Federal Railroad Administration

Track and Rail and Infrastructure Integrity Compliance Manual

Volume III Railroad Workplace Safety
Chapter 1 General

March 2018

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March 2018 Release Note (Volume III, Chapter 1):

- This release contains up-to-date guidance for implementing the Roadway Worker Protection (RWP) rule contained in 49 CFR revised as of October 1, 2017.
- All technical bulletins regarding RWP dated before March 1, 2018 are deemed to be superseded by this guidance.

Text in italic font of this manual is regulatory language, whereas indented paragraphs provide field guidance for FRA inspectors. Indented paragraphs are not to be construed as regulatory language in any manner.

CHAPTER 1
General

Introduction

This chapter provides the necessary information for FRA personnel to properly interpret and enforce the general provisions of the Railroad Workplace Safety Rule. It is not to be construed as a modification, alteration, or revision of the Rule as published. It includes all definitions used in the specific subparts of the Rule.

Any legal proceeding instituted against a railroad must be based on the official regulations found in the Code of Federal Regulations, Title 49, Part 214, published annually by the Government Printing Office. However, the inspector should refer to this manual as often as necessary to understand the intent of any particular standard, thereby ensuring to the extent practicable the nationally uniform application of these rules as intended by Congress in the Federal Railroad Safety Act of 1970.

Summary

The Railroad Workplace Safety Rule requires railroads and railroad contractors to provide, and employees to use, fall protection and personal protective equipment, including head, foot, eye, and face equipment when employees work on railroad bridges, and to protect employees from the hazards of moving trains and other railroad equipment. The purpose of this rule is to prevent accidents and casualties to employees involved in railroad construction and maintenance activities.

§ 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.

Section Analysis from original 49 CFR 214, the Bridge Worker Safety Rule:

This section limits application of the safety standards set forth in this part to those inspection, maintenance, and construction activities described in Subpart B, Bridge Worker Safety Standards, and any additional subparts that may follow. FRA does not in any way intend that Part 214, Railroad Workplace Safety, be read to establish standards for any occupational hazards beyond those addressed by this part.

Additional Discussion:

This section is unchanged in the Roadway Worker Safety Rule. The original section analysis left room for the additional subparts, of which Subpart C, Roadway Worker Protection, is the first.

§ 214.3 Application.

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

Section Analysis from original 49 CFR 214, the Bridge Worker Safety Rule:

The Rule does not apply to urban rapid transit systems or other self-contained systems that are not part of the general railroad system of transportation, nor to railroad bridges that are part of industrial facilities, neither owned nor operated by a railroad.

Should FRA later determine that this rule should apply to certain self-contained railroads that are not part of the general system (E.g., certain tourist railroads), it will propose a new rule to accomplish that change. Such a proceeding could explore whatever unique factors apply in the context of such railroads.

Section Analysis from NPRM of March 14, 1996, the Roadway Worker Protection Rule:

FRA proposes that this subpart will apply to all railroads and contractors to railroads in the general system of railroad transportation, including commuter rail operations. Accordingly, existing section 214.3 will not change. This means that tourist and excursion railroads that are not part of the general system of railroad transportation will not be subject to these rules. The data illustrating the serious nature of the hazards addressed in this subpart did not include tourist and excursion railroads. FRA has not otherwise been notified that these hazards causing death and injury to roadway workers are a serious problem for tourist and excursion railroads or any other railroads not operating over the general system of railroad transportation. However, FRA reserves the right to include tourist and excursion railroads

that do not operate on the general system of railroad transportation in the final rule, if the record reflects such a need.

Section Analysis from Final Rule of December 16, 1996, the Roadway Worker Protection Rule:

Two comments were submitted essentially requesting clarification regarding FRA jurisdiction. Specifically, clarification was sought regarding whether these rules apply on track that is not subject to FRA jurisdiction and not on the general system of railroad transportation. As noted in Sec. 214.3, Application, FRA is concerned with track that is part of the general system of railroad transportation. For further information regarding FRA's exercise of jurisdiction, one should consult 49 CFR Part 209, Appendix A. This Federal regulation, as all other rules issued under FRA authority will only apply in instances were FRA exercises jurisdiction, on track that is part of the general system.

Additional Discussion:

The application of this rule will generally follow the applicability of 49 C.F.R. Part 213, the Federal Track Safety Standards. Contractors to railroads, and the employees of such contractors, would be covered where they are working on and near the track of the railroad to which they are contracted. A contractor to a railroad would be responsible for compliance with this rule at locations where it is performing work for a covered railroad. Employees of the same contractor who might be performing work for a non-railroad industry on a track owned by that industry would not be covered by this rule.

This regulation does not apply to a contractor or other party working on railroad property but not under contract to the railroad. An example would be a communications company installing or maintaining fiber optic lines buried alongside the track, or a highway agency inspecting agency-owned bridges over the track.

As noted in §214.3, the Federal Railroad Administration (FRA) is concerned with track that is part of the general system of railroad transportation. However, Part 209, Appendix A, details FRA's policy in regard to operations of general system railroads on trackage that is not part of the general system of transportation (e.g., plant railroads). Part 209, Appendix A, states: "*...the railroad that is part of that system while inside the installation; thus, all of its activities are covered by FRA's regulations during that period*." Therefore, 49 CFR Part 214 will apply to roadway workers who are on-duty with a general system railroad when conducting engineering functions within plant trackage. When working independently and directly for an industry (plant railroad), a person performing engineering type functions in this environment would not be subject to the RWP regulation. However, such activities come under the jurisdiction of other Federal agencies and FRA highly encourages workers follow on-track safety procedures when working under this environment.

§ 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 $853 and not more than $27,904 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 $111,616 per violation may be assessed. See Appendix A to this part for a statement of agency civil penalty policy.

Section Analysis from original 49 CFR 214, the Bridge Worker Safety Rule:

The Rail Safety Improvement Act (RSIA) established liability for individuals who willfully violate any of the railroad safety regulations. The authority to impose penalties against individual violators exists with respect to all of the safety standards enforced by FRA, but with the addition of § 214.5 in this final rule, FRA now expressly incorporates that authority in Part 214. In addition, as a logical concomitant of this provision, various provisions requiring that certain forms of protection be provided have been amended to require that, when provided, they be used.

§ 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.*

The spacing of less than 25 feet between track centers, which defines adjacent tracks for this rule, represents a consensus decision of the Advisory Committee. Several railroads have recently extended their lateral track spacing to 25 feet. Tracks spaced at that distance may not cause a hazard to employees in one track from trains and equipment moving on the other track. FRA believes that no purpose would be served by requiring these tracks to be spaced at a slightly greater distance. Therefore, tracks spaced at 25 feet are not defined as adjacent tracks, but tracks spaced at a lesser distance will be so defined. Tracks that converge or cross will be considered as adjacent tracks in the zone through which their centers are less than 25 feet apart.

As a practical matter, FRA will apply a rule of reason to the precision used in measuring track centers, so that minor alignment deviations within the limits of the Federal Track Safety Standards (49 C.F.R. Part 213) would not themselves place such short segments of track within the definition of adjacent tracks.

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.*

The common terminology now employed to mean a lanyard, lifeline, and safety belt system for fall protection is a "personal fall arrest system." Anchorage is an integral component of a personal fall arrest system, and therefore is defined. FRA chose the definition utilized by OSHA in its regulations concerning fall protection, which reflects common trade usage. A particular worksite will determine the type of anchorage available, and so the definition allows for flexibility by stating only that it be a secure point of attachment for the other personal fall arrest system components.

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

The use of body harnesses, rather than body belts, is now preferred practice. The body belt does not absorb stress forces in a fall as well as a harness can, and therefore, may cause serious internal injury to the wearer. According to commenters, many companies no longer manufacture belts because of this risk, and the construction industry will phase out their use in the near future. However, there are limited situations, climbing poles for

instance, in which belts can be utilized safely. FRA adopts the definition used by OSHA that reflects current trade language. Although the final rule permits the use of safety belts as part of a personal fall arrest system, use of harnesses is preferred.

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.*

The harness distributes the fall arrest forces over the thighs, shoulders, pelvis, waist, and chest, and therefore decreases the likelihood of serious injury to the wearer.

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

The rule distinguishes among railroads of various classes in the effective dates of this regulation, and in the applicability of § 214.329, Definite Train Location. The largest railroads are Class I. Class II railroads are generally termed "regional railroads" and Class III railroads are generally termed "short line railroads," although these terms are not definitive.

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.*

The rule requires oversight or supervision by a person with knowledge, training, and relevant experience to adequately assess safety hazards. The definition contains these factors, and a requirement that the individual also possess the authority to take prompt corrective measures, if necessary.

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.*

This term may encompass several types of employees. A control operator might relay instructions from a train dispatcher, or operate independently, depending upon the rules of the railroad. On some terminal railroads, a yardmaster might control a remotely controlled switch and thereby be considered a control operator. The term as used here has no connection with the hours of service law.

A yardmaster who gives permission to trains to use non-controlled track is not a control operator. The general distinction is that the actual authorization to use non-controlled track is found in the rules, and the granting or withholding of permission is not an assurance of protection. It is intended to facilitate operations, such as by advising a train not to use an occupied track to attempt to move through a yard.

Controlled point *means a location where signals and/or other functions of a traffic control system are controlled from the control machine.*

FRA added the same definition of “controlled point” to Part 214 as in FRA’s signal regulations at 49 C.F.R. § 236.782. The definition of “controlled point” in Part 214 is necessary because existing § 214.337 prohibits using individual train detection by a lone worker inside the limits of a “controlled point.” See § 214.337(c)(3).

FRA did not include in the definition of a controlled point mechanisms such as switch heaters, blue signal protection, snow blowers, etc. However, remote-controlled power switches and bridges that are moveable via a control machine (by a train dispatcher or control operator) are included in the definition. Under the regulation, a lone worker working on a moveable bridge that is a controlled point is always required to establish working limits because a lone worker using individual train detection as his or her form of

on-track safety is not required to notify a train dispatcher or control operator of the work they are performing. If a lone worker used individual train detection on a moveable bridge "controlled point," the dispatcher or control operator may be unaware of the roadway worker's presence and could remotely move the bridge with the roadway worker on it, creating risk of injury or death to the roadway worker.

Power-operated switches are not generally considered interlockings or controlled points when the switches have wayside indication devices that convey the position of a switch and are operated by train crews. However, if a power operated switch can be remotely operated by a control operator or dispatcher, it may be considered a "controlled point."

The use of individual train detection by a lone worker at power-operated switch installation locations is permitted if:

- The signals at these installations do not convey train movement authority; and
- The switch installation is not controlled by a train dispatcher or control operator, and is not part of a manual interlocking or controlled point.

FRA does not believe it prudent to expand the definition of "controlled point" to include all power-operated switches. Rather, the longstanding guidance described above regarding which power-operated switches constitute "controlled points," will continue to control. Lone workers performing work at these installations, or at any other location where individual train detection use is permitted, maintain the absolute right to use a form of on-track safety other than individual train detection. See § 214.337(b).

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.*

See the discussion under § 214.321 Exclusive track occupancy.

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.*

This is defined is a device that dissipates fall forces during a fall arrest. It is often a type of lanyard, an attachment to a lanyard or harness, or a self-retracting lifeline.

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.*

See the discussion under § 214.331 Definite train location.

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 *means 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..

Effective securing device is defined in this part as one means of preventing a manually operated switch or derail from being operated so as to present a hazard to roadway workers present on certain non-controlled tracks. This definition is specifically intended to include the use of special locks on switch and derail stands that will accommodate them, and switch point clamps that are properly secured. It also includes the use of a spike driven into the switch tie against the switch point firmly enough that it cannot be removed without proper tools, provided that the rules of the railroad prohibit the removal of the spike by employees not authorized to do so.

The language in the regulation clearly shows that the Federal Railroad Administration (FRA) acknowledged that there were other securing devices in addition to locks that are acceptable to use, as long as they were vandal resistant, tamper resistant and are designed to be applied, secured, uniquely tagged and removed by the class, craft or group of employees for whom the protection is being provided. The preamble language specifically discussed locks, clamps and spikes when utilized as effective securing devices. Portable derails that are secured with wedges, would also be in compliance with the regulation, as long as the device is secure, vandal and tamper resistant, and can only be removed by the class, craft or group of employees for whom the protection is being provided.

FRA intended to clearly identify effective securing devices and to prevent railroad employees from being injured attempting to operate a secured device. Therefore, FRA specified in the definition of “effective securing device” that any such device must be equipped with a “unique tag” clearly indicating to other railroad employees that the switch is secured by roadway workers. The tag does not have to be “unique” to a specific person or work gang. Rather, a craft-specific tag is considered unique.

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.*

The responsibility for compliance with this rule follows the employer-employee relationship. Each employer subject to the rule, be it a railroad or a contractor, assumes the employer's responsibilities regarding its own employees.

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.*

In order to give railroads and railroad contractors flexibility in choosing equipment not specified in the final rule, but perhaps more amenable to the railroad environment or more technically advanced, this term has been added to the rule at various locations. The railroad or railroad contractor bears the burden of demonstrating that the alternative device does not in any way decrease employee safety.

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.*

See the discussion under § 214.321 Exclusive track occupancy.

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.*

Care should be taken not to confuse flagman with watchman/lookout. A flagman directs or controls the approach of trains on a track, while the watchman/lookout detects the approach of trains and warns roadway workers of the approaching train.

Some railroads have transportation employees, such as conductors, providing protection against trains to contractors and others who are working on railroad property. Other railroads have maintenance-of-way employees performing the same function, and some railroads use both classifications of employees.

Although the railroad might term these employees “flagmen,” they are not considered as such in this rule unless they actually perform the function of directly stopping trains at their location. Communicating with the train dispatcher to establish working limits does not by itself classify these employees as flagmen under this rule.

The question of whether these employees are roadway workers and covered as such under this rule depends on their other functions at the site. Under the definition of roadway workers, they are roadway workers if they are protecting a roadway work group. Generally, if they have any responsibility for inspection, adjustment or repair of roadway facilities they would be considered to be roadway workers. Finally, if the employer designates them as roadway workers, FRA would normally accept that designation.

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.*

Foul time is an abbreviated method of establishing working limits on controlled track where permitted by the rules of the railroad. It is distinguished from exclusive track occupancy by the absence of a requirement for a written document in the possession of the roadway worker who has been granted the foul time, and the prohibition of any train or on-track equipment movements into or within the working limits. Some railroads utilize this procedure to protect people or machines that are on or near the track where the condition of the track has not been affected.

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.*

An individual could be farther than four feet from the rail and still be fouling the track if the individual's position or actions could cause movement into the four-foot zone, or if there were any possibility of the individual being struck by a part of a moving train or on-track machine that might extend more than four feet outside the rail. An example would be an individual working on the slope of a cut above the track, where a slip could cause movement into the track area.

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

This term is significant in determining the amount of force applied to one who wears a personal fall arrest system. It is defined as the act of falling until the arresting forces begin to take effect.

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.*

As stated above, this phrase is important in determining the amount of force applied to a body before the fall arrest system begins to take effect. As defined, the distance does not include deceleration distance, or lifeline and lanyard elongation.

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.*

See the discussion under § 214.327 Inaccessible track.

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.*

See the discussion under § 214.337 On-track safety procedures for lone workers.

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.*

An informational line-up provides information as to the last known location, and expected movements, of trains in a specific segment of track. It does not necessarily show restrictions placed on trains as would be the case with definite train location, nor are trains necessarily restricted as to the time at which they may pass certain locations.

Interlocking, manual *means 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.*

The definition for Interlocking, Manual mirrors the existing definition for the same term in FRA's signal and train control regulation (§ 236.751).

The table below summarizes the applicability of individual train detection on various

types of track arrangements:

Track Arrangement	Individual Train Detection permitted
Controlled point/manual interlocking with switches, crossings (diamonds), or moveable bridges	No
Controlled point with signals only – see §214.337(c)(3)	Yes
Manual interlocking	No
Automatic interlocking	Yes
Power-operated switch installations	See discussion above

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.*

FRA adopted the definition used by OSHA that reflects current trade language. The term is defined as a flexible line of rope, wire rope or strap that secures 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.*

The definition states that a lifeline is a flexible line connected to an anchorage from which other portions of a fall arrest system are attached. More than one person may be attached to a lifeline, as common practice indicates, so long as the line complies with required standards.

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.*

Lone workers are defined in this part as roadway workers who are not being afforded on-track safety by another roadway worker, are not members of a roadway work group, and are not engaged in a common task with another roadway worker. Generally, a common task is one in which two or more roadway workers must coordinate and cooperate in order to accomplish the objective. Other considerations are whether the roadway workers are under one supervisor at the worksite; or whether the work of each roadway worker contributes to a single objective or result.

For instance, a foreman and five trackmen engaged in replacing a turnout would be engaged in a common task. A signal maintainer assigned to adjust the switch and replace wire connections in the same turnout at the same time as the track workers would be considered a member of the work group for the purposes of on-track safety. On the other hand, a bridge inspector working on the deck of a bridge while a signal maintainer happens to be replacing a signal lens on a nearby signal would not constitute a roadway work group just by virtue of their proximity. FRA does not intend that a common task may be subdivided into individual tasks to avoid the use of on-track safety

procedures required for roadway work groups.

Maximum authorized speed *means the highest speed permitted for the movement of trains permanently established by timetable/special instructions, general order, or track bulletin.*

FRA defines the term "maximum authorized speed" as the speed designated for a track in a railroad's timetable, special instructions, or bulletin. Using a temporary speed restriction as the basis to determine the appropriate train approach warning distance could pose inherent dangers. That danger can occur when someone removes a temporary restriction from a particular segment of track without notifying the roadway work group or lone worker using that temporary speed restriction so they can determine the appropriate train approach warning distance.

This definition also applies to the RWP requirements in the adjacent track rulemaking. See § 214.336.

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.*

See the discussion under § 214.327 Inaccessible track.

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.*

The term "on-track safety" embodies the ultimate goal of this regulation, which is for workers to be safe from the hazards related to moving trains and equipment while working on or in close proximity to the track. The regulation requires railroads to adopt comprehensive programs and rules to accomplish this objective. This regulation, and the required programs, together are intended to produce a heightened awareness among railroad employees of these hazards and the methods necessary to reduce the related risks.

On-track safety manual *means 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.*

§ 214.309 requires each roadway worker in charge and lone worker to have with them a manual containing the rules and operating procedures governing track occupancy and protection. To clarify the materials that must be included in such a manual, FRA defined the term "on-track safety manual," in part, as "the entire set of on-track safety rules and instructions . . . designed to prevent roadway workers from being struck by trains or other on-track equipment." FRA intended to require that the "on-track safety manual" be

a single manual. The single manual may be divided into binders (separate sections where appropriate), rather than requiring railroads to issue new manuals each time it amends a rule or issues a new rule. For example, the manual could be broken into separate sections addressing on-track safety rules, good faith challenge procedures, roadway maintenance machine procedures, and other relevant issues.

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.*

This terminology for the safety harness, lanyard, lifeline fall protection system reflects common trade language. The rule defines this term as a system used to stop a fall from a working level, consisting of an anchorage, connectors, body harness, lanyard, deceleration device, lifeline, or suitable 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.*

The term ”qualified” as used in the rule with regard to roadway workers implies no provision or requirement for Federal certification of persons who perform those functions.

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.*

This definition is taken from section 202(e) of the Federal Railroad Safety Act of 1970, as amended by the RSIA, and includes all forms of non-highway transportation that run on rails or electro-magnetic guideways.

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 is defined as a structure supporting one or more railroad tracks, above land or water, spanning at least 12 feet, and including the entire structure between the faces of the abutments. The term "span length" in this definition includes bridges that might have a total length with multiple spans of 12 feet or more between the extreme backwalls, even if no single span reaches 12 feet in length.

The definition does not apply to structures carrying highways or other structures over railroads, nor to signals or signal bridges that are not located on or part of railroad bridges as defined in this section. A railroad bridge remains a railroad bridge while the track has been temporarily removed for maintenance or repair. A bridge with the track permanently removed is no longer a railroad bridge. A bridge being built by a railroad, or

a contractor to a railroad, intended to carry track, is a railroad bridge.

A bridge being built to carry track, but not yet in possession of a railroad, will not be considered a railroad bridge until it is acquired by a railroad or placed in service to carry railroad traffic. For instance, a railroad bridge under construction by a highway agency, separate from an operating railroad, as part of a highway project, would come under the same OSHA jurisdiction as the rest of the highway construction project until such time as ownership or control of the bridge passes to a railroad, or until railroad traffic begins operating over the bridge.

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.*

The term Railroad bridge worker or bridge worker replaces the term railroad employee or employee formerly used in the Bridge Worker Safety Rule, to recognize the broadened scope of this part after the inclusion of the Roadway Worker Protection Rule and to more precisely define those who are covered by rule as bridge workers.

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.*

This definition varies slightly from the standard definition of restricted speed found in most books of operating rules. It is meant only to apply in the context of roadway worker protection. The primary difference is the inclusion of the term ".. of the person operating the train or other equipment." In the context of an operating rule, the meaning is clear without this term. However, it was thought to be necessary to include the additional language in this regulation because most other references to range of vision apply to persons on the track seeing the train, rather than the range of vision of the operator of the train. This terminology is not meant to apply to any FRA regulations on other topics.

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.*

The definition of this term would mean any roadway maintenance machine equipped with a crane or boom that can hoist, lower, and horizontally move a suspended load. In general, it does not include excavating equipment such as wheel loaders, crawler or rubber tired backhoes or similar types of machines designed for excavating purposes or any device not meeting the requirements of a roadway maintenance machine, e.g., hand cranked winches.

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

See the discussion under § 214.335 On-track safety for roadway work groups.

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.*

Some railroad employees whose primary function is transportation, that is, the movement and protection of trains, will be directly involved with on-track safety as well. These employees would not necessarily be considered roadway workers in the rule. They must, of course, be capable of performing their functions correctly and safely.

The rule requires that the training and qualification for their primary function, under the railroad's program related to that function, will also include the means by which they will fulfill their responsibilities to roadway workers for on-track safety. For instance, a train dispatcher would not be considered a roadway worker, but would be capable of applying the railroad's operating rules to the establishment of working limits for roadway workers. Likewise, a conductor who protects a roadway maintenance machine, or who protects a contractor working on railroad property, would not necessarily be considered a roadway worker unless he or she performs the strict function of a flagman as defined in this section, but would receive training on functions related to on-track safety as part of the training and qualification of a conductor.

Employees of a contractor to a railroad are included in the definition when they perform duties under that contract on or near the track of a railroad. They should be protected as well as employees of the railroad. The responsibility for on-track safety of employees will follow the employment relationship. Contractors are responsible for the on-track safety of their employees and any required training for their employees. FRA expects that railroads will require their contractors to adopt the on-track safety rules of the railroad upon which the contractor is working. Where contractors require specialized on-track safety rules for particular types of work, those rules must, of course, be compatible with the rules of the railroad upon which the work is being performed.

The regulation does not apply to employers, or their employees, if they are not engaged by or under contract to a railroad. Personnel who might work near railroad tracks on projects for others, such as cable installation for a telephone company or bridge construction for a highway agency, come under the jurisdiction of other Federal agencies with regard to occupational safety.

Roadway worker in charge *means 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.*

FRA defines “roadway worker in charge” (RWIC) as “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.” Lone workers can establish on-track safety for their own protection, either via individual train detection

or by establishing working limits. However, if a lone worker is establishing on-track safety for any other roadway workers, he or she must be qualified under § 214.353 as a RWIC.

A RWIC may only perform watchman/lookout duties if the requirements of § 214.329 are met. Section 214.329(b) requires that watchmen/lookouts "shall devote full attention to detecting the approach of trains and communicating warning thereof, and shall not be assigned any other duties while functioning as watchmen/lookouts." Thus, a RWIC could not perform any other duties, such as providing direction to a roadway work group, while simultaneously serving as a watchmen/lookout. The limitation on performing other tasks while simultaneously serving as a watchman/lookout severely limits the instances when a RWIC may permissibly fill both roles.

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.*

The definition adopts OSHA's language, which reflects common trade usage.

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.*

The definition adopts OSHA's language, which reflects common trade usage. The keeper must close automatically, else it is not a snap hook.

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.*

See the discussion under § 214.329 Train approach warning provided by watchmen/lookouts.

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.*

See the discussion under § 214.325 Train coordination.

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 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, fuse. 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.*

FRA removed the word "annually" from the definition of "watchman/lookout." Removing

the reference to "annual" is for consistency with the definitions of the other roadway worker qualifications, and because the "periodic" qualification requirement is not considered an "annual" requirement under the RWP regulation. FRA's longstanding position since the RWP rule became effective in 1997 is that roadway worker training is an annual requirement (see Section-by-Section analysis discussion for §§ 214.343, 214.345, 214.347, 214.349, 214.351 and 214.353).

FRA is aware that some railroads are not providing watchmen/lookouts with any audible or visual warning devices to provide appropriate train approach warning. The rule text for the term "watchman/lookout" in § 214.7 states, in part, that roadway workers acting as watchmen/lookouts "shall be properly equipped to provide visual and auditory warning, such as whistle, air horn, white disk, red flag, lantern, fuse." This section further imposes a duty upon the employer to provide the watchman/lookout employee with the requisite equipment necessary to carry out his on-track safety duties. It is intended that a railroad's on-track safety program would specify the means to be used by watchmen/lookouts to communicate a warning, and that they be equipped according to that provision.

Thus, a railroad must properly equip a watchman/lookout with the equipment specified by the railroad's on-track safety program to properly communicate a warning. Except in limited circumstances (e.g., a watchman/lookout assigned to provide train approach warning for a single welder and who is located immediately next to the welder to provide a warning), if a railroad does not provide equipment with the specified auditory or visual warning capabilities to the roadway workers a watchman/lookout is protecting, the railroad is in violation of § 214.329. If an on-track safety program fails to specify the "requisite equipment necessary" for a watchman/lookout to provide on-track safety for a roadway work group, the program also is not compliant with part 214.

Working limits *means a segment of track with definite boundaries established in accordance with this rule 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.*

See the discussions under and following § 214.319 Working limits, generally.