

permitted to develop, publish, and implement alternate programs that meet the standards established in §219.1001. Such programs must have the written concurrence of the recognized representatives of the regulated employees. Nothing in this subpart restricts a railroad or labor organization from adopting, publishing, and implementing programs that afford more favorable conditions to regulated employees troubled by drug or alcohol abuse problems, consistent with a railroad's responsibility to prevent violations of §§219.101, 219.102, and 219.103.

(b) The concurrence of the recognized representatives of the regulated employees in an alternate program may be evidenced by a collective bargaining agreement or any other document describing the class or craft of employees to which the alternate program applies. The agreement or other document must make express reference to this subpart and to the intention of the railroad and employee representatives that the alternate program applies instead of the program required by this subpart.

(c) The railroad must file the agreement or other document described in paragraph (b) of this section along with the requested alternate program it submits for approval with the FRA Drug and Alcohol Program Manager. FRA will base its approval on whether the alternative program meets the §219.1001 objectives. The alternative program does not have to include each §219.1001 component, but must meet the general standards and intent of §219.1001. If a railroad amends or revokes an approved alternate policy, the railroad must file a notice with FRA of such amendment or revocation at least 30 days before the effective date of such action.

(d) This section does not excuse a railroad from adopting, publishing, and implementing the programs §219.1001 requires for any group of regulated employees not falling within the coverage of an appropriate, approved alternate program.

(e) Consistent with §219.105(c), FRA has the authority to inspect the aggregate data of any railroad alcohol and/or drug use education, prevention, identification, and rehabilitation program or

policy, including alternate peer support programs, to ensure that they are not designed or implemented in such a way that they circumvent or otherwise undermine Federal requirements, including the requirements in this part regarding peer support programs.

PART 220—RAILROAD COMMUNICATIONS

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APPENDIX A TO PART 220—RECOMMENDED PHONETIC ALPHABET

APPENDIX B TO PART 220—RECOMMENDED PRONUNCIATION OF NUMERALS

AUTHORITY: 49 U.S.C. 20102–20103, 20103, note, 20107, 21301–21302, 20701–20703, 21304, 21311; 28 U.S.C. 2461 note; and 49 CFR 1.89.

SOURCE: 63 FR 47195, Sept. 4, 1998, unless otherwise noted.

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.

[75 FR 59601, Sept. 27, 2010]

§ 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.

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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.

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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.

[63 FR 47195, Sept. 4, 1998, as amended at 65 FR 41305, July 3, 2000; 75 FR 59601, Sept. 27, 2010]

§ 220.7 Penalty.

Any person (including but not limited to a railroad; any manager, supervisor, official, or other employee or

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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 \$1,086 and not more than \$35,516 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 \$142,063 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 FRA's website at www.fra.dot.gov for a statement of agency civil penalty policy.

[63 FR 47195, Sept. 4, 1998, as amended at 69 FR 30593, May 28, 2004; 72 FR 51196, Sept. 6, 2007; 73 FR 79702, Dec. 30, 2008; 77 FR 24420, Apr. 24, 2012; 81 FR 43110, July 1, 2016; 82 FR 16133, Apr. 3, 2017; 83 FR 60747, Nov. 27, 2018; 84 FR 23734, May 23, 2019; 84 FR 37073, July 31, 2019; 86 FR 1758, Jan. 11, 2021; 86 FR 23254, May 3, 2021; 87 FR 15868, Mar. 21, 2022; 88 FR 1127, Jan. 6, 2023; 88 FR 89562, Dec. 28, 2023]

§ 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

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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; record-keeping.

(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.

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§ 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.

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§ 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

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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

SOURCE: 75 FR 59602, Sept. 27, 2010, unless otherwise noted.

§ 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—

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- (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:

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- (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

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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.

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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—REC-
OMMENDED PRONUNCIATION OF NU-
MERALS

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.

Number	Spoken
1000	WUN THOUSAND.
1600	WUN SIX HUNDRED.
14899	WUN FO-WER ATE NINER NINER.
20.3	TOO ZERO DECIMAL THUH-REE.

PART 221—REAR END MARKING DEVICE—PASSENGER, COMMUTER AND FREIGHT TRAINS

Subpart A—General

- Sec.
- 221.1 Scope.
- 221.3 Application.
- 221.5 Definitions.
- 221.7 Civil penalty
- 221.9 Waivers.
- 221.11 State regulation.

Subpart B—Marking Devices

- 221.13 Marking device display.
- 221.14 Marking devices.
- 221.15 Marking device inspection.
- 221.16 Inspection procedure.
- 221.17 Movement of defective equipment.

APPENDIX A TO PART 221—PROCEDURES FOR APPROVAL OF REAR END MARKING DEVICES

APPENDIX B TO PART 221—APPROVED REAR END MARKING DEVICES

AUTHORITY: 49 U.S.C. 20103, 20107; 28 U.S.C. 2461 note; and 49 CFR 1.89.

SOURCE: 42 FR 2321, Jan. 11, 1977, unless otherwise noted.

Subpart A—General

§ 221.1 Scope.

This part prescribes minimum requirements governing highly visible marking devices for the trailing end of the rear car of all passenger, commuter and freight trains. So long as these minimum requirements are met, railroads may adopt additional or more stringent requirements for rear end marking devices.

§ 221.3 Application.

(a) Except as provided in paragraph (b) of this section, this part applies to passenger, commuter and freight trains when operated on a standard gage main track which is part of the general railroad system of transportation.

(b) This part does not apply to:

(1) A railroad that operates only trains consisting of historical or antiquated equipment for excursion, educational, or recreational purposes;

(2) A train that operates only on track inside an installation which is not part of the general railroad system of transportation;

(3) Rapid transit operations in an urban area that are not connected with the general railroad system of transportation.

(4) A railroad that operates only one train at any given time.

[42 FR 2321, Jan. 11, 1977, as amended at 53 FR 28600, July 28, 1988]

§ 221.5 Definitions.

As used in this part:

(a) *Train* means a locomotive unit or locomotive units coupled, with or without cars, involved in a railroad operation conducted on a main track. It does not include yard movements.

(b) *Commuter train* means a short haul passenger train operating on track which is part of the general railroad system of transportation, within an urban, suburban or metropolitan area. It includes a passenger train provided by an instrumentality of a State or political subdivision thereof.

(c) *Locomotive* means a self-propelled unit of equipment designed for moving other equipment in revenue service and includes a self-propelled unit designed to carry freight or passenger traffic, or both.

(d) *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.

(e) *Train order* means mandatory directives issued as authority for the conduct of a railroad operation outside of yard limits.

(f) *Red-orange-amber color range* means those colors defined by chromaticity coordinates, as expressed in terms of the International Commission on Illumination's 1931 Colorimetric System, which lie within the region bounded by the spectrum locus and lines defined by the following equations:

$$X + Y = .97 \text{ (white boundary)}$$