure of an on-track roadway maintenance machine's primary braking system occurs where other equipment is not available for coupling, the machine may, if it is safe to do so, travel to a clearance or repair point where it shall be placed out of service until repaired.

§214.531 Schedule of repairs; general.

Except as provided in §§214.527(c)(5), 214.529, and 214.533, an on-track roadway maintenance machine or hi-rail vehicle that does not meet all the requirements of this subpart shall be brought into compliance as soon as practicable within seven calendar days. If repairs are not made within seven calendar days, the on-track roadway maintenance machine or hi-rail vehicle shall be placed out of on-track service.

§214.533 Schedule of repairs subject to availability of parts.

(a) The employer shall order a part necessary to repair a non-complying condition on an on-track roadway maintenance machine or a hi-rail vehicle by the end of the next business day following the report of the defect.

(b) When the employer cannot repair a non-complying condition as required by §214.531 because of the temporary unavailability of a necessary part, the employer shall repair the on-track roadway maintenance machine or hi-rail vehicle within seven calendar days after receiving

the necessary part. The employer may continue to use the on-track roadway maintenance machine or hi-rail vehicle with a non-complying condition until receiving the necessary part(s) for repair, subject to the requirements of §214.503. However, if a non-complying condition is not repaired within 30 days following the report of the defect, the employer shall remove the on-track roadway maintenance machine or hi-rail vehicle from on-track service until it is brought into compliance with this subpart.

(c) If the employer fails to order a part necessary to repair the reported non-complying condition, or if it fails to install an available part within the required seven calendar days, the on-track roadway maintenance machine or hi-rail vehicle shall be removed from on-track service until brought into compliance with this subpart.

(d) Each employer shall maintain records pertaining to compliance with this section. Records may be kept on forms provided by the employer or by electronic means. The employer shall retain each record for at least one year, and the records shall be made available for inspection and copying during normal business hours by representatives of FRA and States participating under part 212 of this chapter. The records may be kept on the on-track roadway maintenance machine or hi-rail vehicle or at a location designated by the employer.

Appendix A to Part 214—Schedule of Civil Penalties[1]

Section	Violation	Willful
Subpart B—Bridge Worker Safety Standards		
214.103 Fall protection:		
(i) Failure to provide fall protection	$5,000	$10,000
(ii) Failure to use fall protection		2,500
214.105 Standards and practices:		
(a) General:		
(1) Fall protection used for other purposes	2,500	5,000
(2) Failure to remove from service	2,500	5,000
(3) Failure to protect from deterioration	2,500	5,000
(4) Failure to inspect and remove	5,000	10,000
(5) Failure to train	5,000	10,000
(6) Failure to provide for prompt rescue	5,000	10,000
(7) Failure to prevent damage	2,500	5,000
(8) Failure to use proper connectors	2,500	5,000
(9) Failure to use proper anchorages	2,500	5,000
(b) Fall arrest system:		
(1)-(17) Failure to provide conforming equipment	2,500	5,000
(c) Safety net systems:		
(1) Failure to install close to workplace	2,500	5,000
(2) Failure to provide fall arrest if over 30 feet	5,000	10,000
(3) Failure to provide for unobstructed fall	5,000	10,000
(4) Failure to test	2,500	5,000
(5) Failure to use proper equipment	2,500	5,000
(6) Failure to prevent contact with surface below	5,000	10,000
(7) Failure to properly install	5,000	10,000
(8) Failure to remove defective nets	5,000	10,000
(9) Failure to inspect	5,000	10,000
(10) Failure to remove objects	1,000	2,500
(11)-(13) Failure to use conforming equipment	2,500	10,000

Section	Violation	Willful
Subpart B—Bridge Worker Safety Standards (Continued)		
(a)(i) Failure to provide life vest	5,000	10,000
(ii) Failure to use life vest		1,500
(c) Failure to inspect	2,500	5,000
(e)(i) Failure to provide ring bouys	5,000	10,000
(ii) Failure to use ring bouys		1,500
(f)(i) Failure to provide skiff	1,000	2,500
(ii) Failure to use skiff		1,500
214.109 Scaffolding:		
(a)-(f) Failure to provide conforming equipment	2,500	5,000
214.113 Head protection:		
(a)(i) Failure to provide	2,500	5,000
(ii) Failure to use		1,500
(b) or (c) Failure to provide conforming equipment	2,500	5,000
214.115 Foot protection:		
(a)(i) Failure to require use of	2,500	5,000
(ii) Failure to use		1,500
214.117 Eye and face protection:		
(a)(i) Failure to provide	2,500	5,000
(ii) Failure to use		1,500
(b) Failure to use conforming equipment	2,500	5,000
(c) Use of defective equipment	2,500	5,000
(d) Failure to provide for corrective lenses	2,500	5,000

Section	Violation	Willful
Subpart C—Roadway Worker Protection Rule		
214.303 Railroad on-track safety programs, generally:		
(a) Failure of a railroad to implement an On-track Safety Program	10,000	20,000
(b) On-track Safety Program of a railroad includes no internal monitoring procedure	5,000	10,000
214.305 Compliance Dates:		
Failure of a railroad to comply by the specified dates	5,000	10,000
214.307 Review and approval of individual on-track safety programs by FRA:		
(a)(i) Failure to notify FRA of adoption of On-track Safety Program	1,000	5,000
(ii) Failure to designate primary person to contact for program review	1,000	2,000
214.309 On-track safety program documents:		
(1) On-track Safety Manual not provided to prescribed employees	2,000	5,000
(2) On-track Safety Program documents issued in fragments	2,000	5,000
214.311 Responsibility of employers:		
(b) Roadway worker required by employer to foul a track during an unresolved challenge	5,000	10,000
(c) Roadway workers not provided with written procedure to resolve challenges of on-track safety procedures	5,000	10,000
214.313 Responsibility of individual roadway workers:		
(b) Roadway worker fouling a track when not necessary in the performance of duty		1,000
(c) Roadway worker fouling a track without ascertaining that provision is made for on-track safety		1,500
(d) Roadway worker failing to notify employer of determination of improper on-track safety provisions		3,000
214.315 Supervision and communication:		
(a)(1) Complete failure of employer to provide on-track safety job briefing	5,000	10,000
(2)-(4) Partial failure of employer to provide on-track safety job briefing	2,000	4,000
(b) Incomplete job briefing	2,000	5,000
(c)(i) Failure to designate roadway worker in charge of roadway work group	2,000	5,000
(ii) Designation of more than one roadway worker in charge of a roadway work group	1,000	2,000
(iii) Designation of non-qualified roadway worker in charge of roadway work group	3,000	6,000

Section	Violation	Willful
Subpart C—Roadway Worker Protection Rule (Continued)		
(d)(i) Failure to notify roadway workers of on-track safety procedures in effect	3,000	6,000
(ii) Incorrect information provided to roadway workers regarding on-track safety procedures in effect	3,000	6,000
(iii) Failure to notify roadway workers of change in on-track safety procedures	3,000	6,000
(e)(i) Failure of lone worker to communicate with designated employee for daily job briefing		1,500
(ii) Failure of employer to provide means for lone worker to receive daily job briefing	3,000	6,000
214.317 On-track safety procedures, generally:		
On-track safety rules conflict with this part	5,000	10,000
214.319 Working limits, generally:		
(a) Non-qualified roadway worker in charge of working limits	5,000	10,000
(b) More than one roadway worker in charge of working limits on the same track segment	2,000	5,000
(c)(1) Working limits released without notifying all affected roadway workers	5,000	10,000
(2) Working limits released before all affected roadway workers are otherwise protected	5,000	10,000
214.321 Exclusive track occupancy:		
(b) Improper transmission of authority for exclusive track occupancy	2,000	5,000
(b)(1) Failure to repeat authority for exclusive track occupancy to issuing employee		1,500
(2) Failure to retain possession of written authority for exclusive track occupancy		1,000
(3) Failure to record authority for exclusive track occupancy when issued		2,000
(c) Limits of exclusive track occupancy not identified by proper physical features	2,000	4,000
(d)(1) Movement authorized into limits of exclusive track occupancy without authority of roadway worker in charge	5,000	10,000
(2) Movement authorized within limits of exclusive track occupancy without authority of roadway worker in charge	5,000	10,000
(3) Movement within limits of exclusive track occupancy exceeding restricted speed without authority of roadway worker in charge	5,000	10,000

Section	Violation	Willful
Subpart C—Roadway Worker Protection Rule (Continued)		
214.323 Foul time:		
(a) Foul time authority overlapping movement authority of train or equipment	5,000	10,000
(b) Failure to repeat foul time authority to issuing employee		1,500
214.325 Train coordination:		
(a) Train coordination limits established where more than one train is authorized to operate	1,500	4,000
(b)(1) Train coordination established with train not visible to roadway worker at the time		1,500
(2) Train coordination established with moving train		1,500
(3) Coordinated train moving without authority of roadway worker in charge	2,000	5,000
(4) Coordinated train releasing movement authority while working limits are in effect	3,000	6,000
214.327 Inaccessible track:		
(a) Improper control of entry to inaccessible track	3,000	6,000
(5) Remotely controlled switch not properly secured by control operator	3,000	6,000
(b) Train or equipment moving within inaccessible track limits without permission of roadway worker in charge	3,000	6,000
(c) Unauthorized train or equipment located within inaccessible track limits	2,000	5,000
214.329 Train approach warning provided by watchmen/lookouts:		
(a) Failure to give timely warning of approaching train		5,000
(b)(1) Failure of watchman/lookout to give full attention to detecting approach of train		3,000
(2) Assignment of other duties to watchman/lookout	3,000	5,000
(c) Failure to provide proper warning signal devices	2,000	5,000
(d) Failure to maintain position to receive train approach warning signal		2,000
(e) Failure to communicate proper warning signal	1,500	3,000
(f)(1) Assignment of non-qualified person as watchman/lookout	3,000	5,000
(2) Non-qualified person accepting assignment as watchman/lookout		1,500
(g) Failure to properly equip a watchman/lookout	2,000	4,000

Section	Violation	Willful
Subpart C—Roadway Worker Protection Rule (Continued)		
214.331 Definite train location:		
(a) Definite train location established where prohibited	3,000	5,000
(b) Failure to phase out definite train location by required date	3,000	5,000
(d)(1) Train location information issued by unauthorized person	2,000	5,000
(2) Failure to include all trains operated on train location list	3,000	5,000
(5) Failure to clear a by ten minutes at the last station at which time is shown		2,000
(6) Train passing station before time shown in train location list	3,000	5,000
(7) Non-qualified person using definite train location to establish on-track safety	2,000	3,000
214.333 Informational line-ups of trains:		
(a) Informational line-ups of trains used for on-track safety where prohibited	3,000	5,000
(b) Informational line-up procedures inadequate to protect roadway workers	5,000	10,000
(c) Failure to discontinue informational line-ups by required date	5,000	10,000
214.335 On-track safety procedures for roadway work groups :		
(a) Failure to provide on-track safety for a member of a roadway work group	3,000	5,000
(b) Member of roadway work group fouling a track without authority of employee in charge		2,000
214.336 On-track safety procedures for certain roadway work groups and adjacent tracks:		
(a)(1) Failure to establish on-track safety for each adjacent controlled track as required under this section	5,000	10,000
(2) Failure to implement the more restrictive procedure required by paragraph (b) during special circumstance of concurrent movement(s) on two adjacent controlled tracks where one movement is authorized or permitted at a speed over 25 mph (or over 40 mph for a passenger movement)	1,500	3,000
(b)(1) Failure of roadway worker to cease work and occupy a predetermined place of safety upon receiving a warning or notification of train or other on-track equipment movement(s) on an adjacent controlled track	5,000	10,000
(2) Resumption of work before trailing-end of all applicable movements has passed the roadway worker	5,000	10,000
(c) Failure to maintain 25-foot spacing between on-track, self-propelled equipment or coupled equipment and roadway worker(s) on the occupied track during an adjacent-controlled-track movement at 25 mph or less	2,000	4,000

Section	Violation	Willful
Subpart C—Roadway Worker Protection Rule (Continued)		
(d) Failure to implement on-track safety procedures on an adjacent track when deemed necessary by the roadway worker in charge of providing on-track safety for a roadway work group	2,000	4,000
(e)	(1)	(1)
(f) Roadway maintenance machine component fouling an adjacent controlled track without working limits or with movements permitted within working limits	5,000	10,000
214.337 On-track safety procedures for lone workers:		
(b) Failure by employer to permit individual discretion in use of individual train detection	5,000	10,000
(c)(1) Individual train detection used by non-qualified employee	2,000	4,000
(2) Use of individual train detection while engaged in heavy or distracting work		2,000
(3) Use of individual train detection in controlled point or manual interlocking		2,000
(4) Use of individual train detection with insufficient visibility		2,000
(5) Use of individual train detection with interfering noise		2,000
(6) Use of individual train detection while a train is passing		3,000
(d) Failure to maintain access to place of safety clear of live tracks		2,000
(e) Lone worker unable to maintain vigilant lookout		2,000
(f)(1) Failure to prepare written statement of on-track safety		1,500
(2) Incomplete written statement of on-track safety		1,000
(3) Failure to produce written statement of on-track safety to FRA		1,500
214.339 Audible warning from trains:		
(a) Failure to require audible warning from trains	2,000	4,000
(b) Failure of train to give audible warning where required	1,000	3,000
214.341 Roadway maintenance machines:		
(a) Failure of on-track safety program to include provisions for safety near roadway maintenance machines	3,000	5,000
(b) Failure to provide operating instructions	2,000	4,000
(1) Assignment of non-qualified employee to operate machine	2,000	5,000
(2) Operator unfamiliar with safety instructions for machine	2,000	5,000
(3) Roadway worker working with unfamiliar machine	2,000	5,000

Section	Violation	Willful
Subpart C—Roadway Worker Protection Rule (Continued)		
(c) Roadway maintenance machine not clear of passing trains	3,000	6,000
214.343 Training and qualification, general:		
(a)(1) Failure of railroad program to include training provisions	5,000	10,000
(2) Failure to provide initial training	3,000	6,000
(b) Failure to provide annual training	2,500	5,000
(c) Assignment of non-qualified railroad employees to provide on-track safety	4,000	8,000
(d)(1) Failure to maintain records of qualifications	2,000	4,000
(2) Incomplete records of qualifications	1,000	3,000
(3) Failure to provide records of qualifications to FRA	2,000	4,000
214.345 Training for all roadway workers		
214.347 Training and qualification for lone workers		
214.349 Training and qualification of watchmen/lookouts		
214.351 Training and qualification of flagmen		
214.353 Training and qualification of roadway workers who provide on-track safety for roadway work groups		
214.355 Training and qualification in on-track safety for operators of roadway maintenance machines		

Section	Violation	Willful
Subpart D—On-Track Roadway Maintenance Machines and Hi-Rail Vehicles		
214.503 Good-faith challenges; procedures for notification and resolution:		
(a) Failure of employee to notify employer that the machine or vehicle does not comply with this subpart or has a condition inhibiting safe operation		4,000
(b) Roadway worker required to operate machine or vehicle when good-faith challenge not resolved	5,000	10,000
(c) Failure of employer to have or follow written procedures to resolve good-faith challenges	5,000	10,000
214.505 Required environmental control and protection systems for new on-track roadway maintenance machines with enclosed cabs:		
(a) Failure to equip new machines with required systems	5,000	10,000
(b) Failure of new or existing machines to protect employees from exposure to air contaminants	5,000	10,000
(c) Failure of employer to maintain required list of machines or make list available	2,000	4,000
(d) Removal of “designated machine” from list before retired or sold	2,000	4,000
(e) Personal respiratory protective equipment not provided when ventilation system fails	5,000	10,000
(f) Personal respiratory protective equipment fails to meet required standards	5,000	10,000
(g) Other new machines with enclosed cabs not equipped with operable heating and ventilation systems	5,000	10,000
(h) Non-enclosed station not equipped with covering, where feasible	5,000	10,000
214.507 Required safety equipment for new on-track roadway maintenance machines:		
(a)(1)-(5) Failure to equip new machine or provide protection as specified in these paragraphs	5,000	10,000
(a)(6)-(7) Failure to equip new machine with first-aid kit or operative and charged fire extinguisher	2,500	5,000
(b) Position for operator to stand not properly equipped to provide safe and secure position	5,000	10,000
(c) New machine not equipped with accurate speed indicator, as required.	2,500	5,000
(d) As-built light weight not conspicuously displayed on new machine	2,500	5,000
214.509 Required visual illumination and reflective devices for new on-track roadway maintenance machines	2,500	5,000

Section	Violation	Willful
Subpart D—On-Track Roadway Maintenance Machines and Hi-Rail Vehicles		
214.511 Required audible warning devices for new on-track roadway maintenance machines	5,000	10,000
214.513 Retrofitting of existing on-track roadway maintenance machines; general:		
(a) Failure to provide safe and secure position and protection from moving parts 2,000 4,000 inside cab for each roadway worker transported on machine	5,000	10,000
(b) Horn or other audible warning device is missing, inoperable, or has non-compliant triggering mechanism	2,500	5,000
(c) Illumination device or portable light missing, inoperable, improperly secured, or incapable of illuminating track as required	2,500	5,000
214.515 Overhead covers for existing on-track roadway maintenance machines:		
(a) Failure to repair, reinstall, or maintain overhead cover as required	5,000	10,000
(b) Failure to provide written response to operator's request within 60 days	2,000	4,000
214.517 Retrofitting of existing on-track roadway maintenance machines manufactured on or after January 1, 1991:		
(a) Failure to equip machine with change-of-direction alarm or rearward viewing device.	5,000	10,000
(b) Failure to equip machine with operative heater	5,000	10,000
(c) Failure to display light weight of machine as required	2,500	5,000
(d) Failure to equip machine with reflective material, reflective device, or operable brake lights	5,000	10,000
(e) Failure to install or replace safety glass as required	5,000	10,000
(f) Failure to equip machine with turntable restraint device or warning light as required	5,000	10,000
214.518 Safe and secure position for riders	5,000	10,000
214.519 Floors, decks, stairs, and ladders for on-track roadway maintenance machines	5,000	10,000
214.521 Flagging equipment for on-track roadway maintenance machines and hi-rail vehicles	2,500	5,000
214.523 Hi-rail vehicles:		
(a) Failure to inspect hi-rail gear annually	5,000	10,000
(b) Failure to maintain inspection record or make record available to FRA	2,000	4,000

Section	Violation	Willful
Subpart D—On-Track Roadway Maintenance Machines and Hi-Rail Vehicles		
(c) Failure to equip new hi-rail vehicle with alarm and light or beacon as required	2,500	5,000
(d)(2) Failure of operator to tag, date or report non-complying condition	2,000	4,000
(d)(3) Failure to repair or replace non-complying alarms, lights or beacons as required	2,500	5,000
214.525 Towing with on-track roadway maintenance machines or hi-rail vehicles	5,000	10,000
214.527 On-track roadway maintenance machines; inspection for compliance and schedule for repairs:		
(a) Failure of operator to check on-track roadway maintenance machine for compliance	2,000	4,000
(b) Failure of oeprator to tag, date, or report noncomplying condition	2,000	4,000
(c)(1)-(4) Failure to meet requirements for operating on-track roadway maintenance machine with non-complying headlights, work lights, horn, fire extinguisher, alarm, warning light, or beacon	2,500	5,000
(c)(5) Failure to repair or replace defective or missing operator's seat within required time period	5,000	10,000
214.529 In-service failure of primary braking system	5,000	10,000
214.531 Schedule of repairs; general	2,500	5,000
214.533 Schedule of repairs subject to availability of parts:		
(a)-(c) Failure to order necessary part(s), make repair(s), or remove on-track roadway maintenance machine or hi-rail vehicle from service as required	2,500	5,000
(d) Failure to maintain record or make record available to FRA	2,000	4,000

[1]A penalty may be assessed against an individual only for a willful violation. The Administrator reserves the right to assess a penalty of up to $105,000 for any violation where circumstances warrant. See 49 CFR part 209, appendix A. Failure to observe any condition(s) of an exception set forth in paragraph (e) of §214.336 deprives the railroad or contractor of the benefit of the exception and makes the railroad or contractor, and any responsible individuals, liable for penalty under the particular regulatory provision(s) from which the exception would otherwise have granted relief.

[2]The penalty schedule uses section numbers from 49 CFR part 214. If more than one item is listed as a type of violation of a given section, each item is also designated by a "penalty code," which is used to facilitate assessment of civil penalties, and which may or may not correspond to any subsection designation(s). For convenience, penalty citations will cite the CFR section and the penalty code, if any. FRA reserves the right, should litigation become necessary, to substitute in its complaint the CFR citation in place of the combined CFR and penalty code citation, should they differ.

[57 FR 28127, June 24, 1992, as amended at 61 FR 65981, Dec. 16, 1996; 63 FR 11620, Mar. 10, 1998; 68 FR 44412, July 28, 2003; 69 FR 8839, Feb. 26, 2004; 69 FR 30593, May 28, 2004; 73 FR 79701, Dec. 30, 2008; 77 FR 24419, Apr. 24, 2012; 76 FR 74615, Nov. 30, 2011; 79 FR 1770, Jan. 10, 2014]

Title 49 CFR Part 218 ADDENDUM
Railroad Operating Practices

Subpart A—General

§218.1 Purpose.

This part prescribes minimum requirements for railroad operating rules and practices. Each railroad may prescribe additional or more stringent requirements in its operating rules, timetables, timetable special instructions, and other special instructions.

§218.3 Application.

(a) Except as provided in paragraph (b) of this section, this part applies to railroads that operate rolling equipment on standard gage track which is part of the general railroad system of transportation.

(b) This part does not apply to—

(1) A railroad that operates only on track inside an installation which is not part of the general railroad system of transportation, or

(2) Rapid transit operations in an urban area that are not connected with the general railroad system of transportation.

[44 FR 2175, Jan. 10, 1979, as amended at 53 FR 28599, July 28, 1988]

§218.4 Preemptive effect.

Normal State negligence standards apply where there is no Federal action covering the subject matter. Under 49 U.S.C. 20106 (section 20106), issuance of the regulations in this part preempts any State law, regulation, or order covering the same subject matter, except an additional or more stringent law, regulation, or order that is necessary to eliminate or reduce an essentially local railroad safety or railroad security hazard; that is not incompatible with a law, regulation, or order of the United States Government; and that does not unreasonably burden interstate commerce. Section 20106 permits State tort actions arising from events or activities occurring on or after January 18, 2002, for the following: Violation of the Federal standard of care established by regulation or order issued the Secretary of Transportation (with respect to railroad safety, such as these regulations) or the Secretary of Homeland Security (with respect to railroad security); a party's violation of, or failure to comply with, its own plan, rule, or standard that it created pursuant to a regulation or order issued by either of the two Secretaries; and a party's violation of a State standard that is necessary to eliminate or reduce an essentially local safety or security hazard, is not incompatible with a law, regulation, or order of the United States Government, and does not unreasonably burden interstate commerce. Nothing in section 20106 creates a Federal cause of action on behalf of an injured party or confers Federal question jurisdiction for such State law causes of action.

[73 FR 8498, Feb. 13, 2008]

§218.5 Definitions.

Absolute block means a block in which no train is permitted to enter while it is occupied by another train.

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

Camp car means any on-track vehicle, including outfit, camp, or bunk cars or modular homes mounted on flat cars used to house rail employees. It does not include wreck trains.

Car shop repair track area means one or more tracks within an area in which the testing, servicing, repair, inspection, or rebuilding of railroad rolling equipment is under the exclusive control of mechanical department personnel.
Controlling locomotive means a locomotive arranged as having the only controls over all electrical, mechanical and pneumatic functions for one or more locomotives, including controls transmitted by radio signals if so equipped. It does not include two or more locomotives coupled in multiple which can be moved from more than one set of locomotive controls.
Designated crew member means an individual designated under the railroad's operating rules as the point of contact between a train or yard crew and a utility employee working with that crew.
Effective locking device when used in relation to a manually operated switch or a derail means one which is:
(1) Vandal resistant;
(2) Tamper resistant; and
(3) Capable of being locked and unlocked only by the class, craft or group of employees for whom the protection is being provided.
Flagman's signals means a red flag by day and a white light at night, and fusees as prescribed in the railroad's operating rules.
Group of workers means two or more workers of the same or different crafts assigned to work together as a unit under a common authority and who are in communication with each other while the work is being done.
Interlocking limits means the tracks between the opposing home signals of an interlocking.
Locomotive means, except for purposes of subpart F of this part, a self-propelled unit of equipment designed for moving other railroad rolling equipment in revenue service including a self-propelled unit designed to carry freight or passenger traffic, or both, and may consist of one or more units operated from a single control.
Locomotive servicing track area means one or more tracks, within an area in which the testing, servicing, repair, inspection, or rebuilding of locomotives is under the exclusive control of mechanical department personnel.
Main track means a track, other than an auxiliary track, extending through yards or between stations, upon which trains are operated by timetable or train order or both, or the use of which is governed by a signal system.
Rolling equipment includes locomotives, railroad cars, and one or more locomotives coupled to one or more cars.
Switch providing access means a switch which if traversed by rolling equipment could permit that rolling equipment to couple to the equipment being protected.
Train or yard crew means one or more railroad employees assigned a controlling locomotive, under the charge and control of one crew member; called to perform service covered by Section 2 of the Hours of Service Act; involved with the train or yard movement of railroad rolling equipment they are to work with as an operating crew; reporting and working together as a unit that remains in close contact if more than one employee; and subject to the railroad operating rules and program of operational tests and inspections required in §§217.9 and 217.11 of this chapter.
Utility employee means a railroad employee assigned to and functioning as a temporary member of a train or yard crew whose primary function is to assist the train or yard crew in the assembly, disassembly or classification of rail cars, or operation of trains (subject to the conditions set forth in §218.22 of this chapter).

Worker means any railroad employee assigned to inspect, test, repair, or service railroad rolling equipment, or their components, including brake systems. Members of train and yard crews are excluded except when assigned such work on railroad rolling equipment that is not part of the train or yard movement they have been called to operate (or been assigned to as "utility employees"). Utility employees assigned to and functioning as temporary members of a specific train or yard crew (subject to the conditions set forth in §218.22 of this chapter), are excluded only when so assigned and functioning.

NOTE: Servicing does not include supplying cabooses, locomotives, or passenger cars with items such as ice, drinking water, tools, sanitary supplies, stationery, or flagging equipment.

Testing does not include (i) visual observations made by an employee positioned on or alongside a caboose, locomotive, or passenger car; or (ii) marker inspections made in accordance with the provisions of §221.16(b) of this chapter.

[58 FR 43292, Aug. 16, 1993, as amended at 60 FR 11049, Mar. 1, 1995; 73 FR 8498, Feb. 13, 2008]

§218.7 Waivers.

(a) A railroad may petition the Federal Railroad Administration for a waiver of compliance with any requirement prescribed in this part.

(b) Each petition for a waiver under this section must be filed in the manner and contain the information required by part 211 of this chapter.

(c) If the Administrator finds that waiver of compliance is in the public interest and is consistent with railroad safety, he may grant the waiver subject to any conditions he deems necessary. Notice of each waiver granted, including a statement of the reasons, therefore, is published in the FEDERAL REGISTER.

§218.9 Civil penalty.

Any person (an entity of any type covered under 1 U.S.C. 1, including but not limited to the following: a railroad; a manager, supervisor, official, or other employee or agent of a railroad; any owner, manufacturer, lessor, or lessee of railroad equipment, track, or facilities; any independent contractor providing goods or services to a railroad; and any employee of such owner, manufacturer, lessor, lessee, or independent contractor) who violates any requirement of this part or causes the violation of any such requirement is subject to a civil penalty of at least $650 and not more than $25,000 per violation, except that: Penalties may be assessed against individuals only for willful violations, and, where a grossly negligent violation or a pattern of repeated violations has created an imminent hazard of death or injury to persons, or has caused death or injury, a penalty not to exceed $105,000 per violation may be assessed. Each day a violation continues shall constitute a separate offense. See appendix A to this part for a statement of agency civil penalty policy.

[53 FR 28599, July 28, 1988, as amended at 53 FR 52928, Dec. 29, 1988; 63 FR 11621, Mar. 10, 1998; 69 FR 30593, May 28, 2004; 72 FR 51196, Sept. 6, 2007; 73 FR 79701, Dec. 30, 2008; 77 FR 24420, Apr. 24, 2012]

§218.11 Filing, testing, and instruction.

The operating rules prescribed in this part, and any additional or more stringent requirements issued by a railroad in relation to the operating rules prescribed in this part, shall be subject to the provisions of part 217 of this chapter, Railroad Operating Rules: Filing, Testing, and Instruction.

Subpart B—Blue Signal Protection of Workers

§218.21 Scope.

This subpart prescribes minimum requirements for the protection of railroad employees engaged in the inspection, testing, repair, and servicing of rolling equipment whose activities require them to work on, under, or between such equipment and subjects them to the danger of personal injury posed by any movement of such equipment.

§218.22 Utility employee.

(a) A utility employee shall be subject to the Hours of Service Act, and the requirements for training and testing, control of alcohol and drug use, and hours of service record keeping provided for in parts 217, 219, and 228 of this chapter.

(b) A utility employee shall perform service as a member of only one train or yard crew at any given time. Service with more than one crew may be sequential, but not concurrent.

(c) A utility employee may be assigned to and serve as a member of a train or yard crew without the protection otherwise required by subpart D of part 218 of this chapter only under the following conditions:

(1) The train or yard crew is assigned a controlling locomotive that is under the actual control of the assigned locomotive engineer of that crew;

(2) The locomotive engineer is in the cab of the controlling locomotive, or, while the locomotive is stationary be replaced in the cab by another member of the same crew;

(3) The utility employee established communication with the crew by contacting the designated crew member on arriving at the train (as defined for the purpose of this section as one or more locomotives coupled, with or without cars) and before commencing any duties with the crew.

(4) Before each utility employee commences duties, the designated crew member shall provide notice to each crew member of the presence and identity of the utility employee. Once all crew members have acknowledged this notice, the designated crew member shall advise the utility employee that he or she is authorized to work as part of the crew. Thereafter, communication shall be maintained in such a manner that each member of the train or yard crew understands the duties to be performed and whether those duties will cause any crew member to go on, under, or between the rolling equipment; and

(5) The utility employee is performing one or more of the following functions: set or release hand brakes; couple or uncouple air hoses and other electrical or mechanical connections; prepare rail cars for coupling; set wheel blocks or wheel chains; conduct air brake tests to include cutting air brake components in or out and position retaining valves; inspect, test, install, remove or replace a rear end marking device or end of train device. Under all other circumstances a utility employee working on, under, or between railroad rolling equipment must be provided with blue signal protection in accordance with §§218.23 through 218.30 of this part.

(d) When the utility employee has ceased all work in connection with that train and is no longer on, under, or between the equipment, the utility employee shall notify the designated crew member. The designated crew member shall then provide notice to each crew member that the utility employee is being released from the crew. Once each crew member has acknowledged the notice, the designated crew member shall then notify the utility employee that he is released from the train or yard crew.

(e) Communications required by §218.22(c)(4) and (d) shall be conducted between the utility employee and the designated crew member. This communications shall be conducted either through direct verbal contact, by radio in compliance with part 220 of this chapter, or by oral telecommunication of equivalent integrity.

(f) No more than three utility employees may be attached to one train or yard crew at any given time.
(g) Any railroad employee who is not assigned to a train or yard crew, or authorized to work with a crew under the conditions set forth by paragraph (b) of this section, is a worker required to be provided blue signal protection in accordance with §§218.23 through 218.30 of this part.
(h) Nothing in this section shall affect the alternative form of protection specified in §221.16 of this chapter with respect to inspection of rear end marking devices.
[58 FR 43293, Aug. 16, 1993, as amended at 60 FR 11050, Mar. 1, 1995]

§218.23 Blue signal display.

(a) Blue signals displayed in accordance with §218.25, 218.27, or 218.29 signify that workers are on, under, or between rolling equipment. When so displayed—

(1) The equipment may not be coupled to;

(2) The equipment may not be moved, except as provided for in §218.29;

(3) Other rolling equipment may not be placed on the same track so as to reduce or block the view of a blue signal, except as provided for in §218.29 (a), (b) and (c); and

(4) Rolling equipment may not pass a displayed blue signal.

(b) Blue signals must be displayed in accordance with §218.25, 218.27, or 218.29 by each craft or group of workers prior to their going on, under, or between rolling equipment and may only be removed by the same craft or group that displayed them.

§218.24 One-person crew.

(a) An engineer working alone as a one-person crew shall not perform duties on, under, or between rolling equipment, without blue signal protection that complies with §218.27 or §218.29, unless the duties to be performed are listed in §218.22(c)(5) and the following protections are provided:

(1) Each locomotive in the locomotive engineer's charge is either:

(i) Coupled to the train or other railroad rolling equipment to be assisted; or

(ii) Stopped a sufficient distance from the train or rolling equipment to ensure a separation of at least 50 feet; and

(2) Before a controlling locomotive is left unattended, the one-member crew shall secure the locomotive as follows:

(i) The throttle is in the IDLE position;

(ii) The generator field switch is in the OFF position;

(iii) The reverser handle is removed (if so equipped);

(iv) The isolation switch is in the ISOLATE position;

(v) The locomotive independent (engine) brake valve is fully applied;

(vi) The hand brake on the controlling locomotive is fully applied (if so equipped); and

(vii) A bright orange engineer's tag (a tag that is a minimum of three by eight inches with the words ASSIGNED LOCOMOTIVE—DO NOT OPERATE) is displayed on the control stand of the controlling locomotive.

(b) When assisting another train or yard crew with the equipment the other crew was assigned to operate, a single engineer must communicate directly, either by radio in compliance with part 220 of this chapter or by oral telecommunication of equivalent integrity, with the crew of the train to be assisted. The crews of both trains must notify each other in advance of all moves to be made by their respective equipment. Prior to attachment or detachment of the assisting locomotive(s), the crew of the train to be assisted must inform the single engineer that the train is secured against movement. The crew of the train to be assisted must not move the train or permit the train to move until authorized by the single engineer.

[60 FR 11050, Mar. 1, 1995]

EFFECTIVE DATE NOTE: Section 218.24 was added at 60 FR 11050, Mar. 1, 1995, effective May 15, 1995. At 60 FR 30469, June 9, 1995, §218.24 was suspended, effective May 15, 1995.

§218.25 Workers on a main track.

When workers are on, under, or between rolling equipment on a main track:

(a) A blue signal must be displayed at each end of the rolling equipment; and

(b) If the rolling equipment to be protected includes one or more locomotives, a blue signal must be attached to the controlling locomotive at a location where it is readily visible to the engineman or operator at the controls of that locomotive.

(c) When emergency repair work is to be done on, under, or between a locomotive or one or more cars coupled to a locomotive, and blue signals are not available, the engineman or operator must be notified and effective measures must be taken to protect the workers making the repairs.

[44 FR 2175, Jan. 10, 1979, as amended at 48 FR 6123, Feb. 10, 1983]

§218.27 Workers on track other than main track.

When workers are on, under, or between rolling equipment on track other than main track—

(a) A blue signal must be displayed at or near each manually operated switch providing access to that track;

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

(c) The person in charge of the workers must have notified the operator of any remotely controlled switch that work is to be performed and have been informed by the operator that each remotely controlled switch providing access to the track on which the equipment is located has been lined against movement to that track and locked as prescribed in §218.30.

(d) If rolling equipment requiring blue signal protection as provided for in this section is on a track equipped with one or more crossovers, both switches of each crossover must be lined against movement through the crossover toward that rolling equipment, and the switch of each crossover that provides access to the rolling equipment must be protected in accordance with the provisions of paragraphs (a) and (b), or (c) of this section.

(e) If the rolling equipment to be protected includes one or more locomotives, a blue signal must be attached to the controlling locomotive at a location where it is readily visible to the engineman or operator at the controls of that locomotive.

§218.29 Alternate methods of protection.

Instead of providing blue signal protection for workers in accordance with §218.27, the following methods for blue signal protection may be used:

(a) When workers are on, under, or between rolling equipment in a locomotive servicing track area:

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

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

(3) A blue signal must be attached to each controlling locomotive at a location where it is readily visible to the engineman or operator at the controls of that locomotive;

(4) If the speed within this area is resticted to not more than 5 miles per hour a derail, capable of restricting access to that portion of a track within the area on which the rolling equipment is located, will fulfill the requirements of a manually operated switch in compliance

with paragraph (a)(2) of this section when positioned at least 50 feet from the end of the equipment to be protected by the blue signal, when locked in a derailing position with an effective locking device, and when a blue signal is displayed at the derail;

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

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

(7) If operated by an authorized employee under the direction of the person in charge of the workers, a locomotive protected by blue signals may be repositioned within this area after the blue signal has been removed from the locomotive to be repositioned and the workers on the affected track have been notified of the movement; and

(8) Blue signal protection removed for the movement of locomotives as provided in paragraphs (a) (5) and (6) of this section must be restored immediately after the locomotive has cleared the switch.

(b) When workers are on, under, or between rolling equipment in a car shop repair track area:

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

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

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

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

(c) Except as provided in paragraphs (a) and (b) of this section, when workers are on, under, or between rolling equipment on any track, other than a main track:

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

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

(d) When emergency repair work is to be done on, under, or between a locomotive or one or more cars coupled to a locomotive, and blue signals are not available, the engineman or operator at the controls of that locomotive must be notified and effective measures must be taken to protect the workers making the repairs.

[44 FR 2175, Jan. 10, 1979, as amended at 48 FR 6123, Feb. 10, 1983]

§218.30 Remotely controlled switches.

(a) After the operator of the remotely controlled switches has received the notification required by §218.27(c), he must line each remotely controlled switch against movement to that track and apply an effective locking device to the lever, button, or other device controlling the switch before he may inform the employee in charge of the workers that protection has been provided.

(b) The operator may not remove the locking device unless he has been informed by the person in charge of the workers that it is safe to do so.
(c) The operator must maintain for 15 days a written record of each notification which contains the following information:

(1) The name and craft of the employee in charge who provided the notification;

(2) The number or other designation of the track involved;

(3) The date and time the operator notified the employee in charge that protection had been provided in accordance with paragraph (a) of this section; and

(4) The date and time the operator was informed that the work had been completed, and the name and craft of the employee in charge who provided this information.

[44 FR 2175, Jan. 10, 1979, as amended at 48 FR 6123, Feb. 10, 1983]

Subpart C—Protection of Trains and Locomotives

§218.31 Scope.

This subpart prescribes minimum operating rule requirements for the protection of railroad employees engaged in the operation of trains, locomotives and other rolling equipment.

[42 FR 5065, Jan. 27, 1977]

§218.35 Yard limits.

(a) After August 1, 1977, yard limits must be designated by—

(1) Yard limit signs, and

(2) Timetable, train orders, or special instructions.

(b) After August 1, 1977, each railroad must have in effect an operating rule which complies with the requirements set forth below:

(1) The main tracks within yard limits may be used, clearing the time an approaching designated class train is due to leave the nearest station where time is shown. In case of failure to clear the time of designated class trains, protection must be provided as §218.37. In yard limits where main tracks are governed by block signal system rules, protection as prescribed by §218.37 is not required.

(2) Trains and engines, except designated class trains, within yard limits must move prepared to stop within one-half the range of vision but not exceeding 20 m.p.h. unless the main track is known to be clear by block signal indications.

(3) Within yard limits, movements against the current of traffic on the main tracks must not be made unless authorized and protected by train order, yardmaster, or other designated official and only under the operating restrictions prescribed in §218.35(b)(2).

(c) Each railroad shall designate in the operating rule prescribed under paragraph (b) of this section the class or classes of trains which shall have superiority on the main track within yard limits.

[42 FR 5065, Jan. 27, 1977]

§218.37 Flag protection.

(a) After August 1, 1977, each railroad must have in effect an operating rule which complies with the requirements set forth below:

(1) Except as provided in paragraph (a)(2) of this section, flag protection shall be provided—

(i) When a train is moving on the main track at less than one-half the maximum authorized speed (including slow order limits) in that territory, flag protection against following trains on the same track must be provided by a crew member by dropping off single lighted fusees at intervals that do not exceed the burning time of the fusee.

(ii) When a train is moving on the main track at more than one-half the maximum authorized speed (including slow order limits) in that territory under circumstances in which it may be overtaken, crew members responsible for providing protection will take into consideration the grade, curvature of track, weather conditions, sight distance and relative speed of his train to following trains and will be governed accordingly in the use of fusees.

(iii) When a train stops on main track, flag protection against following trains on the same track must be provided as follows: A crew member with flagman's signals must immediately go back at least the distance prescribed by timetable or other instructions for the territory and display one lighted fusee. The crew member may then return one-half of the distance to the crew member's train where the crew member must remain until the crew member has stopped the approaching train or is recalled. When recalled, the crew member must leave one lighted fusee and while returning to the crew member's train, the crew member must also place single lighted fusees at intervals that do not exceed the burning time of the fusee. When the train departs, a crew member must leave one lighted fusee and until the train resumes speed not less than one-half the maximum authorized speed (including slow order limits) in that territory, the crew member must drop off single lighted fusees at intervals that do not exceed the burning time of the fusee.

(iv) When required by the railroad's operating rules, a forward crew member with flagman's signals must protect the front of the crew member's train against opposing movements by immediately going forward at least the distance prescribed by timetable or other instructions for the territory, displaying one lighted fusee, and remaining at that location until recalled.

(v) Whenever a crew member is providing flag protection, he must not permit other duties to interfere with the protection of his train.

(2) Flag protection against following trains on the same track is not required if—

(i) The rear of the train is protected by at least two block signals;

(ii) The rear of the train is protected by an absolute block;

(iii) The rear of the train is within interlocking limits; or

(iv) A train order specifies that flag protection is not required.

(v) A railroad operates only one train at any given time.

(b) Each railroad shall designate by timetable or other instruction for each territory the specific distance which a crew member providing flag protection must go out in order to provide adequate protection for his train.

(c) Whenever the use of fusees is prohibited by a Federal, State or local fire regulation, each railroad operating within that jurisdiction shall provide alternate operating procedures to assure full protection of trains in lieu of flag protection required by this section.

[42 FR 5065, Jan. 27, 1977, as amended at 42 FR 38362, July 28, 1977; 73 FR 8498, Feb. 13, 2008]

§218.39 Hump operations.

After June 30, 1984, each railroad that operates a remote control hump yard facility must have in effect an operating rule that adopts the following provisions in substance:

(a) When a train or engine service employee is required to couple an air hose or to adjust a coupling device and that activity will require that the employee place himself between pieces of rolling equipment located on a bowl track, the operator of any remotely controlled switch that provides access from the apex of the hump to the track on which the rolling equipment is located shall be notified;

(b) Upon such notification, the operator of such remotely controlled switch shall line it against movement to the affected bowl track and shall apply a locking or blocking device to the control for that switch; and

(c) The operator shall then notify the employee that the requested protection has been provided and shall remove the locking or blocking device only after being notified by the employee that protection is no longer required on that track.
(Sec. 202, 84 Stat. 971 (45 U.S.C. 431); sec. 1.49(m) of the regulations of the Secretary of Transportation (49 CFR 1.49(m))
[49 FR 6497, Feb. 22, 1984]

§218.41 Noncompliance with hump operations rule.

A person (including a railroad and any manager, supervisor, official, or other employee or agent of a railroad) who fails to comply with a railroad's operating rule issued pursuant to §218.39 of this part is subject to a penalty, as provided in appendix A of this part.
[53 FR 52928, Dec. 29, 1988]

Subpart D—Prohibition Against Tampering With Safety Devices

SOURCE: 54 FR 5492, Feb. 3, 1989, unless otherwise noted.

§218.51 Purpose.

(a) The purpose of this subpart is to prevent accidents and casualties that can result from the operation of trains when safety devices intended to improve the safety of their movement have been disabled.
(b) This subpart does not prohibit intervention with safety devices that is permitted:

(1) Under the provisions of §236.566 or §236.567 of this chapter;

(2) Under the provisions of §218.61 of this part; or

(3) Under the provisions of §229.9 of this chapter, provided that when a locomotive is being operated under the provision of §229.9(b) a designated officer has been notified of the defective alerter or deadman pedal at the first available point of communication.
[54 FR 5492, Feb. 3, 1989, as amended at 58 FR 36613, July 8, 1993]

§218.53 Scope and definitions.

(a) This subpart establishes standards of conduct for railroads and individuals who operate or permit to be operated locomotives equipped with one or more of the safety devices identified in paragraph (c) of this section.
(b) *Disable* means to unlawfully render a device incapable of proper and effective action or to materially impair the functioning of that device.
(c) *Safety device* means any locomotive-mounted equipment that is used either to assure that the locomotive operator is alert, not physically incapacitated, aware of and complying with the indications of a signal system or other operational control system or to record data concerning the operation of that locomotive or the train it is powering. See appendix B to this part for a statement of agency policy on this subject.

§218.55 Tampering prohibited.

Any individual who willfully disables a safety device is subject to a civil penalty as provided in appendix A of this part and to disqualification from performing safety-sensitive functions on a railroad if found unfit for such duties under the procedures provided for in 49 CFR part 209.

§218.57 Responsibilities of individuals.

Any individual who knowingly operates a train, or permits it to be operated, when the controlling locomotive of that train is equipped with a disabled safety device, is subject to a civil penalty as provided for in appendix A of this part and to disqualification from performing safety-sensitive functions on a railroad if found to be unfit for such duties. See appendix B to this part for a statement of agency enforcement policy concerning violations of this section.

§218.59 Responsibilities of railroads.
Any railroad that operates a train when the controlling locomotive of a train is equipped with a disabled safety device is subject to a civil penalty as provided for in appendix A of this part.
§218.61 Authority to deactivate safety devices.
(a) For the purpose of this chapter, it is lawful to temporarily render a safety device incapable of proper or effective action or to materially impair its function if this action is taken as provided for in paragraph (b) or (c) of this section.
(b) If a locomotive is equipped with a device to assure that the operator is alert or not physically incapacitated, that device may be deactivated when:

(1) The locomotive is not the controlling locomotive;

(2) The locomotive is performing switching operations and not hauling cars in a manner that constitutes a train movement under part 232 of this chapter:

(3) The locomotive is dead-in-tow; or

(4) The locomotive is a mid-train slave unit being controlled by radio from a remote location.

(c) If a locomotive is equipped with a device to record data concerning the operation of that locomotive and/or of the train it is powering, that device may be deactivated only in accordance with the provisions of §229.135.
[54 FR 5492, Feb. 3, 1989, as amended at 58 FR 36613, July 8, 1993]

Subpart E—Protection of Occupied Camp Cars

SOURCE: 54 FR 39545, Sept. 27, 1989, unless otherwise noted.
§218.71 Purpose and scope.
This subpart prescribes minimum requirements governing protection of camp cars that house railroad employees. The rule does not apply to such cars while they are in a train.
§218.73 Warning signal display.
(a) Warning signals, *i.e.,* a white disk with the words “Occupied Camp Car” in black lettering during daylight hours and an illuminated white signal at night, displayed in accordance with §218.75, §218.77, or §218.79 signify that employees are in, around, or in the vicinity of camp cars. Once the signals have been displayed—

(1) The camp cars may not be moved for coupling to other rolling equipment or moved to another location;

(2) Rolling equipment may not be placed on the same track so as to reduce or block the view of a warning signal; and

(3) Rolling equipment may not pass a warning signal.

(b) Warning signals indicating the presence of occupied camp cars, displayed in accordance with §§218.75 and 218.79, shall be displayed by a designated occupant of the camp cars or that person's immediate supervisor. The signal(s) shall be displayed as soon as such cars are placed on the track, and such signals may only be removed by those same individuals prior to the time the cars are moved to another location.
§218.75 Methods of protection for camp cars.
When camp cars requiring protection are on either main track or track other than main track:
(a) A warning signal shall be displayed at or near each switch providing access to that track;
(b) The person in charge of the camp car occupants shall immediately notify the person responsible for directing train movements on that portion of the railroad where the camp cars are being parked;

(c) Once notified of the presence of camp cars and their location on main track or other than main track, the person responsible for directing train movements on that portion of the railroad where the camp cars are being parked shall take appropriate action to alert affected personnel to the presence of the cars;
(d) Each manually operating switch providing access to track on which the camp cars are located shall be lined against movement to that track and secured with an effective locking device and spiked; and
(e) Each remotely controlled switch providing access to the track on which the camp cars are located shall be protected in accordance with §218.77.

§218.77 Remotely controlled switches.

(a) After the operator of the remotely controlled switch is notified that a camp car is to be placed on a particular track, he shall line such switch against movement to that track and apply an effective locking device applied to the lever, button, or other device controlling the switch before informing the person in charge of the camp car occupants that protection has been provided.
(b) The operator may not remove the locking device until informed by the person in charge of the camp car occupants that protection is no longer required.
(c) The operator shall maintain for 15 days a written record of each notification that contains the following information:

(1) The name and craft of the employee in charge who provided the notification;

(2) The number or other designation of the track involved;

(3) The date and time the operator notified the employee in charge that protection had been provided in accordance with paragraph (a) of this section; and

(4) The date and time the operator was informed that the work had been completed, and the name and craft of the employee in charge who provided this information.

(d) When occupied camp cars are parked on main track, a derail, capable of restricting access to that portion of the track on which such equipment is located, shall be positioned no less than 150 feet from the end of such equipment and locked in a derailing position with an effective locking device, and a warning signal must be displayed at the derail.

§218.79 Alternative methods of protection.

Instead of providing protection for occupied camp cars in accordance with §218.75 or §218.77, the following methods of protection may be used:
(a) When occupied camp cars are on track other than main track:

(1) A warning signal must be displayed at or near each switch providing access to or from the track;

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

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

(b) Except as provided in paragraph (a) of this section, when occupied camp cars are on track other than main track:

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

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

§218.80 Movement of occupied camp cars.

Occupied cars may not be humped or flat switched unless coupled to a locomotive.

Subpart F—Handling Equipment, Switches, and Fixed Derails

SOURCE: 73 FR 8498, Feb. 13, 2008, unless otherwise noted.

§218.91 Purpose and scope.

(a) The purpose of this subpart is to prevent accidents and casualties that can result from the mishandling of equipment, switches, and fixed derails.

(b) This subpart prescribes minimum operating rule requirements for the handling of equipment, switches, and fixed derails. Each railroad may prescribe additional or more stringent requirements in its operating rules, timetables, timetable special instructions, and other instructions.

§218.93 Definitions.

As used in this subpart—

Associate Administrator for Safety means the Associate Administrator for Safety of the Federal Railroad Administration or that person's delegate as designated in writing.

Clearance point means the location near a turnout beyond which it is unsafe for passage on an adjacent track(s). Where a person is permitted by a railroad's operating rules to ride the side of a car, a clearance point shall accommodate a person riding the side of a car.

Correspondence of crossover switches means both crossover switches are lined for the crossover or both are lined for the straight tracks.

Crossover means, for purposes of this subpart only, a track connection between two adjacent, but not necessarily parallel, tracks, consisting of two switches, which is intended to be used primarily for the purpose of crossing over from one track to another.

Departure track means a track located in a classification yard where rolling equipment is placed and made ready for an outgoing train movement.

Employee means an individual who is engaged or compensated by a railroad or by a contractor to a railroad to perform any of the duties defined in this subpart.

Foul or fouling a track means rolling equipment or on-track maintenance-of-way equipment is located such that the end of the equipment is between the clearance point and the switch points leading to the track on which the equipment is standing.

FRA means the Federal Railroad Administration.

Hand-operated switch means any type of switch when operated by manual manipulation. For purposes of this subpart, a hand-operated switch does not include switches operated by push button or radio control when such switch is protected by distant switch indicators, switch point indicators, or other visual or audio verification that the switch points are lined for the intended route and fit properly.

Highway-rail grade crossing means, for purposes of this subpart only, an at-grade crossing where a public highway, road, street, or private roadway, including associated sidewalks and pathways, crosses one or more railroad tracks at grade, and is identified by a U.S. DOT National Highway-Rail Grade Crossing Inventory Number, or is marked by crossbucks, stop signs, or other appropriate signage indicating the presence of an at-grade crossing.

Industry track means a switching track, or series of tracks, serving the needs of a commercial industry other than a railroad.

Lite locomotive consist means two or more locomotive units coupled without cars attached, regardless of whether the locomotive units are connected so that they may be operated from a single control stand.

***Locomotive* means**, for purposes of this subpart only, a piece of on-track equipment (other than specialized roadway maintenance equipment or a dual purpose vehicle operating in accordance with §240.104(a)(2) of this chapter):

(1) With one or more propelling motors designed for moving other equipment;

(2) With one or more propelling motors designed to carry freight or passenger traffic or both; or

(3) Without propelling motors but with one or more control stands.

Pedestrian crossing means a separate designated sidewalk or pathway where pedestrians, but not vehicles, cross railroad tracks. Sidewalk crossings contiguous with, or separate but adjacent to, highway-rail grade crossings, are presumed to be part of the highway-rail grade crossings and are *not* considered pedestrian crossings.

Qualified means that a person has successfully completed all instruction, training, and examination programs required by the railroad and this subpart and that the person, therefore, has actual knowledge or may reasonably be expected to have knowledge of the subject on which the person is expected to be competent.

Remote control operator means a locomotive engineer, as defined in §240.7 of this chapter, certified by a railroad to operate remote control locomotives pursuant to §240.107 of this chapter.

Remote control zone means one or more tracks within defined limits designated in the timetable special instructions, or other railroad publication, within which remote control locomotives, under certain circumstances specified in this part, may be operated without an employee assigned to protect the pull-out end of the remote control movement, i.e., the end on which the locomotive is located.

Roadway maintenance activity means any work limited to the duties prescribed for a roadway worker by definition in this section, including movement of on-track maintenance-of-way equipment other than locomotives.

Roadway worker means any employee of a railroad, or of a contractor to a railroad, whose duties include inspection, construction, maintenance or repair of railroad track, bridges, roadway, signal and communication systems, electric traction systems, roadway facilities or roadway maintenance machinery on or near track or with the potential of fouling a track, and flagmen and watchmen/lookouts as defined in §214.7 of this chapter.

Roadway worker in charge means a roadway worker who is qualified in accordance with §214.353 of this chapter for the purpose of establishing on-track safety for roadway work groups.

Siding means an auxiliary track, adjacent and connected to a main track, used for meeting or passing trains.

Signaled siding means a siding within traffic control system (TCS) territory or within interlocking limits where a signal indication authorizes the siding's use.

***Switchtende**r* means a qualified employee assigned to handle switches at a specific location.

Track is clear means:

(1) The portion of the track to be used for the intended movement is unoccupied by rolling equipment, on-track maintenance-of-way equipment, and conflicting on-track movements;

(2) Intervening public highway-rail grade crossings, private highway-rail grade crossings outside the physical confines of a railroad yard, pedestrian crossings outside of the physical confines of a railroad yard, and yard access crossings are protected as follows:

(i) Crossing gates are in the fully lowered position, and are not known to be malfunctioning; or

(ii) A designated and qualified employee is stationed at the crossing and has the ability to communicate with trains; or

(iii) At crossings equipped only with flashing lights or passive warning devices, when it is clearly seen that no traffic is approaching or stopped at the crossing and the leading end of the movement over the crossing does not exceed 15 miles per hour;

(3) Intervening switches and fixed derails are properly lined for the intended movement; and

(4) The portion of the track to be used for the intended movement has sufficient room to contain the rolling equipment being shoved or pushed.

Yard access crossing means a private highway-rail grade crossing that is located within the physical confines of a railroad yard and is either:

(1) Open to unrestricted public access; or

(2) Open to persons other than railroad employees going about their normal duties, e.g., business guests or family members.

[73 FR 8498, Feb. 13, 2008, as amended at 73 FR 33902, June 16, 2008]

§218.95 Instruction, training, and examination.

(a) *Program.* Beginning January 1, 2009, each railroad shall maintain a written program of instruction, training, and examination of employees for compliance with operating rules implementing the requirements of this subpart to the extent these requirements are pertinent to the employee's duties. If all requirements of this subpart are satisfied, a railroad may consolidate any portion of the instruction, training or examination required by this subpart with the program of instruction required under §217.11 of this chapter. An employee who successfully completes all instruction, training, and examination required by this written program shall be considered qualified.

(1) The written program of instruction, training, and examination shall address the requirements of this subpart, as well as consequences of noncompliance.

(2) The written program of instruction, training, and examination shall include procedures addressing how the railroad qualifies employees in any technology necessary to accomplish work subject to the requirements of this subpart. Such procedures shall include, but are not limited to, those which explain:

(i) The purpose for using the technology;

(ii) How an employee will be expected to use the technology;

(iii) How to detect malfunctioning equipment or deviations from proper procedures;

(iv) How to respond when equipment malfunctions or deviations from proper procedures are detected; and

(v) How to prevent unintentional interference with the proper functioning of the technology.

(3) *Implementation schedule for employees, generally.* Each employee performing duties subject to the requirements in this subpart shall be initially qualified prior to July 1, 2009.

(4) Beginning July 1, 2009, no employee shall perform work requiring compliance with the operating rules implementing the requirements of this subpart unless qualified on these rules within the previous three years.

(5) The records of successful completion of instruction, examination and training required by this section shall document qualification of employees under this subpart.

(b) Written records documenting successful completion of instruction, training, and examination of each employee required by this subpart shall be retained at its system headquarters and at the division headquarters for each division where the employee is assigned for three calendar years after the end of the calendar year to which they relate and made available to representatives of the FRA for inspection and copying during normal business hours. Each railroad to which this part applies is authorized to retain a program, or any records maintained to prove compliance with such a program, by electronic recordkeeping in accordance with §§217.9(g) and 217.11(c) of this chapter.

(c) Upon review of the program of instruction, training, and examination required by this section, the Associate Administrator for Safety may, for cause stated, disapprove the program. Notification of such disapproval shall be made in writing and specify the basis for the disapproval decision. If the Associate Administrator for Safety disapproves the program,

(1) The railroad has 35 days from the date of the written notification of such disapproval to:

(i) Amend its program and submit it to the Associate Administrator for Safety for approval; or

(ii) Provide a written response in support of the program to the Associate Administrator for Safety, who informs the railroad of FRA's final decision in writing; and

(2) A failure to submit the program with the necessary revisions to the Associate Administrator for Safety in accordance with this paragraph will be considered a failure to implement a program under this part.

[73 FR 8498, Feb. 13, 2008, as amended at 73 FR 33902, June 16, 2008]

§218.97 Good faith challenge procedures.

(a) *Employee responsibility.* An employee shall inform the railroad or employer whenever the employee makes a good faith determination that the employee has been directed to either take actions that would violate FRA regulations regarding the handling of equipment, switches, and fixed derails as required by this subpart, or to take actions that would violate the railroad's operating rules implementing the requirements of this subpart.

(b) *General procedures.* Each railroad or employer is responsible for the training of and compliance by its employees with the requirements of this subpart.

(1) Each railroad or employer shall adopt and implement written procedures which guarantee each employee the right to challenge in good faith whether the procedures that will be used to accomplish a specific task comply with the requirements of this subpart or any operating rule relied upon to fulfill the requirements of this subpart. Each railroad or employer's written procedures shall provide for prompt and equitable resolution of challenges made in accordance with this subpart.

(2) The written procedures required by this section shall indicate that the good faith challenge described in paragraph (b)(1) of this section is not intended to abridge any rights or remedies available to the employee under a collective bargaining agreement, or any Federal law including, but not limited to, 29 U.S.C. 651 *et seq.,* 6 U.S.C. 1142, or 49 U.S.C. 20109.

(3) Each affected employee shall be instructed on the written procedures required by this paragraph as part of the training prescribed by §217.11 of this chapter.

(4) A copy of the current written procedures shall be provided to each affected employee and made available for inspection and copying by representatives of the FRA during normal business hours.

(c) The written procedures shall—

(1) Grant each employee the right to challenge any directive which, based on the employee's good faith determination, would cause the employee to violate any requirement of this subpart or any operating rule relied upon to fulfill the requirements of this subpart;

(2) Provide that the railroad or employer shall not require the challenging employee to comply with the directive until the challenge resulting from the good faith determination is resolved;

(3) Provide that the railroad or employer may require the challenging employee to perform tasks unrelated to the challenge until the challenge is resolved;

(4) Provide that the railroad or employer may direct an employee, other than the challenging employee, to perform the challenged task prior to the challenge being resolved as long as this other employee is informed of the challenge and does not also make a good faith determination that the challenged task would violate FRA regulations regarding the handling of equipment, switches, and fixed derails as required in this subpart, or a railroad's operating rules implementing the requirements of this subpart;

(5) Provide that a challenge may be resolved by:

(i) A railroad or employer officer's acceptance of the employee's request;

(ii) An employee's acceptance of the directive;

(iii) An employee's agreement to a compromise solution acceptable to the person issuing the directive; or

(iv) As further determined under paragraph (d) of this section.

(d) In the event that the challenge cannot be resolved because the person issuing the directive determines that the employee's challenge has not been made in good faith or there is no reasonable alternative to the direct order, the written procedures shall:

(1) Provide for immediate review by at least one officer of the railroad or employer, except for each railroad with less than 400,000 total employee work hours annually. This immediate review shall:

(i) Not be conducted by the person issuing the challenged directive, or that person's subordinate; and

(ii) Provide that a challenge may be resolved by using the same options available for resolving the challenge as the initial officer as well as the option described in paragraph (d)(2) of this section, except that the reviewing officer's decision shall not be subject to further immediate review, unless provided for in the railroad's or employer's written procedures;

(2) Provide that if the officer making the railroad's or employer's final decision concludes that the challenged directive would not cause the employee to violate any requirement of this subpart or the railroad's or employer's operating rule relied upon to fulfill the requirements of this subpart and directs the employee to perform the challenged directive, the officer shall further explain to the employee that Federal law may protect the employee from retaliation if the employee refuses to do the work and if the employee's refusal is a lawful, good faith act;

(3) Provide that the employee be afforded an opportunity to document electronically or in writing any protest to the railroad or employer's final decision before the tour of duty is complete. The employee shall be afforded the opportunity to retain a copy of the protest;

(4) Provide that the employee, upon written request, has a right to further review by a designated railroad or employer officer, within 30 days after the expiration of the month during which the challenge occurred, for the purpose of verifying the proper application of the regulation, law, procedure or rule in question. The verification decision shall be made in writing to the employee.

(e) *Recordkeeping and record retention.* (1) A copy of the written procedures required by this section shall be retained at the employer or railroad's system headquarters and at each division headquarters, and made available to representatives of the FRA for inspection and copying during normal business hours.

(2) A copy of any written good faith challenge verification decision, made in accordance with paragraph (d)(4) of this section, shall be retained at the employer or railroad's system headquarters and at the division headquarters to which the employee was working when the challenge was initiated, and made available to representatives of the FRA for inspection and copying during normal business hours for at least one calendar year after expiration of the year during which the decision was issued.

(3) Each employer or railroad to which this subpart applies is authorized to retain by electronic recordkeeping the information prescribed in this subpart in accordance with the electronic recordkeeping standards set forth in §217.9(g)(1) through (5) of this chapter.

§218.99 Shoving or pushing movements.

(a)(1) Each railroad shall adopt and comply with an operating rule which complies with the requirements of this section. When any person including, but not limited to, each railroad, railroad officer, supervisor, and employee violates any requirement of an operating rule which complies with the requirements of this section, that person shall be considered to have violated the requirements of this section.

(2) The following requirements for shoving or pushing movements do not apply to rolling equipment intentionally shoved or pushed to permit the rolling equipment to roll without power attached, i.e., free rolling equipment, during switching activities known as kicking, humping, or dropping cars.

(b) *General movement requirements*—(1) *Job briefing.* Rolling equipment shall not be shoved or pushed until the locomotive engineer participating in the move has been briefed by the employee who will direct the move. The job briefing shall include the means of communication to be used between the locomotive engineer and the employee directing the move and how point protection will be provided.

(2) *No unrelated tasks.* During the shoving or pushing movement, the employee directing the movement shall not engage in any task unrelated to the oversight of the shoving or pushing movement.

(3) *Point protection.* When rolling equipment or a lite locomotive consist is shoved or pushed, point protection shall be provided by a crewmember or other qualified employee by:

(i) Visually determining that the track is clear. The determination that the track is clear may be made with the aid of monitored cameras or other technological means, provided that it and the procedures for use provide an equivalent level of protection to that of a direct visual determination by a crewmember or other qualified employee properly positioned to make the observation as prescribed in this section and appendix D to this part; and

(ii) Giving signals or instructions necessary to control the movement.

(c) *Additional requirements for remote control movements.* All remote control movements are considered shoving or pushing movements, except when the remote control operator controlling the movement is riding the leading end of the leading locomotive in a position to visually determine conditions in the direction of movement. In addition to the other requirements of this section,

(1) When initiating a remote control shoving or pushing movement:

(i) The remote control operator shall visually determine the direction the equipment moves; or

(ii) A member of the crew shall visually determine the direction the equipment moves and confirm the direction with the remote control operator. If no confirmation is received, the movement shall be immediately stopped; and

(2) If technology is relied upon, whether primarily or as a safeguard, to provide pull-out protection by preventing the movement from exceeding the limits of a remote control zone, the technology shall be demonstrated

(i) To be failsafe; or

(ii) To provide suitable redundancy to prevent unsafe failure.

(d) *Remote control zone, exception to track is clear requirements.* After an initial track is clear determination has been made in an activated remote control zone, it is not necessary to make a new determination prior to each subsequent shoving or pushing movement provided that:

(1) The controlling locomotive of the remote control movement is on the leading end in the direction of movement, i.e., the movement occurs on the pull-out end;

(2) The remote control zone is not jointly occupied; and

(3) The initial determination was made by a crewmember of either:

(i) The remote control crew;

(ii) A relieved remote control crew who has transferred the remote control zone directly to the relieving crew; or

(iii) The last jointly occupying crew who directly communicates, i.e., not through a third party, to a remote control crewmember that the remote control zone is no longer jointly occupied and meets the requirements for track is clear.

(e) *Operational exceptions.* A railroad does not need to comply with paragraphs (b) through (d) of this section in the following circumstances:

(1) Push-pull operations when operated from the leading end in the direction of movement, i.e., push mode;

(2) Shoving or pushing operations with manned helper locomotives or distributed power locomotives assisting a train when the train is being operated from the leading end in the direction of movement;

(3) During the performance of roadway maintenance activity under the direct control of a roadway worker performing work in accordance with railroad operating rules specific to roadway workers; or

(4) When the leading end of a shoving movement is on a main track or signaled siding, under the following conditions:

(i) The train dispatcher gives authority or permission to make the movement and verifies that:

(A) Another movement or work authority is not in effect within the same or overlapping limits unless conflicting movements are protected; and

(B) A main track is not removed from service by a work authority within the same or overlapping limits;

(ii) Movement is limited to the train's authority;

(iii) Movement shall not be made into or within yard limits, restricted limits, drawbridges, or work authority limits;

(iv) Movement shall not enter or foul a highway-rail grade crossing or pedestrian crossing except when:

(A) Crossing gates are in the fully lowered position; or

(B) A designated and qualified employee is stationed at the crossing and has the ability to communicate with trains; or

(C) At crossings equipped only with flashing lights or passive warning devices, when it is clearly seen that no traffic is approaching or stopped at the crossing and the leading end of the movement over the crossing does not exceed 15 miles per hour; and

(v) Movement shall not be made into or within interlocking limits or controlled point limits unless the following conditions are met:

(A) The signal governing movement is more favorable than restricting aspect;

(B) Each signal governing movement into and through interlocking limits or controlled point limits shall be continuously observed by a member of that crew who is in a position to determine that the train's movement has occupied the circuit controlling that signal as evidenced by that signal assuming its most restrictive aspect; and

(C) The movement does not exceed the train's length.

(5) Shoving or pushing movements made in the direction of the circuited end of a designated departure track equipped with a shove light system, if all of the following conditions are met:

(i) The shove light system is demonstrated to be failsafe;

(ii) The shove light system is arranged to display a less favorable aspect when the circuited section of the track is occupied;

(iii) Written procedures are adopted and complied with that provide for a reliable means of determining track occupancy prior to commencing a shoving or pushing movement;

(iv) The track is designated in writing;

(v) The track is under the exclusive and continuous control of a yardmaster or other qualified employee;

(vi) The train crewmember or other qualified employee directing the shoving or pushing movement complies with the general movement requirements contained in paragraphs (b)(1) and (b)(2) of this section;

(vii) All remote control shoving or pushing movements comply with the requirements contained in paragraph (c)(1) of this section; and

(viii) The shove light system is continuously illuminated when the circuited section of the track is unoccupied.

[73 FR 8498, Feb. 13, 2008, as amended at 73 FR 33902, June 16, 2008]

§218.101 Leaving rolling and on-track maintenance-of-way equipment in the clear.

(a) Each railroad shall adopt and comply with an operating rule which complies with the requirements of this section. When any person including, but not limited to, each railroad, railroad officer, supervisor, and employee violates any requirement of an operating rule which complies with the requirements of this section, that person shall be considered to have violated the requirements of this section.

(b) Rolling and on-track maintenance-of-way equipment shall not be left where it will foul a connecting track unless:

(1) The equipment is standing on a main track and a siding track switch that the equipment is fouling is lined for the main track on which the equipment is standing; or

(2) The equipment is standing on a siding and a main track switch that the equipment is fouling is lined for the siding on which the equipment is standing; or

(3) The equipment is standing on a yard switching lead track, and the yard track switch that the equipment is fouling is lined for the yard switching lead track on which the equipment is standing; or

(4) The equipment is on an industry track beyond the clearance point of the switch leading to the industry.

(c) Each railroad shall implement procedures that enable employees to identify clearance points and a means to identify locations where clearance points will not permit a person to safely ride on the side of a car.

§218.103 Hand-operated switches, including crossover switches.

(a)(1) Each railroad shall adopt and comply with an operating rule which complies with the requirements of this section. When any person including, but not limited to, each railroad, railroad officer, supervisor, and employee violates any requirement of an operating rule which complies with the requirements of this section, that person shall be considered to have violated the requirements of this section.

(2) Each railroad shall specify minimum requirements necessary for an adequate job briefing.

(b) *General.* Employees operating or verifying the position of a hand-operated switch shall:

(1) Conduct job briefings, before work is begun, each time a work plan is changed, and at completion of the work;

(2) Be qualified on the railroad's operating rules relating to the operation of the switch;

(3) Be individually responsible for the position of the switch in use;

(4) Visually determine that switches are properly lined for the intended route and that no equipment is fouling the switches;

(5) Visually determine that the points fit properly and the target, if so equipped, corresponds with the switch's position;

(6) After operating a switch and before making movements in either direction over the switch, ensure that the switch is secured from unintentional movement of the switch points;

(7) Ensure that a switch is not operated while rolling and on-track maintenance-of-way equipment is fouling the switch, or standing or moving over the switch; and

(8) After operating a switch, ensure that when not in use, each switch is locked, hooked, or latched, if so equipped.

(c) Rolling and on-track maintenance-of-way equipment shall not foul a track until all hand-operated switches connected with the movement are properly lined, or in the case of hand-operated switches designed and permitted to be trailed through, until the intended route is seen to be clear or the train has been granted movement authority. When a conflicting movement is approaching a hand-operated switch, the track shall not be fouled or the switch operated.

(d) When rolling and on-track maintenance-of-way equipment has entered a track, the hand-operated switch to that track shall not be lined away from the track until the equipment has passed the clearance point of the track.

§218.105 Additional operational requirements for hand-operated main track switches.

(a) Each railroad shall adopt and comply with an operating rule which complies with the requirements of this section. When any person including, but not limited to, each railroad, railroad officer, supervisor, and employee violates any requirement of an operating rule which complies with the requirements of this section, that person shall be considered to have violated the requirements of this section.

(b) *Designating switch position.* The normal position of a hand-operated main track switch shall be designated by the railroad in writing and the switch shall be lined and locked in that position when not in use except when:

(1) The train dispatcher directs otherwise with respect to the position of a hand-operated main track switch and the necessary protection is provided; or

(2) The hand-operated switch is left in the charge of a crewmember of another train, a switchtender, or a roadway worker in charge.

(c) *Additional job briefing requirements for hand-operated main track switches.* (1) Before a train or a train crew leaves the location where any hand-operated main track switch was operated, all crewmembers shall have verbal communication to confirm the position of the switch.

(2) In the case of exclusive track occupancy authority established under §214.321, foul time under §214.323, or train coordination under §214.325, when a roadway worker qualified to operate hand-operated main track switches is granted permission by the roadway worker in charge to occupy or otherwise use the limits of the exclusive track occupancy, such employee receiving permission to occupy the working limits shall report the position of any such switches operated upon expiration of the authority limits to the roadway worker in charge or to a designated intermediary employee who shall convey the switch position to the roadway worker in charge.

(d) *Releasing authority limits.* In non-signaled territory, before an employee releases the limits of a main track authority and a hand-operated switch is used to clear the main track, and, prior to departing the switch's location, the following conditions are required:

(1) The employee releasing the limits, after conducting a job briefing in accordance with this subpart, shall report to the train dispatcher that the hand-operated main track switch has been restored to its normal position and locked, unless the train dispatcher directs that the hand-operated main track switch be left lined and locked in the reverse position and the necessary protection is provided;

(2) If the report of the switch position is correct, the train dispatcher shall repeat the reported switch position information to the employee releasing the limits and ask whether that is correct; and

(3) The employee releasing the limits shall then confirm to the train dispatcher that this information is correct.

§218.107 Additional operational requirements for hand-operated crossover switches.

(a) Each railroad shall adopt and comply with an operating rule which complies with the requirements of this section. When any person including, but not limited to, each railroad, railroad officer, supervisor, and employee violates any requirement of an operating rule which complies with the requirements of this section, that person shall be considered to have violated the requirements of this section.

(b) *Hand-operated crossover switches, generally.* Both hand-operated switches of a crossover shall be properly lined before rolling and on-track maintenance-of-way equipment begins a crossover movement. A crossover movement shall be completed before either hand-operated crossover switch is restored to normal position.

(c) *Correspondence of hand-operated crossover switches.* Hand-operated crossover switches shall be left in corresponding position except when:

(1) Used to provide blue signal protection under §218.27 of this part; or

(2) Used for inaccessible track protection under §214.327 of this chapter; or

(3) Performing maintenance, testing or inspection of crossover switches in traffic control system (TCS) territory; or

(4) One crew is using both tracks connected by the crossover during continuous switching operations.

§218.109 Hand-operated fixed derails.

(a)(1) Each railroad shall adopt and comply with an operating rule which complies with the requirements of this section. When any person including, but not limited to, each railroad, railroad officer, supervisor, and employee violates any requirement of an operating rule which

complies with the requirements of this section, that person shall be considered to have violated the requirements of this section.

(2) Each railroad shall specify minimum requirements necessary for an adequate job briefing.

(b) *General.* (1) The normal position of fixed derails is in the derailing position except as provided in part 218, subpart B of this chapter, or the railroad's operating rules or special instructions.

(2) Fixed derails shall be kept in the derailing position whether or not any rolling and on-track maintenance-of-way equipment is on the tracks they protect, except as provided in paragraph (b)(1) of this section or when changed to permit movement.

(3) Movement must not be made over a fixed derail in the derailing position.

(c) Employees operating or verifying the position of a fixed derail shall:

(1) Conduct job briefings, before work is begun, each time a work plan is changed, and at completion of the work;

(2) Be qualified on the railroad's operating rules relating to the operation of the derail;

(3) Be individually responsible for the position of the derail in use;

(4) Determine that the target, if so equipped, corresponds with the derail's position;

(5) Determine that the derail is secured by:

(i) Placing the throw lever in the latch stand, if so equipped;

(ii) Placing the lock or hook in the hasp, if so equipped; and

(iii) Testing such latches, locks or hooks; and

(6) Ensure that when not in use, derails are locked, hooked, or latched in the normal position if so equipped.

Appendix A to Part 218—Schedule of Civil Penalties[1]

Section	Violation	Willful
Subpart B—Blue signal protection of workmen:		
218.22 Utility employees:		
(a) Employee qualifications	$5,000	$7,500
(b) Concurrent service	5,000	7,500
(c) Assignment conditions		
(1) No controlling locomotive	5,000	7,500
(2) Empty cab	5,000	7,500
(3)(4) Improper communication	5,000	7,500
(5) Performing functions not listed	2,000	4,000
(d) Improper release of utility employee	2,000	4,000
(f) More than three utility employees with one crew	2,000	4,000
218.23 Blue signal display	5,000	7,500
218.24 One-person crew:		
(a)(1) Equipment not coupled or insufficiently separated	2,000	4,000
(a)(2) Unoccupied locomotive cab not secured	5,000	7,500

Section	Violation	Willful
Subpart B—Blue signal protection of workmen:		
(b) Helper service	2,000	4,000
218.25 Workmen on a main track	5,000	7,500
218.27 Workmen on track other than main track:		
(a) Protection provided except that signal not displayed at switch	2,000	4,000
(b) through (e)	5,000	7,500
218.29 Alternate methods of protection:		
(a)(1) protection provided except that signal not displayed at switch	2,000	4,000
(a)(2) through (a)(8)	5,000	7,500
(b)(1) Protection provided except that signal not displayed at switch	2,000	4,000
(b)(2) through (b)(4)	5,000	7,500
(c) Use of derails	5,000	7,500
(d) Emergency repairs	5,000	7,500
218.30 Remotely controlled switches:		
(a) and (b)	5,000	7,500
(c)	1,000	2,000
Subpart C—Protection of trains and locomotives:		
218.35 Yard limits:		
(a) and (b)	5,000	7,500
(c)	1,000	2,000
218.37 Flag protection:		
(a)	5,000	7,500
(b) and (c)	5,000	7,500
218.39 Hump operations	5,000	7,500
218.41 Noncompliance with hump operations rule	5,000	7,500
Subpart D—Prohibition against tampering with safety devices:		
218.55 Tampering		7,500
218.57 (i) Knowingly operating or permitting operation of disabled equipment	2,500	

Section	Violation	Willful
Subpart B—Blue signal protection of workmen:		
(ii) Willfully operating or permitting operation of disabled equipment		5,000
218.59 Operation of disabled equipment	2,500	5,000
Subpart F—Handling Equipment, Switches and Derails:		
218.95 Instruction, Training, and Examination:		
(a) Program	9,500-12,500	13,000-16,000
(b) Records	7,500	11,000
(c) Failure to timely or appropriately amend program after disapproval	9,500-12,500	13,000-16,000
218.97 Good Faith Challenge Procedures:		
(a) Employee Responsibility Failure		5,000
(b) through (d) Failure to adopt or implement procedures	7,500	
218.99 Shoving or Pushing Movements:		
(a) Failure to implement required operating rule	9,500	
(b) Failure to conduct job briefing, use a qualified employee, or establish proper protection	7,500-9,500	11,000-13,000
(c) Failure to observe equipment direction	9,500	13,000
(d) Failure to properly establish point protection within a remote control zone	9,500	13,000
(e) Failure to abide by operational exception requirements	9,500	13,000
218.101 Leaving Equipment in the Clear:		
(a) Failure to implement required operating rule	9,500	
(b) Equipment left improperly fouling	9,500	13,000
(c) Failure to implement procedures for identifying clearance points	9,500	13,000
218.103 Hand-operated switches, including crossover switches:		
(a) Failure to implement required operating rule	9,500	
(b) through (d) Railroad and employee failures	7,500	
218.105 Additional operational requirements for hand-operated main track switches:		
(a) Failure to implement required operating rule	9,500	
(b) and (c) Railroad and employee failures	7,500	11,000

Section	Violation	Willful
Subpart B—Blue signal protection of workmen:		
(d) Failure to properly release authority limits	12,500	
218.107 Additional operational requirements for hand-operated crossover switches:		
(a) Failure to implement required operating rule	9,500	
(b) and (c) Railroad and employee failures	7,500	11,000
218.109 Hand-operated fixed derails:		
(a) Failure to implement required operating rule	9,500	13,000
(b) and (c) Railroad and employee failures	7,500	11,000

[1]Except as provided for in §218.57, a penalty may be assessed against an individual only for a willful violation. The Administrator reserves the right to assess a penalty of up to $105,000 for any violation where the circumstances warrant. See 49 CFR part 209, appendix A.

[53 FR 52928, Dec. 29, 1988, as amended at 54 FR 5492, Feb. 3, 1989; 58 FR 43293, Aug. 16, 1993; 60 FR 11050, Mar. 1, 1995; 63 FR 11621, Mar. 10, 1998; 72 FR 51196, Sept. 6, 2007; 73 FR 8503, Feb. 13, 2008; 73 FR 79701, Dec. 30, 2008; 77 FR 24420, Apr. 24, 2012]

Appendix B to Part 218—Statement of Agency Enforcement Policy on Blue Signal Protection for Utility Employees

The following examples of the application of the train or yard crew exclusion from required blue signal protection for utility employees are provided to clarify FRA's enforcement policy. In the first four examples, the utility employee is properly attached to and functioning as member of a train or yard crew and is excluded from blue signal protection, provided all the conditions specified in §218.22 are met:

Example 1: A utility employee assists a train crew by adding or reducing railroad cars to or from the train. The utility employee may perform any duties which would normally be conducted by members of the train crew, i.e., setting or releasing handbrakes, coupling air hoses and other connections, prepare rail cars for coupling, and perform air brake tests.

Example 2: A utility employee is assigned to assist a yard crew for the purpose of classifying and assembling railroad cars. The yard crew onboard their locomotive arrives at the location in the yard where the work is to be performed. At that time, the utility employee may attach himself to the yard crew and commence duties as a member of that yard crew.

Example 3: A utility employee is assigned to inspect, test, remove and replace if necessary, a combination rear end marking device/end of train device on a through freight train. The utility employee attaches himself to the train crew after the arrival of the train and its crew at the location where this work is to be conducted. He may then perform duties as a member of that crew.

Example 4: A railroad manager who properly attaches himself as a utility employee to a train or yard crew, in accordance with §218.22, may then function as a member of the train or yard crew under the exclusion provided for train and yard crews.

NOTE: In the last four examples, any railroad employee, including regularly assigned crew members, would need blue signal protection to perform the described function.

Example 5: Prior to the arrival of a through freight train, a utility employee installs an end-of-train device on one end of a block of railroad cars that are scheduled to be picked up by the freight train.

Example 6: A railroad employee attaches himself to a train or yard crew while the crew is in the ready room preparing to take charge of their train. Prior to the train crew leaving the ready room and taking charge of the equipment, the employee couples air hoses and other connections between the locomotives.

Example 7: A railroad employee is attached to a train crew after the train crew has taken charge of the train. It is necessary for the employee to perform a repair on a rail car, such as replacing a brake shoe, in addition to those duties normally performed by train or yard crew members.

Example 8: A train or yard crew, supplemented by three utility employees, has an assigned locomotive and train. The regular crew, including the engineer, has left the train to eat lunch. The utility employees have remained with the train and are coupling air hoses between rail cars in the train.

[58 FR 43293, Aug. 16, 1993]

Appendix C to Part 218—Statement of Agency Enforcement Policy on Tampering

The Rail Safety Improvement Act of 1988 (Pub. L. 100-342, enacted June 22, 1988) ("RSIA") raised the maximum civil penalties available under the railroad safety laws and made individuals liable for willful violations of those laws. Section 21 of the RSIA requires that FRA adopt regulations addressing three related but distinct aspects of problems that can occur when safety devices are tampered with or disabled. It requires that FRA make it unlawful for (i) any individual to willfully tamper with or disable a device; (ii) any individual to knowingly operate or permit to be operated a train with a tampered or disabled device; and (iii) any railroad to operate such a train.

Because the introduction of civil penalties against individuals brings FRA's enforcement of the rail safety laws into a new era and because the changes being introduced by this regulation are so significant, FRA believes that it is advisable to set forth the manner in which it will exercise its enforcement authority under this regulation.

Safety Devices Covered by This Rule

FRA has employed a functional description of what constitutes a safety device under this rule. FRA's wording effectively identifies existing equipment and is sufficiently expansive to cover equipment that may appear in the future, particularly devices associated with advanced train control systems currently undergoing research testing.

FRA has been advised by portions of the regulated community that its functional definition has some potential for confusing people who read the rule without the benefit of the preamble discussions concerning the meaning of this definition. Since this rule is specifically intended to preclude misconduct by individuals, FRA wants this rule to be easily comprehended by all who read it. To achieve that clarity, FRA has decide to specify which types of equipment it considers to be within the scope of this rule and provide some examples of equipment that is not covered. In addition, FRA is ready and willing to respond in writing to any inquiry about any other devices that a party believes are treated ambiguously under this rule. This regulation applies to a variety of devices including equipment known as "event recorders," "alerters," "deadman controls," "automatic cab signals," "cab signal whistles," "automatic train stop equipment," and "automatic train control equipment." FRA does not consider the following equipment to be covered by this rule: Radios; monitors for end-of-train devices; bells or whistles that are not connected to

alerters, deadman pedals, or signal system devices; fans for controlling interior temperature of locomotive cabs; and locomotive performance monitoring devices, unless they record data such as train speed and air brake operations. Although FRA considers such devices beyond the scope of the regulation, this does not imply that FRA condones the disabling of such devices. FRA will not hesitate to include such devices at a later date should instances of tampering with these devices be discovered. FRA does not currently perceive a need to directly proscribe tampering with such devices because there is no history of these devices being subjected to tampering.

Subsequent Operators of Trains With Disabled Devices

Section 218.57 addresses instances in which one individual has tampered with a safety device and a second individual (a "subsequent operator") knowingly operates a train or permits it to be operated, notwithstanding the presence of the disabled or tampered-with unit. The most common occurrence addressed by this provision is the situation in which a train crew encounters a locomotive with a safety device that has been tampered with prior to the crew's assuming responsibility for the locomotive. FRA has structured this provision and its attendant enforcement policy to reflect the fact that instances in which one individual encounters a locomotive that someone else has tampered with are relatively infrequent occurrences.

FRA's regulatory prohibition for subsequent operator conduct reflects the legal standard for individual culpability set forth in the RSIA. Under the relevant statutory standard ("knowingly operates or permits to be operated a train on which such devices have been tampered with or disabled by another person")—now incorporated into §218.57—individuals could be held to a simple negligence standard of conduct, i.e., a standard of reasonable care under the circumstances. FRA's conclusion about the proper interpretation of the word "knowingly" stems from both normal canons of statutory construction and analysis of decisional law concerning the use of similar statutory constructs in the civil penalty context. It is also consistent with other Departmental interpretations of the word as used in similar contexts. (See 49 CFR 107.299, defining "knowingly" under the Hazardous Materials Transportation Act, 49 App. U.S.C. 1801 *et seq.*)

Under that statutory language, the responsible members of the crew could be culpable if either (1) due to their failure to exercise reasonable care, they failed to determine that the safety device was not functioning, or (2) having ascertained that the device was not functioning, still elected to operate the train. Similarly, railroad supervisors who permit or direct that a train with a disabled device be operated after having learned that the safety device is not functioning or after having failed to use reasonable care in the performance of their duties could also be subject to sanction. However, as a matter of enforcement policy, application of a negligence standard in this particular context presently appears unwarranted. We have seen no evidence of an employee's negligent failure to detect another employee's tampering having caused a safety problem. FRA can effectively attack the known dimensions of the tampering problem by employing an enforcement policy that limits its enforcement actions to situations where individuals clearly had actual knowledge of the disabled device and intentionally operated the train notwithstanding that knowledge.

Therefore, FRA will not take enforcement action against an individual under §218.57 absent a showing of such actual knowledge of the facts. Actual, subjective knowledge need not be demonstrated. It will suffice to show objectively that the alleged violator must have known the facts based on reasonable inferences drawn from the circumstances. For example, it is reasonable to infer that a person knows about something plainly in sight on the locomotive he is operating. Also, unlike the case where willfulness must be shown (see FRA's statement of policy

at 49 CFR part 209, appendix A), knowledge of or reckless disregard for the law need not be shown to make out a violation of §218.57. The knowledge relevant here is knowledge of the facts constituting the violation, not knowledge of the law.
Should FRA receive evidence indicating that a stricter enforcement policy is necessary to address the tampering problem, it will revise its enforcement policy to permit enforcement actions based only on a showing of the subsequent operator's negligent failure to detect the tampering, as the relevant provision of the RSIA permits it to do now. Any such change in enforcement policy will become effective only after publication of a revised version of this appendix.
[54 FR 5492, Feb. 3, 1989. Redesignated and amended at 58 FR 43293, Aug. 16, 1993]

Appendix D to Part 218—Requirements and Considerations for Implementing Technology Aided Point Protection

Introduction

This appendix provides further explanation and requirements for exercising the option to provide point protection with the aid of technology as permitted in §218.99(b)(3)(i). The regulation permits the visual determination necessary to provide point protection, i.e., a determination that the track is clear, for a shoving or pushing movement to "be made with the aid of monitored cameras or other technological means, provided that it and the procedures for use provide an equivalent level of protection to that of a direct visual determination by a crewmember or other qualified employee properly positioned to make the observation as prescribed in this section and appendix D to this part." This appendix addresses the general requirements and considerations for all technology aided point protection as well as specific additional requirements for those operations involving remote control operations at public highway-rail grade crossings, private highway-rail grade crossings outside the physical confines of a railroad yard, pedestrian crossings outside the physical confines of a railroad yard, and yard Access Crossings.

I. General Requirements and Considerations

A. Although railroading is now one of the nation's older forms of mechanized transportation, equipment, components and operations all have evolved through new and improved technologies. Installing cameras in yards so that a location could be remotely monitored from somewhere else has become a railroading reality as cameras have become smaller, less expensive, and have increased resolution. It is possible to set up these cameras and monitors so that they provide at least an equivalent level of safety to that of an employee protecting the point. Part 218, subpart F permits such an operation to substitute for an employee's direct visual determination where the technology provides an equivalent level of protection to that of a direct visual determination. *See* §218.99(b)(3)(i). Of course, to provide an equivalent level of protection, an employee needs to be properly qualified (*see* §218.95(a)(2)) and the technology must work as intended. Most malfunctions of the technology should be detectable, and result in abandoning the use of the technology for determining point protection until the malfunction can be corrected.
B. The substitution of such technology for a direct visual determination is dependent on many factors. Each situation will have its own particular factual circumstances that shall require consideration in determining whether an equivalent level of safety can be achieved. For instance, with regard to the basic camera setup, a railroad shall consider whether an operator must see in color (largely a necessity if viewing signals), the width of the angle of view, the size and location of the monitor, whether the technology is for day-time use only, and whether its use should be

limited to fair weather conditions. However, under all circumstances, the monitor shall display sufficient information to enable the viewer to make a determination that the track ahead of the shoving or pushing move is clear pursuant to the definition of "track is clear" in §218.93.
C. Each railroad that chooses to implement such camera/monitor setups shall implement attendant procedures and qualify each employee who will be utilizing the technology. Railroads shall ensure that any monitored camera has sufficient resolution and real time coverage to provide protection equal to a direct visual determination. *See* §218.99(b)(3)(i). Concerning attendant procedures, one such procedure may be for an employee viewing a monitor to communicate updates to the locomotive engineer or controlling crewmember at appropriate intervals. FRA equates the employee monitoring the camera to the employee controlling the movement who must not engage in any task unrelated to the oversight of the movement; thus, each railroad utilizing such cameras shall implement attendant procedures limiting any of the monitoring employee's ancillary duties that might distract from the employee's ability to visually determine that the track is clear and provide continuous communication to the employee controlling the movement.
D. There is also the consideration of whether the person viewing the monitor is the locomotive engineer, remote control operator, other crewmember or other qualified person, such as a yardmaster. If the monitor is not being viewed by the operator who is controlling the movement, then, there shall be a clear understanding and channel of communication between the operator and the employee who is viewing the monitor—as the latter would be protecting the movement. Providing an equivalent level of protection to that of a direct visual determination requires a thorough job briefing in which there is an understanding of who is observing the movement, what is the observer's range of vision, at what locomotive speed can the observation be made and how information will be conveyed to the operator/engineer, if that person is not the one viewing the monitor.
E. There may be occasions when a railroad finds it advantageous to use a non-crewmember, e.g., a yardmaster, to provide point protection, line switches, or check the status of a derail for a remote control crew; however, several potential problems may result when non-crewmembers are used to carry out some crewmember functions. Of foremost concern is the great potential for an error in communication or a misunderstanding between the non-crewmember and the crewmembers regarding the activity or status of equipment. A yardmaster who is occupied with his or her other responsibilities might not give the task the attention it deserves, or could be distracted and give an incorrect answer to a question by a crewmember (e.g., "is the move lined?"). The result could be that the task does not get completed or there is an error in task execution. Further, the crewmembers might not have any alternative way of determining that there is a problem with the point protection provided by the non-crewmember until it is too late. Consequently, to the extent they will be called upon to perform these duties, each railroad shall include yardmasters and other non-crewmembers in any operating rule promulgated in accordance with §218.99(b)(2).

II. Additional Requirements for Remote Control Locomotive Operations at Highway-Rail Grade Crossings, Pedestrian Crossings, and Yard Access Crossings

A. In addition to the general requirements and considerations for all technology aided point protection in lieu of direct visual determinations, additional requirements are necessary to address concerns specific to the use of camera/monitor setups for remote control locomotive operations to protect the point at highway-rail grade crossings, pedestrian crossings, and yard access crossings. Railroad operating rules currently permit a movement to travel over a crossing

without the physical presence of a crewmember if a crossing is equipped with gates, if it can be determined that the gates are in the fully lowered position, and if the crossing is clear of vehicles and pedestrians. Remote control movements at highway-rail grade crossings, pedestrian crossings, and yard access crossings that utilize camera/monitor setups pose a greater direct risk to members of the general public than yard movements utilizing camera/monitor setups to check whether a track is clear. In addition, such setups can rapidly develop problems with motor vehicles and pedestrians unaccustomed to railroad operating rules and procedures. For these reasons, additional safeguards are necessary.

B. In consideration of the dangers posed by the use of camera/monitor setups for remote control locomotive operations at highway-rail grade crossings, pedestrian crossings, and yard access crossings, the following procedures shall be complied with in order to establish an equivalent means of safety in accordance with §218.99(b)(3)(i):

1. Before camera-assisted remote control locomotive operations are permitted at highway-rail grade crossings, pedestrian crossings, and yard access crossings, a Crossing Diagnostic Team shall evaluate the crossing. The diagnostic team shall have representatives from the railroad, FRA, the State department of transportation (or another State agency having jurisdiction over the highway-rail grade crossing, pedestrian crossing, or yard access crossing), and local government authorities. The diagnostic team shall evaluate the suitability of each crossing for remote camera operations. Among the factors it shall consider are the following: the average annual daily traffic counts; the number of highway lanes; highway speed limits; the presence of adjacent signalized highway intersections; the number of railroad tracks; the angle of the roadway intersection; the volume of school bus, transit bus, emergency vehicle, commercial motor vehicle, and hazardous materials traffic over the crossing; the minimum remote control locomotive operator sight distances of roadway approaches to the crossing; and other relevant factors that could affect the safety of the crossing. The diagnostic team shall also consider the appropriate number of cameras and appropriate camera angles needed to provide for the remote operation of remote control locomotives over the crossing. The diagnostic team shall agree to a written diagnostic evaluation summary of the factors considered and shall provide the railroad with agreed upon parameters by which the camera-assisted remote control operation may continue in operation if the factors required for suitability change; thus, any change in the factors considered by the diagnostic team outside of the acceptable parameters shall require the railroad to receive a revised evaluation approval from a diagnostic team before continuing any such operation. In addition, any of the Federal, State, or local governmental authorities may trigger review of a prior evaluation approval at any time there is a question of the suitability of the operation. It is possible that, of the requirements listed below, requirements numbered 2, 4, 5, and 6 would be unnecessary at highway-rail grade crossings or yard access crossings equipped with approved supplemental safety devices (*see* 49 CFR part 222, app. A) that prevent motorists from driving around lowered gates; under such circumstances, the diagnostic team shall make such determinations. If a Crossing Diagnostic Team, as described in this paragraph, evaluated a crossing for the factors described herein, prior to April 14, 2008, another diagnostic team evaluation is not required to comply with this rule; however, the requirements listed below shall still apply to any such remotely controlled movements over that crossing.

2. Camera-assisted remote control locomotive operations shall only be permitted at crossings equipped with flashing lights, gates, and constant warning time train detection systems where appropriate, based on train speeds.

3. A crewmember or other qualified employee shall not view the monitor in place of the remote control operator, as is permitted for other shoving or pushing

movements. *See* §218.99(b)(3). For purposes of remote control locomotive operations with camera/monitor setups to protect the point at highway-rail grade crossings, pedestrian crossings, and yard access crossings, the remote control operator controlling the movement shall view the monitor during such operations.

4. The cameras shall be arranged to give the remote control locomotive operator controlling the movement a view of the rail approaches to the crossing from each direction so that the operator can accurately judge the end of the movement's proximity to the crossing.

5. The cameras shall be arranged to give the remote control locomotive operator a clear view to determine the speed and driver behavior (e.g., driving erratically) of any approaching motor vehicles.

6. Either the camera resolution shall be sufficient to determine whether the flashing lights and gates are working as intended or the crossing shall be equipped with a remote health monitoring system that is capable of notifying the remote control locomotive operator immediately if the flashing lights and gates are not working as intended.

7. The railroad shall notify the Associate Administrator for Safety in writing when this type of protection has been installed and activated at a crossing.

III. Conclusion

The technology used to aid point protection will undoubtedly develop and improve over time. FRA encourages the use and development of this technology as is evidenced by the option in this rule to utilize such technology. Meanwhile, as a regulating body, FRA cannot determine whether a new technology to aid point protection provides an equivalent level of protection to that of a direct visual determination unless we are made aware of the new technology. Consequently, aside from the camera/monitor setups described in this appendix, each railroad that intends to implement a technology used to aid point protection shall notify the Associate Administrator for Safety in writing of the technology to be used prior to implementation.

[73 FR 8504, Feb. 13, 2008]

Title 49 CFR Part 220 Addendum
Railroad Communications

Subpart A—General

§220.1 Scope.

This part prescribes minimum requirements governing the use of wireless communications in connection with railroad operations. In addition, this part sets forth prohibitions, restrictions, and requirements that apply to the use of personal and railroad-supplied cellular telephones and other electronic devices. So long as these minimum requirements are met, railroads may adopt additional or more stringent requirements.

§220.2 [Reserved]

§220.3 Application.

(a) Except as provided in paragraph (b) of this section, this part applies to railroads that operate trains or other rolling equipment on standard gage track which is part of the general railroad system of transportation.

(b) This part does not apply to:

(1) A railroad that operates only on track inside an installation which is not part of the general railroad system of transportation; or

(2) Rapid transit operations in an urban area that are not connected with the general railroad system of transportation.

§220.5 Definitions.

As used in this part, the term:

Adjacent tracks means two or more tracks with track centers spaced less than 25 feet apart.

Associate Administrator for Railroad Safety/Chief Safety Officer means either the Associate Administrator for Railroad Safety/Chief Safety Officer, Federal Railroad Administration, 1200 New Jersey Ave.,SE., Washington, DC 20590 or that person's delegate.

Authorized business purpose means a purpose directly related to the tasks that a crewmember is expected to perform during the current tour of duty as specified by the railroad in writing.

Control center means the locations on a railroad from which the railroad issues instructions governing railroad operations.

Division headquarters means the location designated by the railroad where a high-level operating manager (e.g., a superintendent, division manager, or equivalent), who has jurisdiction over a portion of the railroad, has an office.

Earpiece means a small speaker that is inserted in, or held next to, the ear for use in transmitting sounds related to an electronic device.

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 railroad operating 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.

Employee means an individual who is engaged or compensated by a railroad or by a contractor to a railroad, who is authorized by a railroad to use its wireless communications in connection with railroad operations.

Fouling a track means the placement of an individual in such proximity to a track that the individual could be struck by a moving train or other on-track equipment, or in any case is within four feet of the nearest rail.
FRA means the Federal Railroad Administration.
Immediate access to a radio means a radio on the employee's person, or sufficiently close to the employee to allow the employee to make and receive radio transmissions.
In deadhead status means awaiting or in deadhead transport from one point to another as a result of a railroad-issued verbal or written directive.
Joint operations means rail operations conducted by more than one railroad on the track of a railroad subject to the requirements of §220.9(a), except as necessary for the purpose of interchange.
Locomotive means a piece of on-track equipment other than hi-rail, specialized maintenance, or other similar equipment—

(1) With one or more propelling motors designed for moving other equipment;

(2) With one or more propelling motors designed to carry freight or passenger traffic, or both; or

(3) Without propelling motors but with one or more control stands.

Lone worker means 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.
Mandatory directive means any movement authority or speed restriction that affects a railroad operation.
Medical device means an instrument, apparatus, implement, machine, contrivance, implant, or other similar or related article (including a component part), or accessory that is intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease or other conditions.
Personal electronic device means an electronic device that was not provided to the railroad operating employee by the employing railroad for a business purpose.
Railroad operating employee means a person performing duties subject to—

(1) An individual engaged in or connected with the movement of a train, including a hostler, as defined in 49 U.S.C. 21101(5), who is subject to 49 U.S.C. 21103 effective July 16, 2009;

(2) A train employee providing commuter rail passenger transportation or intercity rail passenger transportation as defined in 49 U.S.C. 24102 who, pursuant to 49 U.S.C. 21102(c), is subject to 49 U.S.C. 21103 as it was in effect on October 15, 2008; or

(3) An individual subject to any Federal Railroad Administration regulations prescribed pursuant to 49 U.S.C. 21109 governing the hours of service of train employees.

Railroad operation means any activity which affects the movement of a train, locomotive, on-track equipment, or track motor car, singly or in combination with other equipment, on the track of a railroad.
Railroad-supplied electronic device means an electronic device provided to a railroad operating employee by the employing railroad for an authorized business purpose. A railroad-supplied device will be considered a personal electronic device when it is being used by the employee for a purpose other than an authorized business purpose.
Roadway worker means any employee of a railroad, or of a contractor to a railroad, whose duties include inspection, construction, maintenance or repair of railroad track, bridges, roadway, signal and communication systems, electric traction systems, roadway facilities or roadway maintenance machinery on or near track or with the potential of fouling a track, and flagmen and watchmen/lookouts.
Switching operation means the classification of rail cars according to commodity or destination; assembling of cars for train movements; changing the position of cars for purposes of loading, unloading, or weighing; placing of locomotives and cars for repair or storage; or moving of rail equipment in connection with work service that does not constitute a train movement.
System headquarters means the location designated by the railroad as the general office for the railroad system.
Train, for purposes of subparts A and B of this part, means one or more locomotives coupled with or without cars, requiring an air brake test in accordance with 49 CFR part 232 or part 238, except during

switching operations or where the operation is that of classifying and assembling rail cars within a railroad yard for the purpose of making or breaking up trains. The term, for purposes of subpart C of this part, means—

(1) A single locomotive,

(2) Multiple locomotives coupled together, or

(3) One or more locomotives coupled with one or more cars.

Working radio means a radio that can communicate with the control center of the railroad (through repeater stations, if necessary to reach the center) from any location within the rail system, except:

(1) Tunnels or other localized places of extreme topography, and

(2) Temporary lapses of coverage due to atmospheric or topographic conditions. In the case of joint operations on another railroad, the radio must be able to reach the control center of the host railroad.

Working wireless communications means the capability to communicate with either a control center or the emergency responder of a railroad through such means as radio, portable radio, cellular telephone, or other means of two-way communication, from any location within the rail system, except:

(1) Tunnels or other localized places of extreme topography, and

(2) Temporary lapses of coverage due to atmospheric or topographic conditions. In the case of joint operations on another railroad, the radio must be able to reach the control center of the host railroad.

§220.7 Penalty.

Any person (including but not limited to a railroad; any manager, supervisor, official, or other employee or agent of a railroad; any owner, manufacturer, lessor, or lessee of railroad equipment, track, or facilities; any independent contractor providing goods or services to a railroad; and any employee of such owner, manufacturer, lessor, lessee, or independent contractor) who violates any requirement of this part or causes the violation of any such requirement is subject to a civil penalty of at least $650 and not more than $25,000 per violation, except that: Penalties may be assessed against individuals only for willful violations; where a grossly negligent violation or a pattern of repeated violations has created an imminent hazard of death or injury, or has caused death or injury, a penalty not to exceed $105,000 per violation may be assessed; and the standard of liability for a railroad will vary depending upon the requirement involved. Each day a violation continues shall constitute a separate offense. (See appendix C to this part for a statement of agency civil penalty policy.)

§220.8 Waivers.

(a) Any person subject to a requirement of this part may petition the Administrator for a waiver of compliance with such requirement. The filing of such a petition does not affect that person's responsibility for compliance with that requirement while the petition is being considered.

(b) Each petition for waiver must be filed in the manner and contain the information required by part 211 of this chapter.

(c) If the Administrator finds that a waiver of compliance is in the public interest and is consistent with railroad safety, the Administrator may grant the waiver subject to any conditions the Administrator deems necessary.

§220.9 Requirements for trains.

(a) Except as provided for in paragraphs (b)(1) through (4) of this section, on and after July 1, 1999, each occupied controlling locomotive in a train shall have a working radio, and each train shall also have communications redundancy. For purposes of this section, “communications redundancy” means a working radio on another locomotive in the consist or other means of working wireless communications.

(b) On and after July 1, 2000, the following requirements apply to a railroad that has fewer than 400,000 annual employee work hours:

(1) Any train that transports passengers shall be equipped with a working radio in the occupied controlling locomotive and with redundant working wireless communications capability in the same manner as provided in paragraph (a) of this section.

(2) Any train that operates at greater than 25 miles per hour; or engages in joint operations on track where the maximum authorized speed for freight trains exceeds 25 miles per hour; or engages in joint operations on a track that is adjacent to and within 30 feet measured between track center lines of another track on which the maximum authorized speed for passenger trains exceeds 40 miles per hour, shall be equipped with a working radio in the occupied controlling locomotive.

(3) Any train that engages in joint operations, where the maximum authorized speed of the track is 25 miles per hour or less, shall be equipped with working wireless communications in the occupied controlling locomotive.

(4) Any train not described in paragraph (b) of this section that transports hazardous material required to be placarded under the provisions of part 172 of this title shall be equipped with working wireless communications in the occupied controlling locomotive.

§220.11 Requirements for roadway workers.

(a) On and after July 1, 1999, the following requirements apply to a railroad that has 400,000 or more annual employee work hours:

(1) Maintenance-of-way equipment operating without locomotive assistance between work locations shall have a working radio on at least one such unit in each multiple piece of maintenance-of-way equipment traveling together under the same movement authority. The operators of each additional piece of maintenance-of-way equipment shall have communications capability with each other.

(2) Each maintenance-of-way work group shall have intra-group communications capability upon arriving at a work site.

(b) On and after July 1, 1999, each employee designated by the employer to provide on-track safety for a roadway work group or groups, and each lone worker, shall be provided, and where practicable, shall maintain immediate access to a working radio. When immediate access to a working radio is not available, the employee responsible for on-track safety or lone worker shall be equipped with a radio capable of monitoring transmissions from train movements in the vicinity. A railroad with fewer than 400,000 annual employee work hours may provide immediate access to working wireless communications as an alternative to a working radio.

(c) This section does not apply to:

(1) Railroads which have fewer than 400,000 annual employee work hours, and which do not operate trains in excess of 25 miles per hour; or

(2) Railroad operations where the work location of the roadway work group or lone worker:

(i) Is physically inaccessible to trains; or

(ii) Has no through traffic or traffic on adjacent tracks during the period when roadway workers will be present.

§220.13 Reporting emergencies.

(a) Employees shall immediately report by the quickest means available derailments, collisions, storms, wash-outs, fires, obstructions to tracks, and other hazardous conditions which could result in death or injury, damage to property or serious disruption of railroad operations.

(b) In reporting emergencies, employees shall follow:

(1) The procedures of §220.47 when using a radio; or

(2) The procedures specified for reporting emergencies in the railroad's timetables or timetable special instructions, when using another means of wireless communications.

(c) Employees shall describe as completely as possible the nature, degree and location of the hazard.

(d) An alternative means of communications capability shall be provided whenever the control center is unattended or unable to receive radio transmissions during a period in which railroad operations are conducted.

Subpart B—Radio and Wireless Communication Procedures

§220.21 Railroad operating rules; radio communications; recordkeeping.

(a) The operating rules of each railroad with respect to radio communications shall conform to the requirements of this part.

(b) Thirty days before commencing to use radio communications in connection with railroad operations each railroad shall retain one copy of its current operating rules with respect to radio communications at the locations prescribed in paragraphs (b) (1) and (b)(2) of this section. Each amendment to these operating rules shall be filed at such locations within 30 days after it is issued. These records shall be made available to representatives of the Federal Railroad Administration for inspection and photocopying during normal business hours.

(1) Each Class I railroad, each Class II railroad, each railroad providing intercity rail passenger service, and each railroad providing commuter service in a metropolitan or suburban area shall retain such rules at each of its division headquarters and at its system headquarters; and (2) Each Class III railroad and any other railroad subject to this part but not subject to paragraph (b)(1) of this section shall retain such rules at the system headquarters of the railroad.

(c) For purposes of this section, the terms Class I railroad, Class II railroad, and Class III railroad have the meaning given these terms in 49 CFR Part 1201.

§220.23 Publication of radio information.

Each railroad shall designate where radio base stations are installed, where wayside stations may be contacted, and the appropriate radio channels used by these stations in connection with railroad operations by publishing them in a timetable or special instruction. The publication shall indicate the periods during which base and wayside radio stations are operational.

§220.25 Instruction and operational testing of employees.

Each employee who a railroad authorizes to use a radio in connection with a railroad operation, shall be:

(a) Provided with a copy of the railroad's operating rules governing the use of radio communication in a railroad operation;

(b) Instructed in the proper use of radio communication as part of the program of instruction prescribed in §217.11 of this chapter; and

(c) Periodically tested under the operational testing requirements in §217.9 of this chapter.

§220.27 Identification.

(a) Except as provided in paragraph (c) of this section, the identification of each wayside, base or yard station shall include at least the following minimum elements, stated in the order listed:

(1) Name of railroad. An abbreviated name or initial letters of the railroad may be used where the name or initials are in general usage and are understood in the railroad industry; and

(2) Name and location of office or other unique designation.

(b) Except as provided in paragraph (c) of this section, the identification of each mobile station shall consist of the following elements, stated in the order listed:

(1) Name of railroad. An abbreviated name or initial letters of the railroad may be used where the name or initial letters are in general usage and are understood in the railroad industry;

(2) Train name (number), if one has been assigned, or other appropriate unit designation; and

(3) When necessary, the word “locomotive”, “motorcar”, or other unique identifier which indicates to the listener the precise mobile transmitting station.

(c) If positive identification is achieved in connection with switching, classification, and similar operations wholly within a yard, fixed and mobile units may use short identification after the initial transmission and acknowledgment consistent with applicable Federal Communications Commission regulations governing “Station Identification”.

§220.29 Statement of letters and numbers in radio communications.

(a) If necessary for clarity, a phonetic alphabet shall be used to pronounce any letter used as an initial, except initial letters of railroads. See appendix A of this part for the recommended phonetic alphabet.

(b) A word which needs to be spelled for clarity, such as a station name, shall first be pronounced, and then spelled. If necessary, the word shall be spelled again, using a phonetic alphabet.

(c) Numbers shall be spoken by digit, except that exact multiples of hundreds and thousands may be stated as such. A decimal point shall be indicated by the words “decimal,” “dot,” or “point.” (See appendix B to this part, for a recommended guide to the pronunciation of numbers.)

§220.31 Initiating a radio transmission.

BEFORE TRANSMITTING BY RADIO, AN EMPLOYEE SHALL:

(a) Listen to ensure that the channel on which the employee intends to transmit is not already in use;

(b) Identify the employee's station in accordance with the requirements of §220.27; and

(c) Verify that the employee has made radio contact with the person or station with whom the employee intends to communicate by listening for an acknowledgment. If the station acknowledging the employee's transmission fails to identify itself properly, the employee shall require a proper identification before proceeding with the transmission.

§220.33 Receiving a radio transmission.

(a) Upon receiving a radio call, an employee shall promptly acknowledge the call, identifying the employee's station in accordance with the requirements of §220.27 and stand by to receive. An employee need not attend the radio during the time that this would interfere with other immediate duties relating to the safety of railroad operations.

(b) An employee who receives a transmission shall repeat it to the transmitting party unless the communication:

(1) Relates to yard switching operations;

(2) Is a recorded message from an automatic alarm device; or

(3) Is general in nature and does not contain any information, instruction or advice which could affect the safety of a railroad operation.

§220.35 Ending a radio transmission.

(a) Except for transmissions relating to yard switching operations, at the close of each transmission to which a response is expected, the transmitting employee shall say “over” to indicate to the receiving employee that the transmission is ended.

(b) Except for transmissions relating to yard switching operations, at the close of each transmission to which no response is expected, the transmitting employee shall state the employee's identification followed by the word “out” to indicate to the receiving employee that the exchange of transmissions is complete.

§220.37 Testing radio and wireless communication equipment.

(a) Each radio, and all primary and redundant wireless communication equipment used under §§220.9 and 220.11, shall be tested as soon as practicable to ensure that the equipment functions as intended prior to the commencement of the work assignment.

(b) 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 conducting the test of the clarity of the transmission.

§220.38 Communication equipment failure.

(a) Any radio or wireless communication device found not to be functioning as intended when tested pursuant to §220.37 shall be removed from service and the dispatcher or other employee designated by the railroad shall be so notified as soon as practicable.

(b) If a radio or wireless communication device fails on the controlling locomotive en route, the train may continue until the earlier of—

(1) The next calendar day inspection, or

(2) The nearest forward point where the radio or wireless communication device can be repaired or replaced.

§220.39 Continuous radio monitoring.

Each radio used in a railroad operation shall be turned on to the appropriate channel as designated in §220.23 and adjusted to receive communications.

§220.41 [Reserved]

§220.43 Radio communications consistent with federal regulations and railroad operating rules.

Radio communication shall not be used in connection with a railroad operation in a manner which conflicts with the requirements of this part, Federal Communication Commission regulations, or the railroad's operating rules. The use of citizen band radios for railroad operating purposes is prohibited.

§220.45 Radio communication shall be complete.

Any radio communication which is not fully understood or completed in accordance with the requirements of this part and the operating rules of the railroad, shall not be acted upon and shall be treated as though not sent.

§220.47 Emergency radio transmissions.

An initial emergency radio transmission shall be preceded by the word “emergency,” repeated three times. An emergency transmission shall have priority over all other transmissions and the frequency or channel shall be kept clear of non-emergency traffic for the duration of the emergency communication.

§220.49 Radio communication used in shoving, backing or pushing movements.

When radio communication is used in connection with the shoving, backing or pushing of a train, locomotive, car, or on-track equipment, the employee directing the movement shall specify the distance of the movement, and the movement shall stop in one-half the remaining distance unless additional instructions are received. If the instructions are not understood, the movement shall be stopped immediately and may not be resumed until the misunderstanding has been resolved, radio contact has been restored, or communication has been achieved by hand signals or other procedures in accordance with the operating rules of the railroad.

§220.51 Radio communications and signal indications.

(a) No information may be given by radio to a train or engine crew about the position or aspect displayed by a fixed signal. However, a radio may be used by a train crew member to communicate information about the position or aspect displayed by a fixed signal to other members of the same crew.

(b) Except as provided in the railroad's operating rules, radio communication shall not be used to convey instructions which would have the effect of overriding the indication of a fixed signal.

§220.61 Radio transmission of mandatory directives.

(a) Each mandatory directive may be transmitted by radio only when authorized by the railroad's operating rules. The directive shall be transmitted in accordance with the railroad's operating rules and the requirements of this part.

(b) The procedure for transmission of a mandatory directive is as follows:

(1) The train dispatcher or operator shall call the addressees of the mandatory directive and state the intention to transmit the mandatory directive.

(2) Before the mandatory directive is transmitted, the employee to receive and copy shall state the employee's name, identification, location, and readiness to receive and copy. An employee operating the controls of moving equipment shall not receive and copy mandatory directives. A mandatory directive shall not be transmitted to employees on moving equipment, if such directive cannot be received and copied without impairing safe operation of the equipment.

(3) A mandatory directive shall be copied in writing by the receiving employee in the format prescribed in the railroad's operating rules.

(4) After the mandatory directive has been received and copied, it shall be immediately repeated in its entirety. After verifying the accuracy of the repeated mandatory directive, the train dispatcher or operator shall then state the time and name of the employee designated by the railroad who is authorized to issue mandatory directives. An employee copying a mandatory directive shall then acknowledge by repeating the time and name of the employee so designated by the railroad.

(5)(i) For train crews, before a mandatory directive is acted upon, the conductor and engineer shall each have a written copy of the mandatory directive and make certain that the mandatory directive is read and understood by all members of the crew who are responsible for the operation of the train. Mandatory directives which have been fulfilled or canceled shall be marked with an “X” or in accordance with the railroad's operating rules, and retained for the duration of the train crew's work assignment.

(ii) For on-track equipment, before a mandatory directive is acted upon, the employee responsible for on-track safety shall have a written copy of the mandatory directive, and make certain that the

mandatory directive is acknowledged by all employees who are responsible for executing that mandatory directive. The employee responsible for on-track safety shall retain a copy of the mandatory directive while it is in effect.

(6) A mandatory directive which has not been completed or which does not comply with the requirements of the railroad's operating rules and this part, may not be acted upon and shall be treated as though not sent. Information contained in a mandatory directive may not be acted upon by persons other than those to whom the mandatory directive is addressed.

Subpart C—Electronic Devices

§220.301 Purpose and application.

(a) The purpose of this subpart is to reduce safety risks resulting from railroad operating employees being distracted by the inappropriate use of electronic devices, such as mobile telephones (cell phones or cellular phones) and laptop computers.

(b) The applicability of this subpart is governed by §220.3; this subpart, however, does not affect the use of working wireless communications pursuant to subparts A and B of this part.

(c) The restrictions of this subpart C do not apply—

(1) To the working radio; or

(2) When a working radio failure occurs and an electronic device is used in accordance with railroad rules.

§220.302 Operating rules implementing the requirements of this subpart.

Each railroad shall adopt operating rules that implement the requirements of this subpart.

§220.303 General use of electronic devices.

A railroad operating employee shall not use an electronic device if that use would interfere with the employee's or another railroad operating employee's performance of safety-related duties. No individual in the cab of a controlling locomotive shall use an electronic device if that use would interfere with a railroad operating employee's performance of safety-related duties.

§220.305 Use of personal electronic devices.

A railroad operating employee must have each personal electronic device turned off with any earpiece removed from the ear—

(a) When on a moving train;

(b) When any member of the crew is—

(1) On the ground, or

(2) Riding rolling equipment during a switching operation; or

(c) When any railroad employee is assisting in preparation of the train for movement.

§220.307 Use of railroad-supplied electronic devices.

(a) *General restriction.* A railroad operating employee may use a railroad-supplied electronic device only for an authorized business purpose as specified by the railroad in writing. An authorized business purpose involving the taking of a photograph or video must be approved by FRA. A railroad subject to this subpart must submit to FRA's Associate Administrator for Railroad Safety/Chief Safety Officer a document specifying in writing the authorized business purpose(s) involving the taking of a photograph or video for which a railroad-supplied electronic device may be used by the carrier's railroad operating employees.

(b) *Use by locomotive engineers operating controls.* A locomotive engineer operating the controls of a train shall not use a railroad-supplied electronic device—

(1) When on a moving train;

(2) When any member of the crew is—

(i) On the ground, or

(ii) Riding rolling equipment during a switching operation; or

(3) When any railroad employee is assisting in preparation of the train for movement.

(c) *Use in freight and passenger locomotive cabs generally.* In addition to the restrictions on locomotive engineers described in paragraph (b) of this section, a railroad operating employee who is not in deadhead status shall not use a railroad-supplied electronic device in the cab of a controlling locomotive unless—

(1) A safety briefing that includes all crewmembers is held; and

(2) All crewmembers agree that it is safe to use the device.

(d) *Use outside freight locomotive cabs.* A freight train crewmember who is not in deadhead status may use a railroad-supplied electronic device outside the cab of a controlling freight locomotive only if all of the following conditions are met:

(1) The crewmember is not fouling a track; and

(2) All crewmembers agree it is safe to use the device.

§220.309 Permitted uses; exceptions to other restrictions.

Notwithstanding any other limitations in this subpart, a railroad operating employee may use the following, if that use does not interfere with any employee's performance of safety-related duties—

(a) The digital storage and display function of an electronic device to refer to a railroad rule, special instruction, timetable, or other directive, if such use is authorized under a railroad operating rule or instruction.

(b) An electronic device as necessary to respond to an emergency situation involving the operation of the railroad or encountered while performing a duty for the railroad.

(c) An electronic device to take a photograph of a safety hazard or a violation of a rail safety law, regulation, order, or standard, provided that—

(1) A camera that is part of a cell phone or other similar multi-functional electronic device is not included in this exception unless it is a railroad-supplied device and is used for an authorized business purpose;

(2) The camera, unless otherwise permitted, is turned off immediately after the documentation has been made; and

(3) If the camera is used in the cab of a moving train, the use is only by a crewmember other than the locomotive engineer.

(d) A stand-alone calculator if used for an authorized business purpose.

(e) A medical device that is consistent with the railroad's standards for medical fitness for duty.

(f) A wireless communication device to conduct train or switching operations if the railroad operating employee is part of a crew assigned to a train that is exempt under §220.9(b) from the requirement of a working radio when the employing railroad has fewer than 400,000 annual employee work hours.

§220.311 Railroad operating employees in deadhead status.

(a) Notwithstanding any other restrictions in this subpart, a railroad operating employee who is in deadhead status and not inside the cab of a controlling locomotive may use an electronic device only if the employee is not using the device in such a way that interferes with any railroad operating employee's personal safety or performance of safety-related duties.

(b) A railroad operating employee who is in deadhead status and located inside the cab of a controlling locomotive must have each electronic device turned off with any earpiece removed from the ear—

(1) When on a moving train;

(2) When any member of the crew is—

(i) On the ground, or

(ii) Riding rolling equipment during a switching operation; or

(3) When any railroad employee is assisting in preparation of the train for movement.

§220.313 Instruction.

(a) *Program.* Beginning December 27, 2010, each railroad shall maintain a written program of instruction and examination of each railroad operating employee and each supervisor of the railroad operating employee on the meaning and application of the railroad's operating rules implementing the requirements of this subpart if these requirements are pertinent to the employee's duties. If all requirements of this subpart are satisfied, a railroad may consolidate any portion of the instruction or examination required by this subpart with the program of instruction required under §217.11 of this chapter.

(1) The written program of instruction and examination shall address the requirements of this subpart, as well as consequences of noncompliance.

(2) The written program of instruction and examination shall include, but is not limited to, an explanation of the following:

(i) When a railroad operating employee must have personal electronic devices turned off with the earpiece removed from the ear as required by this subpart.

(ii) If a railroad supplies an electronic device to its railroad operating employees, when a railroad operating employee may use such a device. The employee must be instructed on what constitutes an authorized business purpose.

(iii) The potential penalties and other consequences of committing a violation of this subpart, both those imposed by the Federal Railroad Administration (FRA) and those imposed by the railroad, as well as any distinction between the requirements of this subpart and any more stringent requirements imposed by the railroad and the related distinction between the two sets of potential consequences.

(b) *Implementation schedule.* Each employee performing duties subject to the requirements in this subpart shall be initially instructed prior to March 28, 2011.

(1) Beginning March 28, 2011, no employee shall perform work requiring compliance with the operating rules implementing the requirements of this subpart unless the employee has been instructed on requirements of this subpart within the previous three years.

(2) The records of successful completion of instruction and examination required by this section shall document the instruction of each employee under this subpart.

(c) *Records.* Written records documenting successful completion of instruction and examination of each employee and of his or her supervisors shall be made and shall be retained at the railroad's system headquarters and at the division headquarters for each division where the employee is assigned for three calendar years after the end of the calendar year to which they relate and made available to representatives of FRA for inspection and copying during normal business hours. Each railroad to which this part applies is authorized to retain a program, or any records maintained to prove compliance with such a program, by electronic recordkeeping in accordance with §§217.9(g) and 217.11(c) of this chapter.

(d) *Approval process.* Upon review of the program of instruction and examination required by this section, the Associate Administrator for Railroad Safety/Chief Safety Officer may, for cause stated, disapprove the program. Notification of such disapproval shall be made in writing and specify the basis for the disapproval.

(1) If the Associate Administrator for Railroad Safety/Chief Safety Officer disapproves the program, the railroad has 35 days from the date of the written notification of such disapproval to—

(i) Amend its program and submit it to the Associate Administrator for Railroad Safety/Chief Safety Officer for approval; or

(ii) Provide a written response in support of the program to the Associate Administrator for Railroad Safety/Chief Safety Officer, who informs the railroad of FRA's final decision in writing.

(2) A failure to submit the program with the necessary revisions to the Associate Administrator for Railroad Safety/Chief Safety Officer in accordance with this paragraph is considered a failure to implement a program under this subpart.

§220.315 Operational tests and inspections; further restrictions on use of electronic devices.

(a) The railroad's program of operational tests and inspections under part 217 of this chapter shall be revised as necessary to include this subpart and shall specifically include a minimum number of operational tests and inspections, subject to adjustment as appropriate.

(b) When conducting a test or inspection under part 217 of this chapter, a railroad officer, manager, or supervisor is prohibited from calling the personal electronic device or the railroad-supplied electronic device used by a railroad operating employee while the railroad officer, manager, or supervisor knows or should have known that—

(1) The train to which the employee is assigned is moving;

(2) The employee is—

(i) On the ground;

(ii) Riding rolling equipment during switching operations; or

(iii) Assisting in preparation of the train to which the employee is assigned for movement.

Appendix A to Part 220—Recommended Phonetic Alphabet

A—ALFA
B—BRAVO
C—CHARLIE
D—DELTA
E—ECHO
F—FOXTROT
G—GOLF
H—HOTEL
I—INDIA
J—JULIET
K—KILO
L—LIMA
M—MIKE
N—NOVEMBER
O—OSCAR
P—PAPA
Q—QUEBEC
R—ROMEO
S—SIERRA
T—TANGO
U—UNIFORM
V—VICTOR
W—WHISKEY
X—XRAY
Y—YANKEE
Z—ZULU

The letter “ZULU” should be written as “Z” to distinguish it from the numeral “2”.

Appendix B to Part 220—Recommended Pronunciation of Numerals

To distinguish numbers from similar sounding words, the word “figures” should be used preceding such numbers. Numbers should be pronounced as follows:

Number	Spoken
0	ZERO.
1	WUN.
2	TOO.
3	THUH-REE-.
4	FO-WER.
5	FI-YIV.
6	SIX.
7	SEVEN.
8	ATE.
9	NINER.

(The figure ZERO should be written as “0” to distinguish it from the letter “O”. The figure ONE should be underlined to distinguish it from the letter “I”. When railroad rules require that numbers be spelled, these principles do not apply.)

The following examples illustrate the recommended pronunciation of numerals:

Number	Spoken
44	FO-WER FO-WER.
500	FI-YIV HUNDRED.
1000	WUN THOUSAND.
1600	WUN SIX HUNDRED.
14899	WUN FO-WER ATE NINER NINER.
20.3	TOO ZERO DECIMAL THUH-REE.

Appendix C to Part 220—Schedule of Civil Penalties[1]

Section[2]	Violation	Willful violation
220.9 Requirements for trains	$5,000	$7,500
220.11 Requirements for roadway workers	5,000	7,500
220.21 Railroad Operating rules; radio communications		
(a)	5,000	7,500
(b)	2,500	5,000
220.23 Publication of radio information	2,500	5,000
220.25 Instruction of employees	5,000	7,500
220.27 Identification	1,000	2,000
220.29 Statement of letters and numbers	1,000	2,000
220.31 Initiating a transmission	1,000	2,000
220.33 Receiving a transmission	1,000	2,000
220.35 Ending a transmission	1,000	2,000
220.37 Voice test	5,000	7,500
220.39 Continuous monitoring	2,500	5,000
220.41 [Reserved]		
220.43 Communication consistent with the rules	2,500	5,000
220.45 Complete communications	2,500	5,000
220.47 Emergencies	2,500	5,000
220.49 Switching, backing or pushing	5,000	7,500
220.51 Signal indications	5,000	7,500
220.61 Radio transmission of mandatory directives	5,000	7,500
Subpart C—Electronic Devices		
220.302 Operating rules	9,500	17,000
220.303 General; interfering with safety-related duties	9,500	17,000
220.305 Personal electronic device turned on while prohibited	5,500	10,000
(a)-(c) Personal device in use while prohibited	9,500	17,000
220.307 Railroad-supplied device turned on while prohibited	5,500	10,000
(a) Use not authorized by railroad in writing	9,500	17,000
(b)-(d) Railroad-supplied devices in use while prohibited	9,500	17,000
220.311 Railroad operating employees in deadhead status:		

(a)	9,500	17,000
(b) Devices turned on while prohibited; or	5,500	10,000
device in use while prohibited	9,500	17,000
220.313 Program of instruction:		
(a)-(d)	9,500	17,000
220.315 Operational tests and inspections:		
(a)-(b)	9,500	17,000

[1]A penalty may be assessed against and only for a willful violation. The Administrator reserves the right to assess a penalty of up to $105,000 for any violation where circumstances warrant. See 49 CFR part 209, appendix A.

[2]The penalty schedule uses section numbers from 49 CFR part 220. If more than one item is listed as a type of violation of a given section, each item is also designated by a "penalty code," which is used to facilitate assessment of civil penalties, and which may or may not correspond to any subsection designation(s). For convenience, penalty citations will cite the CFR section and the penalty code, if any. FRA reserves the right, should litigation become necessary, to substitute in its complaint the CFR citation in place of the combined CFR and penalty code citation, should they differ.

Watchman Bag

In addition to this Manual other items that are required in the Watchman Bag (LIRR Stock Number 14291-36):

Item	**LIRR Stock Number**
Red Flag	35953-36
Watchman Disc	21054-36
Air Horn	28351-36
Air Can	28353-36
Fusees (Minimum of 5)	38217-36
Fusees Holder	17521-46
Whistle	18813-36
Flashlight	35488-25E
D Batteries	30126-02B
CPR Mask	17638-47
Roadway Worker Protection Program On-Track Safety Manual	

What the RWIC is required to have at all times when performing the duty of RWIC:

Roadway Worker Protection Program On-Track Safety Manual
Physical Characteristics Maps*
Job Briefing Card(s)

* Please note that employees qualified on the physical characteristics of the territory on which they are serving as EIC or RWIC, as evidenced by examination through the LIRR Transportation Department Office of the Rules Examiner, are not required to carry Physical Characteristics Maps.

NOTES