

**DEPARTMENT OF TRANSPORTATION**

**Federal Railroad Administration**

**49 CFR Part 220**

**[Docket No. FRA-2009-0118]**

**RIN 2130-AC21**

**Restrictions on Railroad Operating Employees' Use of Cellular Telephones and  
Other Electronic Devices**

**AGENCY:** Federal Railroad Administration (FRA), Department of Transportation  
(DOT).

**ACTION:** Final rule; rescission of Emergency Order No. 26.

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**SUMMARY:** FRA is amending its railroad communications regulations by restricting use of mobile telephones and other distracting electronic devices by railroad operating employees. This rule codifies most of the requirements of FRA Emergency Order No. 26, which is supplanted by this final rule on the date it becomes effective. FRA has revised some of the substantive requirements of that Emergency Order as well as its scope to accommodate changes that FRA believes are appropriate based upon its experience with the Emergency Order and in response to public comments submitted in response to the proposed rule.

**DATES:** Effective [INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

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## **I. Background**

### A. Notice of Proposed Rulemaking

On May 18, 2010, FRA published a notice of proposed rulemaking (NPRM) in the Federal Register proposing to restrict the use of mobile telephones and other

distracting electronic devices by railroad operating employees. 75 FR 27672 (May 18, 2010). The NPRM proposed to codify many of the requirements of Emergency Order 26 (Order or EO 26, 73 FR 58702 (Oct. 7, 2008)), but proposed certain changes to it in response to a letter challenging certain provisions of the Order. FRA asked for public comment on the NPRM, and received 15 comments in response. FRA has reviewed those comments and as a result has made changes for this final rule. These changes are described below.

B. Effective Date

This final rule will take effect 180 days after its publication date. FRA has chosen this implementation schedule for several reasons. This implementation schedule will ensure no gaps in safety regulation occur, no gaps in examination or instruction on the requirements of the governing safety regulation occur, and will also accommodate traditional industry practices for the instruction schedule of operating employees.

First, EO 26 is currently in effect, and will remain so until this final rule supplants it upon its effective date. All railroad operating employees were already required to have been trained on the restrictions established by EO 26. EO 26 provides no less measure of safety of than does this final rule, which only modifies certain requirements of the Order.

Next, in response to the NPRM, the Association of American Railroads (AAR) submitted a comment to FRA that requested adequate time for railroads to implement their programs of instruction and to then provide that required instruction to their operating employees. As discussed below, this final rule allows railroads 90 days to implement a program of instruction, and then an additional 90 days to actually instruct their employees. Allowing railroads this period of time to implement the instruction

requirements of this final rule will result in reduced implementation and instruction costs. As AAR's comment indicated, the industry practice is for railroads to finalize their annual rules instruction programs in the fourth quarter of the calendar year, and then to actually instruct their employees on those annual rules instruction programs in the first quarter of the next calendar year. Thus, based on the implementation date FRA has chosen, railroads should not have to alter the timing of their instruction programs or require their employees to attend additional instruction sessions outside of those already planned during the first quarter of 2011.

As EO 26 will remain in effect until this final rule becomes effective, railroad operating employees will not be subject to this final rule until they have already been instructed on its requirements. This implementation schedule also ensures there will be no gap in time where a new railroad operating employee will perform work subject to the requirements of this final rule, but will not have yet been trained on its requirements or the requirements of a supplanted EO 26.

In sum, this implementation schedule does not allow for any gap in safety regulation, as employees have been trained on the requirements of EO 26 and will be subject to its requirements until the final rule takes effect. Upon the final rule taking effect, all new and current railroad employees will have already been instructed on the rule's requirements. Finally, as discussed above, this schedule also accommodates a large segment of the railroad industry's traditional rules instruction practices.

C. Background Information

The increasing number of distractions for drivers has led to increasing safety risks. The distractions caused by cell phones (mobile phones/cellular phones) have been a concern for years. In addition, each day, drivers are distracted by eating, conversations with passengers, using portable electronic devices, or some other type of multitasking. This type of behavior results in vehicle accidents and significant costs to our nation's economy. Parallels are easily drawn between distracted driving and the operation of trains while using distracting electronic devices, as evidenced by the examples discussed below.

In response to this growing problem, DOT hosted a Distracted Driving Summit in Washington, DC (<http://www.distraction.gov/dot/>). At the Summit, DOT brought together safety and law enforcement experts as well as young adults whose distracted driving had tragic consequences. Attendees heard the testimony of families who lost loved ones because someone else had chosen to send a text message, dial a phone, or become occupied with another activity while driving. In addition to hosting the Summit, DOT has reviewed recent research and has decided to take a more systematic look at the issue and its many dimensions. Another Distracted Driving Summit is scheduled for September 21, 2010.

D. Justification for the Rulemaking

FRA has discovered numerous examples of the dangers posed by distracting electronic devices. These examples indicate the necessity of restrictions on the use of such electronic devices. Five of these accidents are described below, though all of these and more can be found in the full text of the Order.

1. On June 8, 2008, a Union Pacific Railroad Company (UP) brakeman was struck and killed by the train to which he was assigned. FRA's investigation indicated that the brakeman instructed the locomotive engineer via radio to back the train up and that the brakeman subsequently walked across the track, into the path of the moving train. The brakeman was talking on his cell phone at the time of the accident.
2. On July 1, 2006, a northward BNSF Railway Company (BNSF) freight train collided with the rear of a standing BNSF freight train at Marshall, Texas. Although there were no injuries, there were estimated damages of \$413,194. Both trains had two-person crews. The striking train had passed a "Stop and Proceed at Restricted Speed" signal indication and was moving at 20 mph. FRA determined that the collision was caused by the failure by the locomotive engineer on the striking train to comply with restricted speed and that he was engaged in cell phone conversations immediately prior to the accident.
3. On December 21, 2005, a contractor working on property of The Kansas City Southern Railway Company at Copeville, Texas was struck and killed when he stepped into the path of an approaching freight train. FRA's investigation disclosed that the contractor was talking on a cell phone at the time of the accident.
4. One locomotive engineer died and a train conductor suffered serious burns when two BNSF freight trains collided head-on near Gunter, Texas on May 19, 2004. The collision resulted in the derailment of 5 locomotives and 28 cars, with damages estimated at \$2,615,016. Approximately 3,000 gallons of diesel fuel were released from the locomotives, which resulted in a fire. The National Transportation Safety Board (NTSB) investigators obtained records that showed the number and duration of cell phone calls

made by crewmembers on both trains between 1:50 p.m. and the time of the accident, approximately 5:46 p.m. During this time, a total of 22 personal cell phone calls were made and/or received by the five crewmembers on both trains while the trains were in motion.

5. At 8:57 a.m. on May 28, 2002, an eastbound BNSF coal train collided head on with a westbound BNSF intermodal train near Clarendon, Texas. The conductor and engineer of the coal train received critical injuries. The engineer of the intermodal train was killed. The cost of the damages exceeded \$8,000,000. The NTSB found that all four crewmembers involved in this accident had personal cell phones. It also found that the use of a cell phone by the engineer of one of the trains may have distracted him to the extent that he was unaware of the dispatcher's instructions that he stop his train at a designated point.

On October 1, 2008, FRA issued EO 26 restricting the use of cellular telephones and other electronic devices while on duty. (73 FR 58702, Oct. 7, 2008). This FRA action was in part a response to the accidents discussed above and in part a response to the September 12, 2008 head-on collision between a Southern California Regional Rail Authority (Metrolink) commuter train and a UP freight train in Chatsworth, California. This accident resulted in 25 deaths, numerous injuries, and more than \$7 million in damages. Information discovered during the NTSB investigation indicates that the locomotive engineer of the Metrolink commuter train passed a stop signal. NTSB stated that a cell phone owned by the commuter train engineer was being used to send a text message within 30 seconds of the time of the accident.



In the period from the effective date of the Order, October 27, 2008, through August 2010, FRA inspectors discovered approximately 249 instances in which the Order may have been violated. FRA's Office of Railroad Safety recommended enforcement action against the employee or railroad in 56 of these instances. Forty-nine of these actions were based on a railroad employee's using an electronic device, failing to have its earpiece removed from the employee's ear, or failing to have the device turned off in a potentially unsafe situation. In addition, 48 of the incidents recommended for enforcement action involved personal, as opposed to railroad-supplied, devices. These incidents begin to illustrate the hazards of using distracting electronic devices while on duty. For this reason, FRA is compelled to promulgate enforceable regulations to prevent the unsafe use of electronic devices by on-duty railroad employees.

FRA has considered the costs and benefits of this rule. Relative to the current requirements of EO 26, the only additional burden produced by the requirements of this rule is that related to revising programs and initial instruction focused on the exceptions that this rule will introduce as well as the additional potential cost for purchasing or carrying cameras or calculators. This added burden will total approximately \$696,000 (PV, 3%) or \$613,000 (PV, 7%) over a 20-year period. The exceptions to the existing restrictions on the use of electronic devices will allow for greater flexibility with respect to the use of certain electronic devices while maintaining the safety benefits intended. Thus, when compared to the existing requirements, the added flexibility will justify the relatively minor cost burden.

In an effort to also evaluate the requirements that will be transferred from EO 26 to Part 220, FRA examined costs and benefits relative to conditions prior to issuance of

EO 26 in the format of break-even analyses, which can be relied upon to indicate likely net benefit outcomes. Applying highly conservative assumptions, 20-year direct and indirect costs could total as much as \$31.9 million (discounted at 7%) or \$42.9 million (discounted at 3%). The break-even analyses for the rule and EO 26 show that, in all scenarios considered, it will not require an unreasonable decrease in the probability of an accident in order to at least break even. As discussed more completely in the Regulatory Impact Analysis accompanying this rule, the frequency and severity of accidents together with the observed rising incidence of improper use of cell phones and other electronic devices strongly suggest that the elimination of improper electronic device usage by railroad operating employees, as required by this rule, will prevent more than one fatality every two years, and therefore, that the monetized benefits of the requirements will likely outweigh the monetized costs.

**Summary of Costs of EO 26 and This Rule**

(in millions)

	Twenty-year total (3% discount rate)	Twenty-year total (7% discount rate)
Total direct costs	\$12.7	\$9.5
Total indirect costs	\$30.2	\$22.4
Total costs	\$42.9	\$31.9
Costs attributable to this rule	\$0.7	\$0.6

E. Legal Basis for the Rulemaking

Congress required the Secretary to complete a study on the safety impact of the use of personal electronic devices by safety-related railroad employees by October 16,

2009, and to report to Congress on the results of the study within six months after its completion. See Sec. 405(a) and (c) of the Rail Safety Improvement Act of 2008 (RSIA), Pub. L. 110-432, Div. A, 122 Stat. 4848, Oct. 16, 2008 (122 Stat. 4885, 49 U.S.C. 20103 note). Sec. 405(d) of the RSIA authorizes the Secretary to prohibit the use of personal electronic devices that may distract employees from safely performing their duties based on the conclusions of the required study. The Secretary, in turn, has delegated the responsibility to carry out these duties and to exercise this authority to the Federal Railroad Administrator. 49 CFR 1.49(o). See also 49 CFR 1.49(m) for further rail safety related delegations, including general rulemaking authority, to the Federal Railroad Administrator.

The required study, titled “The Impact of Distracting Electronic Devices on the Safe Performance of Duties by Railroad Operating Employees”<sup>1</sup> was completed and submitted to Congress on May 27, 2010. The study stated that FRA found that railroad operating employees were increasingly using distracting electronic devices in a manner that created hazards. As such, FRA intervention was warranted. FRA will continue to monitor compliance regarding the use of electronic devices by railroad employees.

F. Distracted Driving Impacts All Transportation Modes

The use of cell phones and other electronic devices has become ubiquitous in American society. There is strong evidence that people permit electronic devices to

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<sup>1</sup> FRA Report “The Impact of Distracting Electronic Devices on the Safe Performance of Duties by Railroad Operating Employees” (May 27, 2010). Available online at: [http://www.fra.dot.gov/downloads/safety/CellPhone Report4510.pdf](http://www.fra.dot.gov/downloads/safety/CellPhone%20Report4510.pdf)

distract them from driving all kinds of vehicles and that such distractions can have serious safety consequences.

1. Aviation

On October 21, 2009, Northwest Airlines Flight 188 was enroute from San Diego to Minneapolis-St. Paul International /Wold-Chamberlain Airport with 144 passengers. Flight 188 overflew its destination airport by approximately 150 miles before air traffic controllers were able to contact the crew via radio. After the incident, the pilot and first officer told the NTSB that they had lost track of the plane's location because they had been distracted in the cockpit while using personal laptop computers and discussing airline crew scheduling procedures. Using personal laptop computers in the cockpit was a violation of airline policy, and the Federal Aviation Administration suspended the certificates of both the pilot and first officer on October 27, 2009.

2. Rail

See the discussion above.

3. Motorcoach

On November 14, 2004, a bus struck a bridge on the George Washington Parkway in Alexandria, Virginia, a serious accident that destroyed the roof of the motorcoach and injured 11 students, including one seriously. As determined by an NTSB investigation, the bus driver said he had been talking on a hands-free cell phone at the time of the accident. Records from the bus driver's personal cell phone service provider showed that the bus driver initiated a 12-minute call on the morning of the accident. The driver said that he saw neither the warning signs nor the bridge itself before the impact. Evidence indicates that he did not apply any brakes before impacting the bridge. The NTSB

concluded that the bus driver's cell phone conversation at the time of the accident diverted his attention from driving.

This crash resulted in the NTSB recommendation H-06-27 that commercial driver's license (CDL) holders with a passenger-carrying or school bus endorsement be prohibited from using cell phones or other personal electronic devices while driving those vehicles.

Statistics show that distraction from the primary task of driving presents a serious and potentially deadly danger. In 2008, 5,870 people lost their lives and an estimated 515,000 people were injured in police-reported crashes in which at least one form of driver distraction was reported on the crash report. While these numbers are significant, they may not state the true size of the problem, since it is difficult to identify distraction and its role in a crash. See <http://www.dot.gov/affairs/DOT%20HS%2011%20216.pdf>.

First, the data are based largely on police accident reports that are conducted after the crash has occurred. These reports vary across police jurisdictions, thus creating potential inconsistencies in reporting. Some police accident reports identify distraction as a distinct reporting field, while others identify distraction from the narrative portion of the report. Further, the data includes only those crashes in which at least one form of driver distraction was actually reported by law enforcement, thus creating the potential for an undercount.

In addition to, and contributing to, inconsistent reporting of distraction on police accident reports, there are challenges in determining whether the driver was distracted at the time of the crash. Self-reporting of negative behavior, such as distracted driving, is likely lower than actual occurrence of that behavior. Law enforcement must also rely on

crash investigation information to determine if distraction was involved in those crashes with a driver death. The information available to law enforcement may not indicate distraction even where it was a cause of or a factor in the accident. For these additional reasons, reported crashes involving distraction may be undercounted.

#### G. Studies

Due to differences in methodology and definitions of distraction, any study or survey conducted may arrive at different results and conclusions with respect to the involvement of driver distraction in causing a crash. A 2008 research paper sponsored by the National Highway Traffic Safety Administration (NHTSA) entitled, *Driver Distraction: A Review of the Current State-of-Knowledge*, discusses multiple means of measuring the effects of driver distraction including observational studies of driver behavior, crash-based studies, and experimental studies of driving performance. Each type of study has its own set of advantages and disadvantages.<sup>2</sup>

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<sup>2</sup> Ranney, Thomas A. (2008). "Driver Distraction: A Review of the Current State-of-Knowledge." DOT HS 810 787. Available online at: <http://www.scribd.com/doc/12073978/Driver-Distraction-A-Review-of-the-Current-StateofKnowledge>. A more comprehensive listing of research on distracted driving, which includes links to many of the reports discussed in this analysis, can be found online at: [http://www.nhtsa.dot.gov/portal/site/nhtsa/template.MAXIMIZE/menuitem.8f0a414414e99092b477cb30343c44cc/?javax.portlet.tpst=4670b93a0b088a006bc1d6b760008a0c\\_ws\\_MX&javax.portlet.prp\\_4670b93a0b088a006bc1d6b760008a0c\\_viewID=detail\\_view&itemID=97b964d168516110VgnVCM1000002fd17898R\\_CRD&overrideViewName=Article](http://www.nhtsa.dot.gov/portal/site/nhtsa/template.MAXIMIZE/menuitem.8f0a414414e99092b477cb30343c44cc/?javax.portlet.tpst=4670b93a0b088a006bc1d6b760008a0c_ws_MX&javax.portlet.prp_4670b93a0b088a006bc1d6b760008a0c_viewID=detail_view&itemID=97b964d168516110VgnVCM1000002fd17898R_CRD&overrideViewName=Article).

1. National Motor Vehicle Crash Causation Survey (NMVCCS)

NHTSA recently conducted a nationwide survey of crashes involving light passenger vehicles with a focus on factors related to pre-crash events.<sup>3</sup> The NMVCCS investigated a total of 6,950 crashes during the three-year period from January 2005 to December 2007. The report used a nationally representative sample of 5,471 crashes that were investigated during a two-and-a-half-year period from July 3, 2005, to December 31, 2007. Based on the sampling method of the survey, findings were representative of the nation as a whole.

Survey researchers were able to assess the critical event that preceded the crash, the reason for this event, and any other associated factors that might have played a role. Examples of the critical event preceding the crash include running off the edge of the road, failure to stay in the proper lane, or loss of control of the vehicle. Researchers assessed the reason underlying this critical event and attributed that reason to either the driver, the condition of the vehicle, failure of the vehicle systems, adverse environmental conditions, or roadway design. Each of these areas was further broken down to determine more specific critical reasons. For the driver, critical reasons included facets of driver distraction and, therefore, NMVCCS was able to quantify driver distraction involvement in crashes. The percentages included in this discussion are based on 5,471 crashes.

In addition to reporting distraction as the critical reason for the pre-crash event, NMVCCS also reported crash-associated factors. These are factors such as interior distractions that likely added to the probability of a crash occurrence. In cases where the researchers attributed the critical reason of the pre-crash event to a driver, researchers

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<sup>3</sup> NHTSA (2009). "National Motor Vehicle Crash Causation Survey: Report to Congress." DOT HS 811 059. Available online at: <http://www-nrd.nhtsa.dot.gov/Pubs/811059.PDF>.

also attempted to determine the role and type of distraction. Of the crashes studied, about 18 percent of the drivers were engaged in at least one interior (i.e., in-vehicle) non-driving activity (e.g., looking at other occupants, dialing or hanging up a phone, or conversing with a passenger). For the most part, that activity was conversing either with other passengers or on a cell phone, as a total of about 12 percent of drivers in these crashes were engaged in conversation. Drivers between ages of 16 and 25 demonstrated the highest rate of being engaged in at least one interior non-driving activity.

## 2. 100-Car Naturalistic Driving Study

The 100-Car Naturalistic Driving Study was an observational study—via instrumented vehicles—to provide details on driver performance, behavior, environment, and other factors associated with critical incidents, near-crashes, and crashes for 100 cars over a one-year period.<sup>4</sup> This exploratory study was conducted to determine the feasibility of a larger-scale study that would be more representative of the nation’s driving behavior. Despite the small scale of the 100-Car study, extensive information was obtained on 241 primary and secondary drivers over a 12- to 13-month period occurring between January 2003, and July 2004. The data covered approximately 2 million vehicle miles driven and 43,000 hours of driving. As stated in *An Overview of the 100-Car Naturalistic Study and Findings*, “the goal of this study was to maximize the potential to record crash or near crash events through the selection of subjects with higher than

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<sup>4</sup> Dingus, T.A. et al. (2006). “The 100-Car Naturalistic Driving Study, Phase II – Results of the 100-Car Field Experiment.” DOT HS 810-593. Available online at: <http://www.nhtsa.dot.gov/staticfiles/DOT/NHTSA/NRD/Multimedia/PDFs/Crash%20Avoidance/Driver%20Distraction/100CarMain.pdf>.

Neale et al. (2005). “An Overview of the 100-Car Naturalistic Study and Findings.” NHTSA Paper Number 05-0400. Available online at: [http://www.nhtsa.dot.gov/staticfiles/DOT/NHTSA/NRD/Multimedia/PDFs/Crash%20Avoidance/Driver%20Distraction/100Car\\_ESV05summary.pdf](http://www.nhtsa.dot.gov/staticfiles/DOT/NHTSA/NRD/Multimedia/PDFs/Crash%20Avoidance/Driver%20Distraction/100Car_ESV05summary.pdf).



average crash or near crash risk exposure.”<sup>5</sup> In order to achieve this goal, the 100-car study selected a larger sample of drivers who were 18-25 years of age and who drove more than average.

Additionally, the subjects were selected from the Northern Virginia/Washington, DC metropolitan area which offers primarily urban and suburban driving conditions, often in moderate to heavy traffic. This type of purposive sample served well the intentions of the study; however, it also created limitations on the application of the findings. The findings of the 100-car study cannot be generalized to represent the behavior of the nation’s population or the potential causal factors for the crashes that occur across the nation’s roadways.

During the 100-car study, complete information was collected on 69 crashes, 761 near-crashes, and 8,295 incidents. The encompassing term *inattention* was classified during this study as 1) secondary task involvement, 2) fatigue, 3) driving-related inattention to the forward roadway, and 4) non-specific eye glance away from the forward roadway. Secondary task involvement is defined for the study as driver behavior that diverts the driver’s attention away from the driving task; this may include talking on a cell phone, eating, talking to a passenger, and other distracting tasks. Results of the 100-car study indicate that secondary task distraction contributed to over 22 percent of all the crashes *and* near-crashes recorded during the study period.<sup>6</sup> This study found that when a secondary task took the driver’s eyes off of the road for more than 2.0 seconds

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<sup>5</sup> Neale *et al.*, *supra* note 3.

<sup>6</sup> Klauer *et al.* (2006). “The Impact of Driver Inattention on Near-Crash/Crash Risk: An Analysis Using the 100-Car Naturalistic Driving Study Data.” DOT HS 810 594. Available online at: <http://www.nhtsa.dot.gov/staticfiles/DOT/NHTSA/NRD/Multimedia/PDFs/Crash%20Avoidance/Driver%20Distraction/810594.pdf>.

(out of a 6.0-second time interval), the odds of a crash or near-crash event occurring significantly increased.

### 3. National Occupant Protection Use Survey (NOPUS)

NHTSA's annual survey of occupant protection also collects data on electronic device use. NOPUS provides the only probability-based observed data on driver electronic device use in the United States.<sup>7</sup> Based on the sampling method of the survey, findings are representative of the nation as a whole. In 2008, it was estimated that about 6 percent of all drivers were using hand-held cell phones while driving during daylight hours. This finding means that about 812,000 vehicles on the road at any given daylight moment were being driven by someone using a hand-held cell phone in 2008. Survey data from the previous year yielded an even higher figure: according to NOPUS, in 2007 about 1,005,000 vehicles were being driven by someone using a hand-held cell phone at any given daylight moment.<sup>8</sup> Another finding was that in both 2007 and 2008 an estimated 11 percent of vehicles in a typical daylight moment were driven by someone who was using some type of electronic device, either hand-held or hands-free.<sup>9</sup>

### 4. Motor Vehicle Occupant Safety Survey (MVOSS)

The MVOSS is a periodic national telephone survey on occupant protection issues. The most recent administration of the survey was in 2007. *Volume 4, Crash Injury and Emergency Medical Services Report*, includes discussion of questions pertaining to wireless phone use in the vehicle.<sup>10</sup> According to the report summarizing the

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<sup>7</sup> NHTSA (2009). "Driver Electronic Device Use in 2008." DOT HS 811 184. Available online at: <http://www-nrd.nhtsa.dot.gov/Pubs/811184.PDF>.

<sup>8</sup> NHTSA (2008). "Driver Electronic Device Use in 2007." DOT HS 810 963. Available online at: <http://www-nrd.nhtsa.dot.gov/Pubs/810963.PDF>.

<sup>9</sup> NHTSA (2008) *supra* note 7 and NHTSA (2009) *supra* note 6.

<sup>10</sup> Boyle, J. M and C. Lampkin (2008). "2007 Motor Vehicle Occupant Safety Survey Volume 4: Crash Injury and Emergency Medical Services Report." DOT HS 810 977.

2007 data, 81 percent of drivers age 16 and older usually have a wireless phone in the vehicle with them when they drive. Drivers over the age of 54 were less likely than younger drivers to have them—87 percent of 16- to 54-year olds, 74 percent of 55-to 64-year-olds, and 63 percent of drivers age 65 and older. Of those drivers who usually have a wireless phone in the vehicle, 85 percent said they keep the phone on during all or most of their trips. Among drivers who keep the phone turned on when they drive, 64 percent always or usually answer incoming phone calls.

Of the drivers who usually have a wireless phone in the vehicle with them when they drive, 16 percent said they talk while driving during most or all of their trips, and 17 percent said they talk on their wireless phone during about half of their trips. On the other hand, 22 percent of individuals reported never talking on their phone while driving. When driving and wanting to dial the phone, 32 percent of those who at least occasionally talk on the phone while driving tend to dial the phone while driving the vehicle. An additional 37 percent tend to wait until they are temporarily stopped, and 19 percent tend to pull over to a stop to place the call. Ten percent stated they never dial while driving.

## H. Other Efforts

### 1. State Action

Texting while driving is prohibited in 30 States, the District of Columbia, the Virgin Islands, and Guam. A list of States and Territories that have taken such actions can be found at the following DOT Web site: <http://www.distraction.gov/state-laws>.

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See report summary dated March 2009 online at:  
<http://www.nhtsa.dot.gov/staticfiles/DOT/NHTSA/Communication%20&%20Consumer%20Information/Traffic%20Tech%20Publications/Associated%20Files/tt371.pdf>.

Many other States have instituted even stricter prohibitions on the use of cell phones for other functions, including voice communications, while driving.

## 2. Federal Action

On October 1, 2009, during DOT's Distracted Driving Summit, the President issued Executive Order 13513 on "Federal Leadership on Reducing Text Messaging While Driving." Among other things, the Order prohibits all Federal employees from engaging in text messaging while--

- Driving Government-owned, -leased, or -rented vehicles;
- Driving privately-owned vehicles while on official Government business; and
- Using electronic equipment supplied by the Government (including, but not limited to, cell phones, BlackBerries, or other electronic devices) while driving any vehicle.

On April 1, 2010, the Federal Motor Carrier Safety Administration published a notice of proposed rulemaking which proposed to prohibit texting by commercial motor vehicle (CMV) drivers while operating in interstate commerce. 75 FR 16391 (April 1, 2010). The rule was proposed to improve safety on the Nation's highways by reducing the prevalence of distracted driving-related crashes, fatalities, and injuries involving drivers of commercial motor vehicles.

On April 26, 2010, the Federal Aviation Administration issued Information for Operators (InFO) guidance<sup>11</sup> on cockpit distractions, urging crewmembers to refrain from engaging in distracting tasks not related to flight duties, such as using personal electronic devices. The guidance highlighted recent incidents in which pilots had engaged in the

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<sup>11</sup> InFo 10003 "Cockpit distractions" (April 26, 2010). Available online at: [http://www.faa.gov/other\\_visit/aviation\\_industry/airline\\_operators/airline\\_safety/info/all\\_infos/media/2010/InFO10003.pdf](http://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/info/all_infos/media/2010/InFO10003.pdf)

use of distracting personal electronic devices while performing required flight duties, and called on air carriers to create policies limiting pilot distraction.

The Pipeline and Hazardous Material Safety Administration (PHMSA) issued “Safety Advisory Notice: Personal Electronic Device Related Distractions (Safety Advisory Notice No.10-5)” to alert the hazardous materials community to the dangers associated with the use of electronic devices while operating a commercial motor vehicle. 75 FR 45697 (Aug. 3, 2010). In the notice, PHMSA stressed the heightened risk of transportation incidents involving hazardous materials when drivers are distracted by electronic devices. The notice urges motor carriers that transport hazardous materials to institute policies and provide awareness instruction to discourage the use of mobile telephones and electronic devices by motor vehicle drivers.

## **II. Response to Public Comment**

FRA received 15 comments in response to the NPRM. Comments were submitted by a wide variety of affected parties, including the American Association for Justice (AAJ); AAR; five labor organizations that submitted a joint comment, (including the United Transportation Union, Brotherhood of Locomotive Engineers and Trainmen, Brotherhood of Railroad Signalmen, Brotherhood of Maintenance of Way Employes, and the American Train Dispatchers Association (collectively referred to as the Labor Organizations)); the National Railroad Passenger Corporation (Amtrak); the National Transportation Safety Board (NTSB); the National Safety Council; the Peninsula Corridor Joint Powers Board (Caltrain); the Utah Transit Authority; and seven

individuals. In addition, New Jersey Transit (NJT) contacted FRA and had a brief conversation that was summarized and documented in a memorandum, which is posted in the public docket for this rule. FRA staff extensively reviewed and evaluated the comments. In this section, FRA will respond to comments regarding locomotive engineer certification; access to personal cell phone records; personal emergencies; exceptions regarding personal devices such as GPS and cameras; electronic devices to document violations of safety laws; minimum standards, authorized business purposes; passenger train considerations; accident reduction; instruction; operational tests; regulatory impact analysis; and other general comments. FRA will also respond to some of the smaller concerns within the Section-by-Section Analysis below.

In the NPRM, FRA requested comments on four issues: (1) whether violations should be the basis for revoking a locomotive engineer's certification; (2) whether railroads should require railroad access to personal cell phone records if the employee was involved in an accident; (3) whether devices or uses other than those specified should be subject to only limited restrictions; and (4) whether FRA should allow electronic devices to be used more liberally for personal emergencies.

### **Locomotive Engineer Certification Revocation**

FRA received five comments in response to our request for information on whether to amend 49 CFR part 240 (part 240). FRA specifically requested comment on whether violations of this final rule should be added as a basis for revoking a locomotive engineer's certification. Both the NTSB and AAR submitted comments in support of this proposal, stating that it would provide a deterrent to the improper use of electronic

devices and also that such violations should be incorporated as the basis for revoking a conductor's certification in the forthcoming conductor certification regulation. The Utah Transit Authority commented that if part 240 were amended, that it should be at the discretion of the individual railroad to decide whether electronic device violations should be cause for decertification.

The Labor Organizations' joint comment and a railroad employee both commented that they opposed amending part 240. The railroad employee stated that the current revocable offenses found at 49 CFR 240.117(e) (§ 240.117(e)) are absolute rules, but that this final rule contains numerous exceptions where it is permissible for operating employees to use electronic devices. The Labor Organizations' comment stated that accident information does not support adding violations to § 240.117(e). The comment stated that unlike the current provisions of that section, a significant portion of train accidents do not result from use of electronic devices. These commenters also expressed concern that revoking an engineer's certification merely because he or she may have forgotten to turn a device off would be an overly harsh penalty. The commenters also pointed out that FRA has numerous other enforcement tools at its disposal should it discover violations of this regulation. Finally, they commented that if FRA were to amend part 240 to include violations of this rule as offenses mandating revocation of a locomotive engineer's certification, that revocation should be limited to instances in which a violation has occurred that contributed to one of the events identified in FRA's provision on post-accident toxicological testing (49 CFR 219.201(a)), such as a major train accident or a fatality.

After reviewing the comments, and based on the serious railroad incidents that have occurred as a result of electronic device use, FRA believes that it may be appropriate to amend part 240 to allow for decertification in certain instances. However, FRA wishes to further review the issue, and to consider how it would appropriately implement such an amendment. Further, FRA would like to allow for this regulation to first take effect before making a final decision as to whether action to amend part 240 is necessary. As such, FRA may amend part 240 in a future rulemaking; for example, in a rulemaking where the agency could simultaneously implement a consistent provision in the forthcoming conductor certification rule.

#### **Access to Employees' Personal Cell Phone Records**

FRA has decided that a provision mandating that railroads require operating employees to provide access to personal cell phone records in the event of an accident is unnecessary for FRA purposes. As noted in the NPRM, FRA currently uses its investigative authority under 49 U.S.C. 20107 and 49 U.S.C. 20902 to obtain personal cell phone records when appropriate.

#### **Personal Emergencies**

FRA has decided that an exception for personal emergencies would present significant obstacles to enforcing this subpart. An employee who has just been found with a cell phone turned on while on a moving train could easily say that the phone was on because of a sick family member, whether true or not. Railroads have been able to contact crewmember for years in the event of emergencies before cell phones by using



the locomotive radio. In addition, if there is genuine evidence of a personal emergency, FRA inspectors have discretion not to recommend a penalty. No FRA inspector, for example, would recommend a penalty against a railroad operating employee who called 911 because an employee was having a heart attack. FRA expects railroads to also use reasonable discretion in the event of extenuating circumstances. If this proves not to be the case, FRA will revisit this issue.

### **GPS Devices**

After publication of EO 26, FRA received a letter challenging certain provisions of the Order. That letter urged FRA to amend EO 26 to allow for the use of personal GPS devices. However, in the NPRM, FRA did not propose to allow any exemptions for use of personal GPS devices that would otherwise be in violation of the prohibitions set forth in the proposed regulation. In response to the NPRM, two comments addressed GPS devices. Amtrak commented that it understood the NPRM to mean that while personal GPS devices would be prohibited from being utilized outside the circumstances set forth in § 220.305, that § 220.307 of the proposed regulation would still allow use for of a GPS feature included in a railroad-supplied multifunctional device for an authorized business purpose. The Labor Organizations urged FRA to adopt a provision allowing for the use of GPS devices. The comment states that FRA should do so as GPS devices can aid in determining train speed and can help a crew more accurately determine where physical characteristics are located, especially during severe weather when visibility might be limited. The comment also states that GPS technology will be part of positive train control systems that will be able prevent train incursions into working limits and

other relevant operating restrictions that may be present. The comment alluded that personal GPS devices could help provide these same safeguards.

In response, FRA points out that both proposed and final Subpart C do not prohibit the use of railroad-supplied GPS technology. First, railroads are free to issue railroad-supplied devices that utilize GPS technology. So long as those devices are used for an authorized business purpose in accordance with written instructions, the use of those devices is permissible during periods of time not otherwise prohibited by § 220.307. Thus, Amtrak's understanding of the proposed regulation is correct. If railroads feel that such devices are necessary for operations, they may issue them for use.

However, FRA has opted not to include personal GPS devices in the exemptions listed in § 220.309. Thus, a personal GPS device is not permitted to be used by a railroad operating employee in violation of the prohibitions set forth in § 220.305. There are several reasons why FRA has decided such. First, locomotive engineers are required to be familiar with the physical characteristics of the routes over which they operate. This knowledge is required by both railroad operating rules and by part 240. Thus, engineers should already be aware of where sidings, road crossings, and other physical characteristics are located. Second, there are other suitable means that FRA has already accounted for in this final rule with which to determine a train's speed or location. Railroad mileposts along the right of way currently help denote a train's exact location. Measured mile markers along the right of way are often used along with stopwatches, which are permitted to be used by this regulation, to determine the accuracy of a train's speed indicator. Calculators are permitted to be used under this final rule, and can be used to determine formulas such as train stopping calculations. Locomotive foot-counter

devices (sometimes in conjunction with calculators) are often used to determine when a train is clear of a speed restriction, interlocking, or working limits. Also, by nature, GPS devices are sometimes complicated devices to operate that could distract employees from safety-related functions. Finally, as noted above, if such devices are needed, the railroad is free to supply such devices for business purposes. FRA has not been presented with sufficient justification that these devices enhance railroad safety, especially because the above-listed means to determine train speed and location are already available to operating employees. Accordingly, FRA has chosen not to allow for the use of personal GPS devices in this final rule.

### **Cameras**

In § 220.309(c) of the NPRM, FRA proposed allowing the use of “stand-alone” cameras to document a safety hazard or a violation of a rail safety law, regulation, order, or standard. The proposed text allowed for that use if the camera was not a part of a cell phone or other multi-functional electronic device. Further, the proposed text did not allow for the use of that device by a locomotive engineer on a moving train. In response to this proposal, FRA received four comments, which are addressed in detail below.

After reviewing all of the comments, FRA declines to expand this provision to allow for the use of personal cameras that are part of a multi-function device during the periods of time prohibited by this rule. However, the agency is expanding the exception to allow for the use of railroad-supplied multi-functional devices as a camera. In other words, if a railroad issues a multi-functional device that includes a camera feature, the camera may be utilized by operating employees for an authorized business purpose as specified by the railroad in writing in accordance with this exception. Those purposes

must be approved by FRA. FRA has chosen to allow such use to account for devices that may be used in the future as part of evolving technologies that railroads may utilize that could enhance safety. FRA has also chosen to amend the proposed exception as there may be less temptation to improperly use a railroad-supplied device as opposed to an employee's personal device.

Finally, FRA has changed the provision to eliminate reference to the use of video to document safety hazards. Many locomotives are already equipped with forward facing locomotive video recorders, and FRA is unaware of any sufficient justification to allow railroad operating employees an exemption to use video cameras during any additional periods of time outside those prohibited under §§ 220.303-220.305. Next, the language of the camera exemption was also changed to remove any reference to videos to prevent confusion. FRA realizes that some cameras intended for use as a camera have a video function, and believes those devices should be able to be used under this exception to take photographs. A number of cell phones, however, also have camera functions. By limiting this exemption to prohibit those devices unless they are railroad-provided and used for an authorized business purpose stated in writing by the railroad and approved by FRA, FRA avoids situations where those devices could be used outside these parameters by a railroad operating employee who claims to be documenting a safety hazard.

AAJ commented that FRA should also allow for the use of cell phones to photograph safety hazards. AAJ reasoned that it was unreasonable to expect railroad employees to carry stand-alone cameras, and proposed allowing for the use of cell phone cameras if the device were turned off immediately after documenting the hazard. AAJ further asserted that railroads underreport accident and injury data and employees are

thus at a disadvantage in ensuring safe working conditions. AAJ also discounted that the use of cell phone cameras presented enforceability problems for FRA.

In response to AAJ's comment, FRA notes that AAJ acknowledged that the proposed NPRM exemption regarding use of cameras would be an expansion of the current allowances under EO 26. Section 220.309(c) of this final rule will allow for the expanded use of cameras to document safety hazards. However, by prohibiting cell-phone cameras except in narrow circumstances, FRA enhances its goal of attempting to eliminate the use of distracting electronic devices by railroad operating employees. In FRA's experience, personal cell phones account for the vast majority of documented instances where electronic device distraction contributed to railroad accidents. By disallowing the use of a camera that is part of a personal cell phone, the agency hopes to minimize use of cell phones during safety-critical times, and therefore prevent future accidents. Further, even outside the expanded ability to photograph safety hazards that this rule grants, railroad employees can always report these hazards to FRA or to the railroad. Lastly, FRA is not prohibiting employees from carrying stand-alone cameras. Whether an employee chooses to carry a personal camera to document potential safety hazards is at his or own discretion subject to railroad rules. Further, during the periods of time when electronic devices are not prohibited from being used by this regulation, employees are free to use their personal cell phones in any manner they wish, including the camera function, provided that use is in accordance with any applicable railroad operating rules.

AAR requested that FRA delete this proposed camera exemption as unnecessary and compromising to security. AAR first reasoned, that even without the use of

potentially distracting cameras, operating employees have other means of reporting safety issues to both the railroad itself and to FRA. Second, AAR asserted that for security reasons FRA should not allow for the use of cameras at all, as employees could then post pictures of security-sensitive locations. In response to AAR's comment, FRA declines to delete § 220.309(c) from the final rule. As discussed in the NPRM, FRA realizes the importance of being able to document violations of railroad safety laws and potential hazardous conditions, and FRA does not want to infringe upon that usefulness. The provision in the final rule, while limiting the use of electronic devices, still allows for hazardous conditions to be documented safely. Further, FRA has no information that railroad employees distributing what could potentially be security-sensitive pictures has been an issue in the past, and this regulation only exempts cameras for the purposes of documenting safety hazards, and not for any other circumstances.

Amtrak also commented on the use of cameras, and, similar to their comment on GPS devices, wanted to ensure that the proposed regulation would not curtail its authority to issue railroad-supplied electronic devices that contain a camera feature, so that its employees would be able to utilize that function for authorized business purposes. Amtrak stated that it envisioned the use of the camera function on railroad-supplied devices being utilized to document an equipment defect or hazard. Amtrak stated that such use could help expedite repair requests and forward safety hazard information to the railroad. In response to Amtrak's comment, such use of a railroad-supplied device would be permissible under this final regulation, as is explained above.

Finally, the Labor Organizations' joint comment stated that the proposed text should be expanded in the final rule to allow for the use of the camera feature of a

cellular telephone. They stated that any device used to document a hazard should be permitted to be used, reasoning that the word of railroad employees is not usually sufficient for FRA to initiate investigations and that if employees do not have the ability to document a hazard in realtime, railroads could repair these conditions before an investigation can begin. Finally, the comment stated that it is unnecessary to require employees to carry several separate electronic devices in order to perform their duties.

In response, FRA often receives complaints from railroad employees, and investigates them if they allege on their face a violation of a railroad safety regulation, law, or order. When FRA finds that those complaints have merit, FRA often takes enforcement action as a result. Next, the Labor Organizations' comment states that if a safety hazard is not documented at the time the employee is present, that the condition is often repaired. However, the goal of documenting hazards is that such conditions would be repaired and made safe in a timely fashion. Thus, FRA does not find that argument persuasive. Finally, as stated above in response to AAJ's comment, FRA does not require operating employees to carry any devices. This regulation merely sets the requirements for the permissible uses of certain electronic devices in order to eliminate distractions that have in the past had severe consequences. If operating employees choose to carry such devices, this regulation merely sets forth certain prohibitions on their use.

**Comment Proposing (1) New Exception for Electronic Devices Necessary to Document Violations of Safety Laws or (2) Amendments to Locomotive Safety Standards**

The Labor Organizations comment requests a general exception for “[o]ther electronic devices that are necessary to adequately document a safety hazard or a violation of a rail safety law, regulation, order, or standard, provided that the devices are turned off immediately after the documentation has been made.” The Labor Organizations expressed their concern that a carbon monoxide detector would be subject to the restrictions in this subpart. In particular, FRA would consider a carbon monoxide detector to be excluded from the definition of “electronic device”. A carbon monoxide detector does not perform any specifically prohibited functions, and it does not entail the risk of distracting an employee from a safety-related task while being unnecessary for the employee’s health and safety. In addition, FRA does not believe this proposed exception is necessary in general. Every FRA region has a toll-free phone number to report safety hazards and violations. As discussed above, employees can report safety hazards to FRA. Accordingly, no general exception for devices necessary to document safety hazards will be included in Subpart C.

The Labor Organizations’ recommended that if FRA denied the request for this general exception that it instead amend 49 CFR part 229, Railroad Locomotive Safety Standards. Their suggestion was to allow an employee to refuse to operate a locomotive if the employee makes a good-faith determination that it does not comply with certain regulatory requirements, such as § 229.119(d), requiring proper ventilation, and § 229.121, locomotive cab noise. This suggestion is outside of the scope of the NPRM and thus will not be addressed by this final rule.

### **Minimum Standards**



The Labor Organizations' comment requested that FRA prohibit railroads from imposing more restrictions on the use of electronic devices than those of this rule. FRA declines to do so. Specifically, the Labor Organizations were concerned that railroad operating rules would prohibit using calculators and the use of cameras to take pictures of safety hazards. FRA finds it unlikely that a railroad would prohibit the use of a calculator. There is also a significant possibility that some, if not all, railroads will allow the use of cameras to take pictures of safety hazards. Amtrak, for example, argued that FRA's proposed exception be expanded to allow cameras on cell phones and other multi-functional devices to be used. Railroads have a vested interest in safety and discovering and remedying safety repairs. Train accidents are generally expensive. In addition, even if a railroad prohibited the use of cameras for this, employees will be more likely to report such defects to FRA. FRA declines to refuse railroads the right to impose more restrictive use of electronic devices.

That railroads may impose more restrictions than Subpart C allows is the primary reason why FRA did not delete § 220.311 (standards for use by deadheading employees) as AAR requested. AAR voiced its concern that a deadheading employee would unsafely use an electronic device while walking through a yard. This conduct would be prohibited under § 220.311 as it would be interfering with the employee's personal safety. Nevertheless, railroads may choose to amend their operating rules to prohibit deadheading employees from using electronic devices. FRA declines to do so, noting that another commenter objected to any restrictions for deadheading employees.

#### **Authorized Business Purpose**

An “authorized business purpose” is necessary for railroad operating employees to use an electronic device under the less restrictive circumstances of § 220.307, as opposed to § 220.305 which governs personal electronic devices. The Labor Organizations stated their concern that a railroad would unreasonably expand the definition of “authorized business purpose,” and proposed a definition of “authorized business purpose” that, among other things, would require approval by FRA and would include language stating that an “authorized business purpose” is one that “is necessary to report, document, or prevent an imminent safety hazard . . .” We believe this suggested definition is unnecessarily restrictive, but are persuaded by the Labor Organization’s argument that a railroad might consider requiring a railroad operating employee to answer questions regarding incidents from previous duty tours to be an “authorized business purpose.” Accordingly, FRA has defined the term as “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.”

### **Passenger Trains and Considerations Related to Use of Railroad-Supplied Phones**

Three commenters (Caltrain, Amtrak, and an anonymous commenter) were specifically concerned about the use of electronic devices by passenger train railroad operating employees. Caltrain, a commuter rail service, requested that FRA incorporate a provision of EO 26 that was not included in the proposed rule. The provision Caltrain referred to was paragraph (d)(3) of the Order, which allows operating employees to use railroad-supplied devices within the body of passenger trains. Caltrain was concerned that the exclusion of this provision would limit its ability to continue to use Nextel two-way communication systems. Those devices can receive texts from its centralized

control facility but cannot transmit text messages or make or receive phone calls. Caltrain requested that paragraph (d)(3) of EO 26 be incorporated into Subpart C. That provision reads as follows:

A railroad operating employee may use a railroad-supplied electronic or electrical device for an approved business purpose while on duty within the body of a passenger train or railroad business car. Use of the device shall not excuse the individual using the device from the responsibility to call or acknowledge any signal, inspect any passing train, or perform any other safety-sensitive duty assigned under the railroad's operating rules and special instructions.

When EO 26 was drafted, FRA considered that it would be appropriate and necessary for conductors of passenger trains to use cell phones or other electronic devices as they dealt with passengers. For this reason, the only restrictions on that use when the employee was outside of the cab of the locomotive were that the use had to be for an approved business purpose and it could not interfere with the performance safety-sensitive duties. Subpart C does not explicitly address conductors or other railroad operating employees of passenger trains using railroad-supplied electronic devices; however, Subpart C retains the substantive restrictions as set forth in EO 26. Conductors of passenger trains wanting to use railroad-supplied electronic devices outside the locomotive must comply with § 220.307, requiring the use to be for an authorized business purpose, as well as § 220.305, which states that the employee may not use an electronic device if it would interfere with the employee's safety-related duties. Subpart C does not otherwise restrict the use of railroad-supplied electronic devices of conductors or assistant conductors.

Caltrain did not specify whether its locomotive engineers currently use its Nextel system while in the cab. Subpart C kept the restrictions of EO 26 regarding a locomotive

engineer using railroad-supplied electronic devices; engineers may not use them while on a moving train, when any member of the crew is on the ground or riding rolling equipment during a switching operation, or when any railroad employee is assisting in preparation of the train for movement. Assuming Caltrain does not fall under the exception of § 220.309(f), Caltrain must apply for and receive a waiver for its locomotive engineers to use its Nextel system in other circumstances. FRA believes the way that the rule is currently written adequately balances the needs of passenger train operations and safety. Subpart C does not prohibit conductors on passenger trains from communication channels for purposes relating to railroad operations as one anonymous commenter, concerned about a recent commuter train's lack of air conditioning, implied.

As previously discussed, Amtrak submitted a comment expressing its desire for FRA to clarify whether its conductors may use GPS technology, possibly within the cab of a controlling locomotive. Amtrak also requested that FRA explicitly allow railroad operating employees to use the cameras of a multifunctional device to take pictures of safety hazards. Amtrak plans to distribute conductor handheld electronic devices nationally in 2011. Subpart C will allow Amtrak employees on passenger trains to use both GPS technology and cameras to take pictures of safety hazards, provided that these uses are specified in writing and do not interfere with an employee's safety-related duties.

If the employee is located inside the cab of a passenger train, then a conductor may use a GPS application or a camera function on a railroad-supplied handheld device if the crew has held a safety briefing and all crewmembers have unanimously agreed that it is safe to use the device. If a passenger crewmember is outside the cab of a locomotive, a conductor may use such a device to photograph a safety hazard if the employee complies

with both § 220.307, requiring the use to be for an authorized business purpose, and § 220.303, which states that the employee must not use an electronic device if it would interfere with the employee's safety-related duties.

### **Operational Tests**

Section 220.315 of the NPRM contained proposed requirements related to operational tests. In response, FRA received three comments from AAR, NTSB, and the Labor Organizations. AAR's comment stated that it was not clear on the meaning of proposed § 220.315(c) and questioned whether FRA implied that employees were supposed to be aware that operational tests were occurring. AAR asked for clarification from FRA on this point. In response, FRA did not intend that railroad employees must be notified that an operations test will occur or is occurring under proposed § 220.315(c). The explanation for that proposed provision was intended to convey that once railroad employees became aware that an operations test was occurring, that even if use of electronic devices was otherwise permissible under the proposed regulation, that they refrain from use of any devices until the completion of the test. This provision was intended to help ensure that employees could achieve the maximum learning benefit from operational tests. However, in light of AAR's comment that the provision was confusing, and after further review, FRA has decided to delete proposed § 220.315(c) from this final rule. FRA decided to do so as in most circumstances, other than a banner test, employees are not even aware an operational test is underway until after the test is completed. Thus, the proposed provision may not have been of much practical utility, and could have led to additional confusion.

The NTSB's comment stated that FRA should provide more guidance to develop uniform standards of guidance across the railroad industry. NTSB stated that the use of in-cab audio and image recordings could be used as a deterrent, and reiterated a recommendation published as a result of the Chatsworth, California, Metrolink crash. That recommendation is that FRA require the installation of inward-facing video cameras and also require that railroads regularly review the images recorded on these cameras.

In response to NTSB's comment, FRA has left to the railroads' discretion how to conduct operational tests on the requirements of this subpart, but has required that those tests shall be included in a railroad's program of tests under 49 CFR part 217. FRA has also required that a railroad's program be revised to include a minimum number of tests that must be performed. This is consistent with FRA's approach to allowing railroads the discretion to best tailor testing to their specific operating situations and needs. FRA currently does not have regulations mandating inward-facing video cameras on locomotives to monitor employee's actions while operating trains. As NTSB's comment mentioned, requiring such cameras could raise potential privacy concerns. Further, no FRA regulations preclude railroads from installing inward-facing cameras at their own discretion should they want to monitor their employees actions, as some railroads currently do. Also, requiring inward-facing video cameras was outside the scope of the NPRM. Finally, 49 CFR 229.135 currently requires that most controlling locomotives be equipped with event recorders. Event recorders allow railroads to monitor how trains are operated by their employees.

The Labor Organizations' comment requested that FRA expand the proposed § 220.315(b) prohibition on calling the device of a locomotive engineer on a moving train.

The comment proposed text that would prohibit railroad managers from calling the devices of all crewmembers during additional periods. In response to the Labor Organizations' comment, FRA has decided to amend the text of proposed § 220.315(b) in this final rule. FRA has included all railroad operating employees rather than just locomotive engineers, expanded the provision to prohibit railroad managers from calling the devices of employees during additional safety-critical times rather than only when on a moving train, and limited the prohibition to calls when the manager knew or should have known that the crew was occupied with safety-critical duties. FRA has chosen to make these changes because structured operational tests are supposed to be fail-safe tests that do not create dangerous situations. The periods of time this final rule mandates that an employee's personal device must be turned off signify that the employee is performing a safety-sensitive function. Therefore, calling the operating employee's cell phone during those periods of time could create a distraction that the operational testing officer cannot control if the device is not turned off. As such, the rule has been expanded to include those times when operating employees on riding moving equipment, on the ground, or assisting in the preparation of their train for movement. By expanding this provision, FRA intends to reduce the risk of operational tests creating potentially dangerous situations.

### **Instruction**

Section 220.313 of the NPRM contained the proposed instruction requirements for this regulation. AAR commented that the proposed schedule in that section was impractical and that the instruction requirements were unnecessary. AAR stated that because EO 26 has been in place since October 2008, railroads and their employees have

experience with prohibitions on electronic devices, and thus do not need any further instruction. The comment stated that there has not been a showing that employees do not understand the existing prohibitions, and also that a formal approval process for instruction programs is not needed. AAR also commented that it was counterproductive to train employees on both relevant railroad operating rules and on the requirements of this new subpart, stating that this could lead to confusion among employees. AAR stated that because of this potential confusion, that proposed § 220.313(a)(2)(iii) is unnecessary. AAR's comment proposed an alternate § 220.313 for FRA to consider adopting.

After reviewing AAR's comment, FRA continues to believe that the proposed instruction section for this regulation is necessary. This final rule is substantively different from EO 26, and thus railroad operating employees should be properly apprised of its updated provisions and of the consequences for non-compliance. If employees are going to be operationally tested on the requirements of this subpart as § 220.315 requires, then FRA must also require that employees be instructed on these requirements. The instruction requirements found in § 220.313(a)(2) are minimal, as FRA only specifically requires that employees be instructed on when personal devices must be turned off, when railroad-supplied devices may be used, and the distinction between possible penalties for violations of this new subpart and corresponding railroad operating rules. FRA specifically mentioned these three points to emphasize their urgent importance. As discussed in the NPRM, employees need to be made aware of the distinction between the consequences of violating railroad operating rules and the consequences of violating FRA's regulation, as the potential consequences of violation of this regulation, in terms of liability, are quite different from those of the railroad's system of sanctions. Other



than these listed minimal requirements, railroads are free to use their discretion in instructing their employees on the requirements of this subpart. AAR's comment did not elaborate why it believes that no further instruction is necessary on this subject, other than that EO 26 has been in place since October 2008 and railroads already have rules in place regarding electronic device use. FRA's response is that it continues to find that violations of EO 26 are occurring, and, that incidents continue to occur where electronic device use is a contributing factor. FRA believes that instruction on the requirements of this subpart could help to alleviate some future incidents, especially when the consequences of non-compliance with FRA regulations are explained. In the future, should FRA add violations of this subpart as revocable violations for locomotive engineers and conductors as it is contemplating, it is critical that employees have been instructed on these distinctions.

Next, FRA is not requiring that railroads submit their programs under this section for approval, but merely reserves the right to review a railroad's program. The recordkeeping requirement is present so that FRA has a mechanism to ensure that instruction is indeed being performed as required, similar to other similar provisions found in FRA's safety regulations. FRA has built flexibility into the recordkeeping requirement to allow for the use of electronic records. Also, the dates that FRA has decided on for implementing § 220.313 fall in line with those suggested by AAR in its comment. This final rule will be published in advance of when AAR states most railroads finalize their instruction schedules. The regulation will also allow for sufficient time for employees to be instructed in the first quarter of 2011, which AAR indicates is industry norm.

## **Regulatory Impact Analysis**

In its comment, AAR takes issue with FRA's assertion that, "by virtue of FRA promulgating prohibitions on the use of electronic devices, the use of such devices at inappropriate times and the number of accidents attributable to such use would decrease." AAR believes that FRA's assertion is unsubstantiated, that railroad operating rules go further in restricting the use of electronic devices than the proposal, and that "there is no evidence that FRA prohibitions on the use of electronic devices will have a greater effect than railroad operating rules on the use of electronic devices or accidents attributable to their use."

FRA clarifies that the safety impact of promulgating Federal restrictions on the use of electronic devices is incremental in nature. This safety impact is largely attributable to the restrictions instituted by EO 26. FRA believes that Federal restrictions on the use of electronic devices taken together with existing railroad operating rules will have a greater effect than solely railroad operating rules on the use of electronic devices or accidents attributable to their use. FRA is not claiming that the additional or incremental impact of Federal restrictions is greater than the impact of the railroad operating rules. This rule does not, of course, supplant railroad operating rules; it complements railroad operating rules. The deterrent effect of the Federal restrictions is cumulative with that of railroad operating rules. That is, operating rules presumably already have some deterrent effect on the improper use of electronic devices because of the implicit or explicit threat of punitive actions, such as dismissal from employment, that employers could take in response to violations of its operating rules prohibiting the improper use of electronic devices. Federal intervention adds yet another possible

consequence to the improper use of electronic devices: possible sanctions. These sanctions would not exist absent Federal regulatory action. Thus, prior to Emergency Order 26 and this rule, the possible consequences of being observed improperly using an electronic device equaled whatever action the employer took against the offending employee. Conversely, after the issuance of Emergency Order 26 and with this rulemaking, the possible consequences of being observed improperly using an electronic device equal the actions taken by the railroad plus any FRA sanctions, which may include civil penalties, the removal from safety-sensitive service, and disqualification from safety-sensitive service on *any* railroad.<sup>12</sup>

The existence of a Federal rule may also serve to raise general employee awareness and signal the importance of the safety implications of improper usage of electronic devices. However, as a point of further clarification, it is not necessarily solely the act of restriction or the existence of a Federal rule alone that would be expected to incrementally affect individual behavior. A principal mechanism for effecting change in employee behavior is the possibility of sanctions for the inappropriate use of electronic devices. As the RIA that accompanied the NPRM states, by including the possibility of individual sanctions for the inappropriate use of electronic devices, “FRA effectively increased the cost of performing railroad operations while distracted by electronic devices. FRA believes, in accordance with economic theory, that such an increase in the cost of performing railroad operations while distracted by electronic devices will lead individuals to choose to engage in such activities less often, resulting in safer railroad operations.”

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<sup>12</sup> There are also possible sanctions applicable to the employer both in Emergency Order 26 and the proposed rulemaking, but these may not be as salient in the individual employee’s choice on whether to use an electronic device.

Furthermore, by creating Federal restrictions on the unsafe use of electronic devices with EO 26 and codifying the restrictions with this rule, FRA increases the probability of FRA inspectors observing, and thereby documenting, an employee who chooses to improperly use an electronic device in disregard of railroad operating rules and Federal regulations. This is because FRA inspectors have limited enforcement capability with respect to railroad operating rules that are not based on Federal regulations. Inspectors may write defects for observations of failure to follow railroad operating rules, but defects do not carry any sort of civil penalties on either the railroad or its employees. Furthermore, although inspectors generally write defects when they observe violations of railroad operating rules, inspectors may not be as focused on observing non-compliance with railroad operating rules, compared to observing non-compliance with Federal rules and emergency orders. In contrast, FRA inspectors have definite enforcement capabilities with respect to Federal regulations and emergency orders. Through the promulgation of Federal restrictions on the improper use of electronic devices, FRA inspectors become active enforcers of these restrictions, and such enforcement becomes a high priority for inspectors. As a result, the probability of FRA's observing an employee improperly using an electronic device increases.

FRA also notes that railroad operating rules are subject to change at the railroad's discretion, without notice to FRA, and can vary from railroad to railroad. A Federal regulation limiting the use of electronic devices would ensure a uniform minimum standard that could only be revised with opportunity for notice and comment. A Federal regulation would also apply to new railroads.

FRA asserts that issuance of this regulation will further reduce risk and incrementally raise safety levels. The magnitude of the decrease in risk is uncertain due to the lack of empirical data regarding electronic device usage in railroad operations. To address this uncertainty, the RIA contained a multitude of break-even analyses that inform decision-makers as to how much of a decrease in the probability of an accident caused by electronic device usage would be necessary for the expected benefits of the rule to exactly equal the expected costs.

### **Other Comments**

FRA received other comments that may not have addressed a specific provision of the NPRM, or that are not addressed in this section or in the Section-by-Section Analysis below. Five of those comments came from individuals, with a sixth submitted by the National Safety Council. The National Safety Council submitted a white paper dated March 2010, titled *Understanding the Distracted Brain*. This document addresses the distracted driving problem, and contains an in-depth discussion explaining that the use of even hands-free cell phones does not eliminate driver distraction. The document further explains that multitasking impairs a driver's performance. FRA is appreciative that the National Safety Council submitted this document, as it helps further illustrate the necessity of regulations prohibiting the use of distracting electronic devices while performing safety-critical functions such as driving, operating a train, or flying.

Next, FRA received two comments from individuals who are generally opposed to this regulation. One commenter did not believe this regulation would be effective, stating railroads already have operating rules in place prohibiting the use of electronic devices, and that this will be a more monetarily costly rule than predicted. The

commenter also stated that certain electronic devices have utility in the railroad setting. In response, although railroads have operating rules in place regarding the use of electronic devices, the incidents referenced above and in the NPRM have shown those rules are not an effective deterrent to keep railroad employees from using distracting devices in a manner that severely impacts safety. Thus, FRA views this regulation as necessary. Further, FRA has built in exceptions to this rule that the commenter discusses in order to accommodate technologies that are beneficial to railroad operating environments and do not detract from safety. The second individual commenter states the regulation should only apply to employees on moving trains, and that cell phones can help save lives in an emergency if left on. FRA disagrees, as there are other safety-critical times when operating employees are on the ground where electronic device distraction can have severe consequences, such as when performing an inspection. Illustrating such is a December 2, 2009, Norfolk Southern train derailment. The train stopped after a detector alerted the crew to a problem, and while inspecting the train the conductor failed to notice a freight car that had already derailed. The conductor's cell phone records indicated personal cell phone use occurred during the period of time he was supposed to be inspecting the train. The train then continued on its route and a large-scale derailment occurred a short distance later.

An individual commenter expressed general support for additional regulation of electronic devices, referencing a fellow operating employee's extensive cell phone use. Another commenter was strongly opposed to ever giving railroads access to an employee's personal cell phone records. As indicated above, FRA did not propose such in the NPRM. Finally, an anonymous commenter submitted a comment after the

comment period had closed which discussed the June 21, 2010, MARC commuter train incident where passengers were stuck on a malfunctioning train for a lengthy time period without air conditioning during extremely hot weather conditions. The comment stated the final rule should not preclude railroad employees from using alternative channels to communicate to avoid future situations. As explained above and in the Section-by-Section Analysis, FRA has built exceptions into this rule to account for varying operating situations, with particular flexibility for railroad-supplied devices. The final rule also contains an exception allowing for the use of devices to respond to emergency situations.

### **III. Section-by-Section Analysis**

All section references below refer to sections in Title 49, Part 220 of the Code of Federal Regulations (CFR). The NTSB asked FRA to identify sanctions for violating this subpart. As part of FRA regulations, railroads and individuals violating of these provisions are subject to civil penalties under 49 U.S.C. 21301. Individuals who violate the final rule also may be possibly removed from safety-sensitive service under 49 U.S.C 20111, and, in the future, 49 CFR Part 240 may be amended to revoke the locomotive engineer certification of engineers who fail to comply with these restrictions.

Amendments to 49 CFR Part 220 (Part 220).

#### *§ 220.1 Scope.*

FRA amends the scope of § 220.1 to include the new Subpart C. The amendment states that Part 220 now sets forth prohibitions, restrictions, and requirements for the use of electronic devices. It also establishes that these are only minimum restrictions that must be complied with and that railroads are free to impose stricter prohibitions at their discretion.

*§ 220.2 Preemptive effect.*

FRA is removing this section from 49 CFR part 220 (part 220). This section was prescribed in 1998 and has become outdated and, therefore, misleading because it does not reflect post-1998 amendments to 49 U.S.C. 20106. Such a section is unnecessary because 49 U.S.C. 20106 and 20701-20703 and case law under those statutory provisions sufficiently address the preemptive effect of part 220. In other words, providing a separate Federal regulatory provision concerning part 220's preemptive effect is duplicative of statutory law and case law and, therefore, unnecessary.

There has been no opportunity for public comment on this particular amendment in the final rule. FRA has determined, pursuant to section 4 of the Administrative Procedure Act (5 U.S.C. 553), that prior notice and an opportunity for comment on the removal of § 220.2 are not necessary. The amendment is administrative in nature and merely eliminates an outdated and incomplete restatement of the preemptive effect of part 220. FRA is not exercising its discretion in a way that could be informed by public comment. As such, FRA finds that notice and public comment procedures are "impracticable, unnecessary, or contrary to the public interest" under 5 U.S.C. 553(b)(3)(B).

*§ 220.5 Definitions.*

FRA amends the existing "definitions" section for Part 220 by both adding new definitions and amending an existing definition. FRA adds new definitions for the following terms: Associate Administrator for Railroad Safety/Chief Safety Officer, authorized business purpose, earpiece, electronic device, fouling a track, FRA, in deadhead status, medical device, personal electronic device, railroad operating employee,



railroad-supplied electronic device, and switching operation. FRA also amends Part 220's existing definition of "train."

Of the new terms that FRA adds to this section, most of them had been previously defined in the Order, and proposed in the NPRM. Some of those definitions have been amended slightly to be more efficiently focused toward accomplishing the goals of this final rule. For example, as explained in the NPRM, in describing "electronic device," FRA broadens that description from that found in the Order to ensure that the definition in this final rule includes electronic book-reading devices or devices used to replicate navigation of the physical world. We have also excepted locomotive electronic control systems and digital timepieces from the definition. The first exception makes clear that this subpart does not affect the use of any control systems or displays in the cab of a locomotive that facilitate the operation of a train. We have specified that the control systems may be fixed or portable, and expanded the definition by removing the phrase "for a locomotive engineer" in recognition that devices under a conductor or other crewmember's control may be necessary to operate a train in response to AAR's comment that requested both of these minor changes. This rule instead obviously intends to address electronic devices that are not part of those systems. In addition, FRA expects that a device mentioned in AAR's comment (one to calculate where a locomotive horn should be sounded) would be considered to be part of the control system.

The second exception allows railroad operating employees the use of digital clocks or wristwatches whose primary functions are as timepieces. Timepieces are commonly used in the railroad industry to verify the accuracy of a locomotive's speed indicator. This function is safety-related in that it accurately allows a train crew to

comply with relevant track speed limits during the course of a train's movement. FRA notes that this specific provision is limited to allowing the use of a stopwatch, wristwatch, or other similar device whose primary function is the keeping of time. This provision does not allow for the use of other devices, such as a cell phone or a personal digital assistant, that might have a stopwatch function but whose primary purpose is not that of a timepiece. FRA has so limited this exception specifically to timepieces as enforcement otherwise would be difficult, but also primarily to avoid the potential for distraction when an employee might turn on a cell phone with a stopwatch function in order to verify the train's speed, but then might proceed to use that device in an otherwise impermissible manner.

FRA has also chosen to refer to an "electronic or electrical device" as only an "electronic device" in the rule. We have done so both for the purposes of complying with plain language directives and for brevity. We have also done so because "electronic device" is a more accurate descriptor of the devices meant to be subject to this rule. The definition of "railroad operating employee" has also been changed from that found in the Order. We have attempted to clarify which employees are covered by this rule in order to avoid inadvertent over-inclusion. The definition of "railroad-supplied electronic devices" has also been modified from the Order to mean that the term refers only to devices that are provided for a business purpose authorized by the employing railroad and not being used for something other than an authorized business purpose. FRA has slightly changed that definition in order to focus more narrowly on which devices will be considered railroad-supplied.

In addition, the definition of “railroad-supplied electronic device” and “personal electronic device” have both been altered somewhat from the definitions proposed in the NPRM. NJT requested and received a brief meeting with FRA officials, documented in the docket, raising the issue that it, as well as at least one other railroad, allows its employees limited personal use of phones the railroad provides for business purposes. How the electronic devices are being used at any given moment determines what standards-those for personal or railroad-supplied devices-should apply. The definition railroad-supplied electronic device was slightly altered to clearly reflect such. The amended definitions make clear that when a railroad-supplied device is being used for other than an authorized business purpose that for the purposes of this regulation that the device will be treated as a personal electronic device.

The only truly new definitions that were not established in some form in the Order are for the following terms: “Associate Administrator for Railroad Safety/Chief Safety Officer,” “authorized business purpose,” “earpiece,” “in deadhead status,” and “medical device.” However, these definitions were proposed in the NPRM. FRA adds a definition for the term “in deadhead status” because below in § 220.311 we explain that railroad operating employees in deadhead status are subject to somewhat different prohibitions on the use of electronic devices than are employees who are actively engaged in their assigned duties. The definition that we have is similar to and consistent with the existing definition of “deadheading” found in existing 49 CFR 228.5. FRA also adds the term “medical device” to the “definitions” section, as below we explain that the use of any electronic medical devices consistent with a railroad’s medical fitness for duty standards is exempt from the restrictions of this subpart. FRA wishes to make clear that medical

devices such as hearing aids or blood sugar monitors are exempt from the prohibitions that this rule puts forth. FRA finds that these devices do not detract from rail safety, but they may actually enhance safety in some circumstances for obvious reasons.

Two of the comments requested changes to the definition section. As noted above, in response to the Labor Organizations' comment, FRA is adding a definition for "authorized business purpose." AAR requested that FRA amend its definition of "fouling a track" to "an individual in such proximity to a track that the individual could be struck by a moving train or other on-track equipment." It reasoned that there would be times when, because of a wall or other physical restriction, an employee might not be able to move four feet away from the track to answer a phone call. FRA believes this scenario will be extremely rare and does not outweigh FRA's interest in consistency among its regulations: FRA's definition stems from 49 CFR 214.7. In addition, FRA believes that a measurement of four feet can be easier for employees to assess than trying to judge how close a train or on-track equipment will be.

Next, FRA amends the existing definition of a "train" in § 220.5. The existing definition specifically references a train for purposes of existing Subparts A and B to include "one or more locomotives coupled with or without cars requiring an air brake test in accordance with 49 CFR Part 232 or 238 ...". The existing definition resulted from FRA's work with an RSAC Working Group and intentionally meant to exempt certain trains and switching operations from the existing Part 220. That existing definition will still apply to Subparts A and B. However, we define "train" for purposes of Subpart C to go beyond locomotive or locomotives coupled to one or more cars that are subject to the

requirements of an air brake test. We use a more inclusive definition of “train” in order to apply the prohibitions on use of electronic devices to all switching movements.

Finally, FRA has eliminated one definition from this rule that appeared in the Order. The term “wireless communication device” has been eliminated, as the term “working wireless communications” is already included in existing § 220.5, and encompasses the substance of what FRA attempted to convey with that definition in the Order, and also because the devices described in that definition are already addressed by other provisions of this rule.

#### Subpart C--Electronic Devices

##### *§ 220.301 Purpose and application.*

FRA amends Part 220 by adding a new Subpart C. FRA’s purpose for promulgating this subpart is to limit distractions caused by electronic devices to railroad crews. FRA means to limit these distractions in its effort to improve railroad safety and prevent incidents such as those mentioned in the preamble above, where loss of human life, injuries, and property damage may have been attributable to distraction by these devices. FRA notes that this subpart sets forth minimum standards that must be complied with, yet we fully anticipate that railroads will implement even stricter guidelines via operating rules. This is consistent with both existing and § 220.1, which provides that Part 220 only sets minimum standards that must be complied with, but that railroads may adopt additional, more stringent, requirements.

Section 301 of this subpart describes both its purpose and application. Paragraph (a) of this section merely restates the subpart’s purpose as described above. Paragraph (b) makes clear that the subpart does not affect the use of working wireless

communications that railroads use under the authority of existing Subparts A and B. Paragraph (c)(1) explains that this regulation also does not in any way affect the use of railroad radios. Railroad radios are an essential part of daily operating practices, and FRA wishes to make explicit that this new subpart does not apply to their use. Paragraph (c)(2) of this section explains that in the event of a working railroad radio failure, that locomotive engineers or conductors may use electronic devices provided that use is in accordance with the applicable railroad's operating rules. FRA recognizes that, in certain instances, the use of an electronic device such as a cell phone in place of a malfunctioning radio may actually enhance safety rather than harm it. For example, should a crew need to contact a train dispatcher regarding their train's movement, a cell phone might in certain instances be the best means of reaching such a person in the event of a radio failure, and may provide a higher level of safety than not being able to make contact at all. So long as the device is used with the parameters of railroad operating rules, FRA has made this exception to the prohibitions on use of electronic devices discussed below.

*§ 220.302 Operating rules.*

This section is a new provision that was not included in the NPRM, but was referred to in § 220.313 where it was proposed that railroads instruct their employees on the operating rules implementing the requirements of this subpart. The reason for including this provision in the final rule is to ensure each railroad adopts operating rules that comply with the requirements of this subpart. As explained above, railroads are free to adopt more stringent requirements than those adopted here, but this provision ensures railroads cannot adopt operating rules that are less stringent than or are contrary to this

final rule. FRA is aware that most railroads already have operating rules in place governing the use of electronic device by their operating employees. However, at its discretion a railroad is also free to simply adopt the text of this subpart as its operating rule. If the railroad provides electronic devices to its employees, however, it must specify authorized business purposes in written procedures that are distributed to employees.

As stated above, FRA did not propose this section in the NPRM. However, this section is within the scope of the NPRM as it merely provides a mechanism for FRA to enforce this final rule and to ensure that railroads implement the requirements of the final rule. Further, as mentioned above, reference to railroads being required to have operating rules implementing the requirements of this subpart was proposed in § 220.313 of the NPRM.

*§ 220.303 General use of electronic devices.*

FRA adds § 220.303 to this subpart to set forth general guidance regarding the use of electronic devices. This section would prohibit railroad operating employees from using electronic devices in any way that would detract from railroad safety, irrespective of the other specific provisions and exceptions to this rule. This provision reinforces FRA's overarching mission of ensuring safety while railroad employees are performing their duties. As discussed above, distractions resulting from the use of electronic devices can result in railroad accidents that have catastrophic consequences. This paragraph is also meant to encompass other potential uses of electronic devices that may arise outside those detailed or contemplated by this rule or by railroad operating rules.

The Labor Organizations' pointed out that individuals beside railroad operating employees could be in the cab of a locomotive at critical times and could distract those employees from their safety-related duties. FRA adopted the view that no one in the cab of a controlling locomotive should use an electronic device in a way that distracts a railroad operating employee from a safety-related duty and amended § 220.303 accordingly.

Section 220.303 is intended to be restrictive, as FRA views any use of electronic devices not contemplated in this subpart as capable of distracting employees while on duty. A commenter suggested that FRA prohibit everyone, including members of the public, who is fouling a track from using cell phones. While limiting members of the public is outside the scope of the NPRM, FRA believes that this provision will limit the most hazardous use of electronic devices by the individuals most often at risk.

*§ 220.305 Use of personal electronic devices.*

This section prohibits the use of personal electronic devices while any safety-related duty is being performed. This provision governing personal electronic devices is self-explanatory, and is meant to be more restrictive than provisions governing railroad-supplied electronic devices. See § 220.307 discussed below. Provisions (a) through (c) of this section dictate certain safety-critical times during which each personal electronic device must be turned off with any earpiece removed, and are meant to encompass the situations in which FRA finds it is absolutely impermissible to use a personal electronic device. FRA notes that compliance with this section might have prevented many of the accidents described above and in the Order that occurred as a result of distraction caused by electronic devices.



*§ 220.307 Use of railroad-supplied electronic devices.*

This section addresses the use of electronic devices that are supplied by the railroad to employees and are currently being used for business purposes. Paragraph (a) sets forth the general restriction that any use of these devices must be in accordance with railroad instructions for authorized business purposes as determined by the railroad. FRA also wishes to make clear that the use of railroad-supplied devices contemplated by this provision is limited to those authorized by the railroad in writing. In addition, uses involving the taking of photographs and videos must be approved by FRA. This is to prevent, for example, a crewmember using a camcorder for an entire trip.

Paragraph (b) sets forth the specific instances where FRA prohibits any use of railroad-supplied electronic devices by a locomotive engineer who is at the controls of a train. Similar to the conditions set out in § 220.305, paragraph (b) of § 220.307 describes specific instances where FRA finds distraction by electronic devices impermissibly interferes with railroad safety. While the actions specified in paragraph (b) are taking place, it is imperative that a locomotive engineer be attentive to his or her duties and not be distracted by any electronic device, regardless of whether that device is railroad-supplied or not. FRA also notes that paragraph (b)(3) of this section encompasses those times when passengers are boarding or alighting from a train. For example, it would be a violation of this regulation if a locomotive engineer at the controls of a passenger train was using a railroad-supplied electronic device while the train was stopped and passengers were boarding. Paragraph (c) sets forth the circumstances under which an operating employee other than a locomotive engineer in the situations described in

paragraph (b) may use a personal electronic device while located in the cab of a controlling locomotive.

In its NPRM, FRA proposed that paragraph (c) only permitted use of a mobile telephone or remote computing device under the conditions of that paragraph. FRA has reconsidered and believes that limiting use to a mobile telephone or remote computing device would be overly restrictive and possibly limit the use of helpful technologies that emerge. Devices used in these circumstances may only be used if a safety briefing is held by all crewmembers in the locomotive, who must come to an agreement that it is safe to use the device. It is FRA's intent that the permissible use of these devices under this paragraph must be for a railroad-related purpose, e.g., to contact a dispatcher, control operator, or yardmaster. It is not permissible to use the mechanisms provided by this section to use an electronic device for a personal use, such as making a personal phone call or watching a movie. When an employee uses a railroad-supplied device for personal reasons, the device is considered a personal device and governed accordingly. This provision and the provision found in paragraph (d) of this section discussed below both state that they apply only to employees who are not in deadhead status. Different rules apply to employees in deadhead status, as is explained below in the analysis to § 220.311.

Paragraph (d) of § 220.307 explains the conditions under which it is permissible for an operating employee who is outside the cab of a controlling locomotive to use a railroad-supplied device. It sets forth two conditions that must be met for that use to be permitted. The first condition is that no crewmember may be fouling a track. The second condition, at paragraph (d)(2) of this section, states that all crewmembers agree it is safe

to use the device. An instance described in the background section of the Order discusses an incident that occurred on December 21, 2005, when a contractor working on The Kansas City Southern Railway Company was struck and killed by a train after fouling a track while allegedly talking on a cell phone. Although in that case the incident involved a contractor who was apparently not a train employee, FRA notes that compliance by operating employees with the provisions of paragraph (d) would eliminate any similar occurrences among operating employees resulting from the impermissible use of electronic devices.

In the Order and as proposed in the NPRM, a railroad operating employee had to ensure that switching operations were suspended to use a railroad-supplied device in these circumstances. Because of this, AAR requested an exception for employees to use railroad-supplied devices inside buildings. It also recommended that FRA have § 220.307(c) cover employees inside and outside the cab and delete paragraph (d) completely. FRA has loosened the restrictions of paragraph (d) in response to these concerns; however, it does not add an exception for employees inside buildings. FRA believes that crews should function as a unit during any particular operation and does not see an advantage to have one employee leaving a train to go into a building to use an electronic device. FRA believes that requiring the employee not to be fouling a track and having other crewmembers to agree it is safe to use a device will provide adequate safeguards without operations suspended, especially since any use must be for an authorized business purpose and cannot interfere with a railroad operating employee's performance of safety-related duties.

*§ 220.309 Permitted uses.*

This section establishes six uses of electronic devices that FRA finds to be permissible. This list is intended to be exhaustive. FRA has specifically weighed other exceptions and uses, such as the proposed GPS device and personal emergency exceptions discussed above. After contemplating those other uses, at this time FRA does not agree there is a need for further permitted use of electronic devices other than those described here. Also, as stated in the text of this section, these permitted uses are subject to the requirement that the use not interfere with any employee's safety-related duties. This is consistent with the overall goals of this rule, and also specifically with the general prohibition established by § 220.303 discussed above.

Paragraph (a) of § 220.309 refers to electronic storage devices that specifically hold relevant operating documents that a crew might need to access during the normal course of their duties, as FRA is aware that some railroads issue devices to their operating employees that contain such information. FRA views this use as no different from a crewmember accessing relevant paperwork, such as a railroad timetable or train consist, in hardcopy form during the course of her duties. However, as stated in the text of paragraph (a), the use of this device must be authorized under an applicable railroad operating rule. For example, if a freight conductor wished to utilize a railroad-supplied electronic device while in the cab of the controlling locomotive of a moving train for the purpose of accessing a railroad operating rule, he would be allowed to do so if permitted by applicable railroad operating rules. If railroad operating rules more stringent than those provided by this subpart prohibited the use of that device while on a moving train, then that use would be disallowed.

Paragraph (b) of this section specifically allows for the use of personal electronic devices in response to an emergency situation. This paragraph is meant to allow flexibility to this regulation, as common sense dictates that unpredictable emergency situations may arise where use of a personal electronic device, such as a cell phone, may be appropriate. FRA contemplated this when it proposed § 220.301(b), which allows for use of a personal electronic device in instances where a radio failure occurs, but also proposes this broader emergency exception to build in flexibility where common sense dictates.

Paragraph (c) of this section is amended from that proposed in the NPRM. This provision specifically allows for employees to take a photograph of a safety hazard or a violation of a rail safety regulation, or order outside of those periods of time where it would otherwise be prohibited by § 220.303 or by § 220.305. However, it provides that only cameras may be used to take these photographs, unless the device is a railroad-supplied device as discussed above. A camera that is equipped with the ability to take video is allowed, but no video may be taken under this exception. As stated in the rule text, a camera that is part of a personal cell phone or other similar personal electronic device is not included in this exception. To allow personal cell phone cameras to be used outside the periods of time prohibited by § 220.305 would present enforceability issues for FRA. More importantly, however, FRA also decided such because after turning on a device such as a cell phone to take a photo, FRA does not want to encourage or permit an employee to then continue to use the device. FRA wishes to avoid presenting any temptation once a device is turned on to then send text messages or engage in other distracting use of electronic devices. Use of the camera to document such rail safety

hazards or violations is only permitted where its use does not interfere with a crewmember's performance of a safety-related duty, is turned off immediately after documentation has been made, and is not used by a locomotive engineer who is at the controls of a moving train. FRA realizes the importance of documenting hazardous conditions, but emphasizes that such documentation should only be made when the filming of the hazard itself does not create a hazardous situation. For the reasons explained above in response to public comments, FRA has also deleted reference to the use of "video" to document safety hazards in this final rule. An employee taking advantage of this exception using a railroad-supplied device must be using the device for an authorized business purpose that has been approved by FRA.

Paragraph (d) permits the use of a calculator. The use of this device is common in the railroad industry for important safety-related purposes. Train tonnage, train length, and train stopping formulas are commonly computed using a calculator. An example of the safety-related reasons for allowing the use of a calculator includes the need to compute train length accurately so that a locomotive engineer (via the locomotive's distance counter) can accurately ascertain when his or her train has cleared a relevant speed restriction, interlocking, or working limits. However, consistent with paragraph (c) above, FRA has chosen to limit the permissible devices under this paragraph to those whose primary purpose is as a calculator. FRA will not allow the use of another device, such as a personal cell phone that might have a calculator function..

Paragraph (e) permits the use of a medical device, if that use is consistent with the railroad's standards for medical fitness for duty. In putting forth this exception, FRA envisioned blood sugar monitors used by operating employees with diabetes, hearing aids

used by operating employees with hearing loss, etc. The definition of a “medical device” was added to the definitions section of this part, at § 220.5, as is discussed above. FRA finds that the use of these devices does not detract from rail safety and in many instances may enhance it. For example, an operating employee with hearing loss who utilizes an electronic hearing aid may consequently be able to communicate via working radio more effectively, resulting in safer train operations.

Paragraph (f) permits the use of wireless communication devices for crewmembers of trains that are exempt from the requirement of a working radio under § 220.9(b). That section exempts railroads that have less than 400,000 annual employee work hours from being required to have a working radio on the controlling locomotive of certain trains so long as such usage is limited to performing the employees’ railroad duties. FRA created this exception to allow smaller railroads to continue to operate as they are presently permitted. The locomotives of these railroads do not operate at high speeds, do not handle regular passenger traffic, are only permitted to operate over joint territory in specific, low-speed circumstances, and must have working wireless communications aboard the controlling locomotive of trains containing placarded hazardous material loads. As such, FRA finds there is no safety risk in continuing to allow permitted railroads to use wireless communication devices in place of railroad radios so long as such usage by railroad employees is limited to performing their railroad duties. It is not the intent of this rule to affect in any way the use of working wireless communications pursuant to existing Part 220, as those presently permitted business uses have not been problematic in regard to safety in the past. This rule is instead obviously directed at the type of use that occurred in the railroad accidents described above.

*§ 220.311 Railroad operating employees in deadhead status.*

This section establishes guidelines for the use of an electronic device by operating employees in deadhead status. The definition of “in deadhead status” has been added to the "definitions" section of this part at § 220.5 as discussed above. Paragraph (a) of this section allows for employees in deadhead status to use electronic devices so long as that use does not interfere with any employee’s safety or the performance of safety related duties. FRA created this loosened restriction on employees in deadhead status as the agency recognizes that while deadheading, operating employees typically do not have any safety–related responsibilities. As stated above, these changes amend the restrictions on electronic devices put forth in the Order in a more appropriate manner to address safety concerns.

However, paragraph (b) of this section limits the use of any electronic device by employees in deadhead status who are located inside the cab of a controlling locomotive of a train. Employees in deadhead status who are located inside the cab of a controlling locomotive must follow the identical restrictions set forth both in this provision and in § 220.305, regardless of whether the device is a personal electronic device or a railroad-supplied electronic device. This is to reflect that any use of electronic devices in the cab of a controlling locomotive has the potential to distract employees engaged in safety-related duties, no matter the status of person using a device. This provision more strictly prohibits the use of any railroad-supplied device than does § 220.307, as employees in deadhead status typically do not have any safety-related responsibilities that would necessitate use of such devices.

*Section 220.313 Instruction.*



This section requires that railroads provide instruction to their operating employees on the operating rules implementing the requirements of this subpart. This instruction is necessary as employees must be operationally tested by railroad supervisors on the substance of this regulation, as FRA has required in § 220.315(a). By requiring such instruction FRA also intends to ensure that both railroads and their employees are fully aware of the requirements of this regulation. FRA has removed the word “training” from this final rule, because “instruction” is the more appropriate descriptor of the education this section requires railroads provide their employees. Further, the terms were duplicative.

In paragraph (a), FRA requires that each railroad maintain a written program that will qualify its operating employees for compliance with the requirements of this final rule. The written program may be consolidated with the program of instruction required under 49 CFR 217.11. FRA has allowed railroads 90 days to implement a program of instruction, as per AAR’s comment that should FRA allow railroads appropriate time to prepare these programs for presentation to their employees in the first-quarter of 2011, as is discussed below. Paragraph (a)(1) specifically requires that the program include instruction on both the requirements of this subpart as well as consequences of non-compliance. Paragraph (a)(2) states that the written program must include instruction on specific provisions of this rule. Paragraph (a)(2)(iii) requires that instruction be provided on the distinctions between the requirements of this regulation and any more stringent railroad operating rules. FRA has decided to leave this provision in the final rule despite AAR’s comment discussed above due to the different potential consequences involved with violation of this subpart versus violation of a railroad rule. If FRA were to find a

probable violation of this regulation has occurred, FRA could attempt to take action against an individual employee by way of its authority to impose a monetary civil penalty or disqualification of that employee from safety-sensitive service. These actions are in some instances much more severe than those that a railroad might take against an individual employee for a violation of its operating rules. Also, should FRA add violations of this subpart as revocable violations for locomotive engineers and conductors as it is contemplating, it is critical that employees have been instructed on these distinctions.

Paragraph (b) sets the implementation schedule for this section. Paragraph (b) states that within 180 days from the publication date of the final rule, employees performing duties subject to these requirements shall receive instruction on the requirements of this subpart. FRA has lengthened this time period from that proposed in the NPRM in order to allow for railroad employees to be instructed during first-quarter of 2011, as AAR's comment indicates is the industry norm. After 180 days from the publication date of the final rule. FRA expects that new operating employees would receive the proper instruction before being allowed to perform duties subject to the requirements of this subpart. The three-year recurrent instruction window in this paragraph was adopted because it is a standard industry practice to re-qualify employees on rules at least every three years. Finally, in paragraph (b)(2), FRA requires records maintenance of the instruction required by this section, which shall serve as documentation that employees have been qualified on the requirements of this subpart.

In paragraph (c), FRA requires that records discussed in paragraph (b)(2), documenting an employee's instruction and examination, be retained at a railroad's

division headquarters where the employee is assigned. This will enable FRA to quickly obtain such records upon request if necessary. Records must be kept for each employee instructed on the requirements of this subpart, and must be kept for three years after the end of the calendar year to which they relate. This paragraph allows railroads the discretion to keep the required records electronically.

Paragraph (d) provides a mechanism for FRA to review a railroad's written program required under paragraph (a). This paragraph requires that the Associate Administrator for Railroad Safety/Chief Safety Officer only disapprove programs of instruction and examination required by this section for cause stated. As the disapproval decision is made for cause, it is significant for the railroad to understand exactly why FRA is disapproving the program; thus, FRA notification of such disapproval must be made in writing and specify the basis for the disapproval decision. If the Associate Administrator for Railroad Safety/Chief Safety Officer disapproves the program, paragraph (d)(1) provides that a railroad is required to respond within 35 days by either providing submissions in support of its program or by amending its program and submitting those proposed amendments. Paragraph (d)(1)(ii) mandates that the Associate Administrator for Railroad Safety/Chief Safety Officer shall render a final decision in writing informing the railroad of FRA's decision. Paragraph (d)(2) provides that a failure to submit a program with the necessary revisions to the Associate Administrator for Railroad Safety/Chief Safety Officer will be considered by FRA to be a failure to implement a program under this part. FRA is not requiring that each railroad submit its program for review and explicit approval. Rather, FRA may review the programs of

railroads in connection with review of their overall programs of instruction to determine if they are effective.

*§ 220.315 Operational tests and inspections; further restrictions on use of electronic devices.*

This section requires that railroads perform operating tests to ensure operating employees' compliance with this subpart. FRA is requiring operating tests be performed to both ensure that railroads provide employee instruction on the conditions of this subpart and to help verify that the requirements of the subpart are being adhered to by railroad employees.

Per Part 217, railroads are already required to perform regular operating tests. This paragraph adds Subpart C to that existing requirement. Paragraph (a) leaves to the railroads' discretion the minimum number of operational tests that must be performed by referring to the guidelines established in 49 CFR Part 217, Railroad Operating Rules. Paragraph (b) of this section prohibits railroad supervisors from calling or sending text message to an electronic device of an operating employee during an operational test while the train to which the employee is assigned is moving, while the employee is on the ground or riding rolling equipment, or while the employee is assisting in preparation of the train for movement. This provision has been expanded from that proposed in the NPRM, and is meant to prevent an operating test from posing potentially dangerous distractions that could impact rail safety. It is also meant to prevent the encouragement of potential rail safety violations.

Finally, for the reasons explained in the response to the AAR's comment above, FRA has deleted the proposed § 220.315(c) from this final rule. FRA has done so

because in most instances, employees are not aware an operating test is being conducted until after the test has already been performed. Thus, that proposed provision could have created confusion. Further, after reviewing comments and deliberating the provision, FRA does not believe it would have been of significant utility.

#### *Appendix C to Part 220 Schedule of Civil Penalties*

FRA is amending appendix C of this part to establish guideline penalties for subpart C. Appendix C specifies the civil penalty FRA will ordinarily assess for the violation of a particular provision of this rule. However, consistent with 49 CFR part 209, appendix A, FRA's Statement of Agency Policy Concerning Enforcement of the Federal Railroad Safety Laws, FRA reserves the right to assess a penalty up to the statutory maximum where circumstances warrant. Further, a penalty may be assessed against an individual only for a willful violation. FRA did not solicit public comment on this appendix as it is a statement of agency policy.

#### **IV. Regulatory Impact**

##### A. Executive Order 12866 and DOT Regulatory Policies and Procedures

This rule is a significant regulatory action within the meaning of Executive Order 12866 and the U.S. Department of Transportation's regulatory policies and procedures (DOT Order 2100.5 dated May 22, 1980; 44 FR 11034, Feb. 26, 1979). FRA has made this determination by finding that, although the economic effects of the regulatory action will not exceed the \$100 million annual threshold as defined in Executive Order 12866, the rule is significant because of substantial public interest in transportation safety and because it is part of a broader programmatic effort to address distracted transportation operations. FRA has prepared and placed in the docket a regulatory impact analysis

(RIA) addressing the economic impact of restrictions on traincrew use of electronic devices as well as the costs of this final rule.

The RIA details estimates of the costs likely to be induced over a twenty year period. This analysis also includes break-even analyses, or estimates of the monetized benefits that will be necessary to achieve to offset the total costs of restricting use of electronic devices. Informed by its analysis of the economic effects of both EO 26 and this rule, FRA believes that this rule will achieve the same safety outcome as EO 26 at a lower cost. This rule achieves this outcome more cost-effectively relative to EO 26 by removing some restrictions on the usage of electronic devices by deadhead status employees and on the usage of calculators and cameras, under certain circumstances. These restrictions in EO 26 likely achieved little to no safety benefits, but they may have created substantial, unquantifiable opportunity costs, the removal of which makes this rule more cost-effective. The costs that may be induced by this rule over the twenty-year period considered include both direct costs and indirect costs. The direct costs may include the cost of revising operational testing and inspections programs; the cost of conducting additional operational testing and inspections; the cost of instructing employees on the requirements of this rule; and the cost of calculators and cameras for train crew use. Indirect costs may include the opportunity cost of railroad operating employees' time spent in safety briefings. The summed total of the estimated direct costs over twenty years equals about \$12.7 million at a 3 percent discount rate and about \$9.5 million at a 7 percent discount rate (in 2009 dollars). Additionally, the indirect costs that may result are estimated to equal about \$30.2 million at a 3 percent discount rate and \$22.4 million at a 7 percent discount rate. The majority of the costs associated with

implementation of the restrictions are for costs that are already being incurred through the implementation of EO 26. The table below summarizes both the direct and indirect costs of the restrictions as considered in the RIA, summed over the twenty-year period analyzed and discounted to present value using 3 percent and 7 percent discount rates.

Direct costs	Twenty-year total (3% discount rate)	Twenty-year total (7% discount rate)
Revising programs *	\$ 8,348.02	\$ 6,175.35
Revising programs for rule	\$39,659.62	\$39,659.62
Performing operational tests	\$633,087.44	\$468,318.78
Instruction *	\$11,339,537.79	\$8,388,404.44
Instruction on rule	\$246,610.00	\$246,610.00
Cameras (potential)	\$334,951.39	\$252,434.85
Calculators (potential)	\$75,080.95	\$74,083.90
<b>Total direct costs</b>	<b>\$12,677,415.21</b>	<b>\$9,475,686.94</b>
Indirect Costs	Twenty-year total (3% discount rate)	Twenty year total (7% discount rate)
Opportunity cost of additional time spent in safety briefings*	\$30,238,989.11	\$22,368,926.84
<b>Total indirect costs</b>	<b>\$30,238,989.11</b>	<b>\$22,368,926.84</b>

\* Costs already being incurred under EO 26

FRA also modified some provisions of the Notice of Proposed Rulemaking (NPRM) in this final rule. Two of these modifications were to remove potentially costly provisions that were very unlikely to yield net benefits. The first of these modifications was with respect to a proposal in the NPRM, at §220.307(c), which had allowed a limited set of railroad-supplied electronic devices to be used by railroad operating employees not in deadhead status, other than locomotive engineers, under certain circumstances and only following a crew safety briefing and unanimous agreement amongst the crew that

such use would be safe.<sup>13</sup> Specifically, in the NPRM, §220.307(c) had limited the railroad-supplied electronic devices that could be used in certain circumstances to “a mobile phone or remote computing device.”<sup>14</sup> This limitation could have inadvertently stifled the development or adoption of new technologies that could be used by railroads to enhance productivity, safety, or for some other purpose. To avoid this unintended cost of potentially hindering the growth or adoption of technology, FRA removed the limitation, instead adopting language that will allow the use of any railroad-supplied electronic device under prescribed circumstances and following a safety briefing and unanimous agreement amongst crewmembers that it is safe to use the device.

The second modification was with respect to § 220.307(d)(2) in the NPRM, which had required that, among other conditions, operations be suspended when a crewmember not in deadhead status outside a cab of a controlling locomotive used a railroad-supplied electronic device. The requirement that operations be suspended could have inadvertently prevented the development or adoption of technologies that potentially enhance productivity or safety while performing operations. For example, if some operations are currently performed using printed or handwritten instructions, FRA recognizes that such instructions could just as easily be followed on an electronic device – a device that might also allow the automatic updating of data or instructions and through such updating increase safety for crewmembers. Thus, in the final rule, FRA removed the requirement that all operations be suspended before a crewmember uses a railroad-supplied electronic device outside the cab of a controlling locomotive, while still

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<sup>13</sup> Federal Railroad Administration.(2010). “Notice of Proposed Rulemaking: Restrictions on Railroad Operating Employees’ Use of Cellular Telephones and Other Electronic Devices.” *Federal Register*, May 18, Vol 75, No. 95. Available online: <http://www.regulations.gov/search/Regs/home.html#documentDetail?R=0900006480aef96d>.

<sup>14</sup> *Ibid.*, p. 27688.



requiring that the crewmember not be fouling a track and that all crewmembers agree that it is safe to use the device prior to its use.

Both of the modifications discussed above removed a potentially costly provision of the NPRM. However, no change in expected costs, vis-à-vis the preliminary RIA, is reflected in this final RIA because the preliminary RIA accompanying the NPRM had not accounted for these potential costs. FRA had not intended to create such burden.

Although FRA has not estimated the total benefits associated with the restrictions on use of electronic devices, FRA has performed break-even analyses using differing assumptions regarding the frequency and severity of future accidents caused by or linked to electronic device usage. In most scenarios considered, it will not require an unreasonable decrease in the annual probability of such an accident in order for this rule to at least break even – in fact, for most cases considered, decreases in relevant accident probability of less than 0.10 would make the rule cost-beneficial. As an alternative framework, FRA compared the costs to the minimum number of statistical fatalities that will need to be prevented for implementation to be cost-beneficial. Considering direct costs alone, if the new regulation prevented the loss of one-fifth of the value of a statistical life each year of the twenty-year period examined, the restrictions will yield positive net benefits. If considering direct and indirect costs, the restrictions will yield positive net benefits if it prevents the loss of just half of the value of a statistical life each year over the twenty-year period examined. In other words, prevention of one fatality every two years will justify the restrictions. For some perspective on the achievability of such prevention, FRA notes that over the period from 2000 to 2008, electronic device usage by train operating employees likely caused or contributed to accidents resulting in

at approximately 30 fatalities and over 100 injuries – an average of over three deaths per year, as well as significant train delay and property damages. The table below lists the quantifiable benefits considered in the RIA.

Benefit
Fatalities avoided
Injuries avoided
Property damage avoided

Given the frequency and severity of accidents together with the observed rising incidence of improper uses of cell phones and other electronic devices, FRA is confident that the elimination of improper electronic device usage by railroad operating employees, as required by this rule, will yield total monetizable safety benefits that will likely outweigh total monetized costs.

Relative to the requirements of EO 26, the only additional burdens produced by the requirements of this rule are those related to revising programs and initial instruction focused on the exceptions that this rule will introduce; the potential cost associated with purchasing cameras and calculators or carrying ones previously purchased and available for use should the need arise, which were banned under EO 26, but are permitted under this rule; and nominal costs associated with seeking FRA approval for use of railroad-supplied electronic devices for taking photographs and videos.

. This added burden, estimated over a 20-year period, could total as much as \$696,000, discounted at an annual rate of 3%, or \$613,000, discounted at a rate of 7% and is broken down as follows.

	PV (3%)	PV(7%)
Program revision	\$ 39,660	\$ 39,660

Initial instruction	246,610	246,610
Potential cost of cameras	334,951	252,435
Potential cost of calculators	75,081	74,084
Total	\$696,302	\$612,789

Clearly, the benefits associated with a more cost effective program will justify the additional costs associated with the program revisions and initial training focused on the exceptions introduced by the rule. The benefits of associated with the allowance for use of cameras and calculators will equal or exceed the costs associated with carrying and using these devices in accordance with this regulation. Given that this is not a mandatory requirement, but rather a permissive one, cameras and calculators will only be used to the extent that perceived benefits exceed perceived costs. The benefits of seeking FRA approval for use of railroad-supplied electronic devices for taking photographs and videos will be the avoidance of unwarranted use of such devices, which would equal or exceed the nominal costs associated with meeting this requirement.

B. Regulatory Flexibility Act and Executive Order 13272

To ensure potential impacts of rules on small entities are properly considered, FRA developed this rule in accordance with Executive Order 13272 (“Proper Consideration of Small Entities in Agency Rulemaking”) and DOT’s procedures and policies to promote compliance with the Regulatory Flexibility Act (5 U.S.C. 601 et seq.).

The Regulatory Flexibility Act requires agencies to review regulations to assess their impact on small entities. An agency must conduct a regulatory flexibility analysis

unless it determines and certifies that a rule is not expected to have a significant impact on a substantial number of small entities.

As discussed in earlier sections of this preamble, FRA has discovered numerous examples proving the danger of distracting electronic devices. This rulemaking is intended to limit distractions caused by the use of cellular telephones and other electronic devices in an effort to improve railroad safety and prevent incidents where loss of human life, injuries, and property damage may have been attributable to distraction by these devices. In 2008, FRA issued Emergency Order No. 26 restricting the on-duty use of cellular telephones and other electronic devices. This FRA action was in part a response to the September 12, 2008, Chatsworth accident, which resulted in 25 deaths, numerous injuries, and more than \$7 million in damages. The BLET and the UTU filed a Petition for Review of that Emergency Order, citing some valid concerns. FRA then issued an NPRM on May 18, 2010, in which FRA proposed to codify most of the requirements of the Order with some modifications to accommodate changes that had been previously recommended by a Petition for Review of that Order as well as a number of amendments that FRA believed appropriate. FRA reviewed and responded to comments on its NPRM in this preamble. With this rule, which is slightly different from the NPRM version, as discussed above, FRA is finalizing the codification of its restrictions on the unsafe usage of electronic devices by railroad operating employees.

FRA is certifying that this rule will result in “no significant economic impact on a substantial number of small entities.” The following section explains the reasons for this certification.

1. Description of Regulated Entities and Impacts

The “universe” of the entities under consideration includes only those small entities that can reasonably be expected to be directly affected by the provisions of this rule. In this case, the “universe” comprises solely small railroads.

“Small entity” is defined in 5 U.S.C. 601. Section 601(3) defines a “small entity” as having the same meaning as “small business concern” under section 3 of the Small Business Act. This includes any small business concern that is independently owned and operated, and is not dominant in its field of operation. Section 601(4) likewise includes within the definition of “small entities” not-for-profit enterprises that are independently owned and operated, and are not dominant in their fields of operation. Additionally, § 601(5) defines as “small entities” governments of cities, counties, towns, townships, villages, school districts, or special districts with populations less than 50,000.

The U.S. Small Business Administration (SBA) stipulates “size standards” for small entities. It provides that the largest a for-profit railroad business firm may be and still classify as a “small entity” is 1,500 employees for “Line-Haul Operating” railroads, and 500 employees for “Short-Line Operating” railroads.<sup>15</sup>

Federal agencies may adopt their own size standards for small entities in consultation with SBA and in conjunction with public comment. Pursuant to the authority provided to it by SBA, FRA has published a final policy that formally establishes small entities as railroads that meet the line haulage revenue requirements of a Class III railroad.<sup>16</sup> Currently, the revenue requirement is \$20 million or less in annual operating revenue, adjusted annually for inflation (\$32,113,449 for 2008). This threshold is based on the Surface Transportation Board’s (STB) threshold of a Class III railroad

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<sup>15</sup> “Table of Size Standards,” U.S. Small Business Administration, January 31, 1996, 13 CFR Part 121. See also NAICS Codes 482111 and 482112.

<sup>16</sup> See 68 FR 24891 (May 9, 2003).

carrier, which is adjusted by applying the railroad revenue deflator adjustment.<sup>17</sup> FRA is using the STB's threshold in its definition of "small entities" for this rule.

Approximately 700 railroads meet the criteria for small entities and report operational data to FRA. FRA is using this as our estimate of the universe of small entities that could be directly impacted by this rule. Many of these railroads rely on cell phones for train operations.

Like EO 26, this rule contains exceptions that would allow railroads that have fewer than 400,000 annual employee hours and that rely on wireless communication devices for certain train operations to continue to do so, with the same restriction that such usage be limited to performing the employees' railroad duties. The primary benefactors of this flexibility are small railroads. FRA is clarifying that the exception in the Order for railroad operating employees to use railroad-supplied or railroad-authorized electronic devices to conduct train or switching operations "under conditions authorized under 49 CFR Part 220" was intended to accommodate small railroad operations. The locomotives of the trains exempt from the requirement to have a working radio on the lead locomotive do not operate at high speeds, do not handle regular passenger traffic, are only permitted to operate over joint territory in specific low-speed circumstances, and must have working wireless communications aboard the controlling locomotive of trains containing placarded hazardous material loads.

This rule contains additional flexibility that would reduce the impact relative to EO 26. With this rule, FRA will: (1) allow deadheading railroad operating employees who are not in the cab of a controlling locomotive to use electronic devices if that use does not interfere with an employee's personal safety or performance of safety-related

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<sup>17</sup> For further information on the calculation of the specific dollar limit, please see 49 CFR Part 1201.

duties; (2) allow use of cameras to document safety hazards or violations, except in the cab of the controlling locomotive of a moving train; and (3) exclude standalone calculators from all restrictions within this subpart as long as the calculator is used for an authorized business purpose and does not interfere with the performance of any employee's safety-related duties. In addition, FRA is creating an exception for medical devices to encompass both devices that enhance an ability to perform safety-related tasks, such as a hearing aid, and other devices that protect an employee's health and well-being.

In general, small railroad costs associated with compliance with EO 26 would continue to accrue under FRA's rule. Additional burden to such railroads would come from the requirement to provide instruction to its operating employees on the substance of the regulation as well as the need to update their written programs to qualify its operating employees for compliance with operating rules implementing the new requirements. FRA anticipates that this instruction will be achieved through means such as distribution of written materials to employees, job briefings by supervisors or roving instructors, and question-and-answer services. FRA estimates that the time cost of such instruction will come to about 15 minutes per employee in the first year of the rule. Approximately 91,000 train and engine employees will be impacted, and about 20 percent of these will be small railroad employees. Assuming a cost per hour of employee instructed of \$43.37, the total cost of this additional instruction will be approximately \$200,000 for small railroads or an average of \$300 per railroad. Revision of programs is not expected to entail more than 1 labor hour per railroad. These two costs – that of additional instruction and that of revising programs – will likely not significantly burden any small railroads.

Additional railroad costs transferred from EO 26 include the costs associated with performing operational tests and conducting periodic instruction. Given that operational tests and instruction associated with this regulation will be conducted with other required operational testing and instruction, the additional annual cost will total about as much as the cost in the first year for instruction and program revision. Again, this cost will likely not significantly burden small railroads.

Because this rule will apply to all small railroads, FRA has concluded that a substantial number of small entities will be impacted. However, the overall impact on small railroads is not expected to be significant. FRA believes that the costs to small railroads associated with this rule are not significant and are very similar to those currently incurred under EO 26.

In the NPRM, FRA certified that the proposal would likely not result in a significant economic impact on a substantial number of small entities and requested comments on all aspects of its supporting analysis. No comments were received.

## 2. Certification

Pursuant to section 605(b) of the Regulatory Flexibility Act, 5 U.S.C. 605(b), the FRA Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities. Although a substantial number of small railroads could be affected by the rule, they will not be significantly impacted.

## C. Paperwork Reduction Act

The information collection requirements in this final rule have been submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995, 44 U.S.C. 3501 *et seq.* The sections that contain the new and



current information collection requirements, and the estimated time to fulfill each requirement are as follows:

CFR Section	Respondent Universe	Total Annual Responses	Average Time per Response	Total Annual Burden Hours
220.8 – Waivers	728 Railroads	6 petitions	1 hour	6 hours
220.25 – Instruction in Proper Use of Radio Communication -- Subsequent Years  -- Operational Testing of Employees	728 Railroads 728 Railroads 728 Railroads	91,000 trained Employees 12,540 trained Employees 100,000 tests	30 minutes 30 minutes 5 minutes	45,500 hours 6,270 hours 8,333 hours
220.37 – Testing of Radios and Wireless Devices	728 Railroads	780,000 tests	30 seconds	6,500 hours
220.61 – Transmission of Mandatory Directives -- Copying of Mandatory Directives  -- Marking Mandatory Directives	728 Railroads 728 Railroads	7,200,000 copies 624,000 marks	1.5 minutes 15 seconds	180,000 hours 2,600 hours
<b><u>NEW REQUIREMENTS</u></b>				

220.302 – Operational Rules That Comply with this Subpart -- Revision of RR Operational Rules in Part 217 to Comply with this Subpart	728 Railroads	Burden Incl. Under OMB No. 2130-0035	Burden Incl. Under OMB No. 2130-0035	Burden Incl. Under OMB No. 2130-0035
220.307 – Use of Railroad-Supplied Electronic Device As Specified in Writing - Written documents submitted to FRA specifying authorized business purpose for taking photo/video w/railroad-supplied electronic device  -- Engineer and Train Crew Briefings to Use RR-Supplied Electronic Device Inside/Outside of Locomotive Cab	728 Railroads  728 Railroads  91,000 Employees	728 amended RR Op. codes 50 documents  5,460,000 briefings	1 hour  1 hour  1 minute	728 hours  50 hours  91,000 hours
220.313 – Instruction Railroad Written Program of Instruction  -- Implementation: Training of Employees  -- Records: Successful Completion of Training -- Approval Process: Disapproval of RR Written Program of Instruction or Written Response in Support of Program	728 Railroads  91,000 Employees  728 Railroads  728 Railroads	728 amended programs 91,000 trained Employees 91,000 records  6 revised programs / written resp.	1 hour  15 minutes 5 minutes  60 minutes	728 hours  22,750 hours 7,583 hours  6 hours

220.315 – Operational Tests/Inspections -- Revision of RR Program of Operational Tests and Inspections under Part 217 to Include This Subpart	728 Railroads	Burden Incl. Under OMB # 2130-0579	Burden Incl. Under OMB # 2130-0579	Burden Incl. Under OMB # 2130-0579
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All estimates include the time for reviewing instructions; searching existing data sources; gathering or maintaining the needed data; and reviewing the information. For information or a copy of the paperwork package submitted to OMB, contact Robert Brogan at 202-493-6292 or Ms. Kimberly Toone at 202-493-6132 or via e-mail at the following addresses: [robert.brogan@dot.gov](mailto:robert.brogan@dot.gov) ; [kimberly.toone@dot.gov](mailto:kimberly.toone@dot.gov)

Organizations and individuals desiring to submit comments on the collection of information requirements should direct them to the Office of Management and Budget, 725 17<sup>th</sup> St., N.W., Washington, D.C. 20590; Attention: FRA OMB Desk Officer.

Comments may also be sent via e-mail to the Office of Management and Budget at the following address:

[oir\\_submissions@omb.eop.gov](mailto:oir_submissions@omb.eop.gov)

OMB is required to make a decision concerning the collection of information requirements contained in this final rule between 30 and 60 days after publication of this document in the Federal Register. Therefore, a comment to OMB is best assured of having its full effect if OMB receives it within 30 days of publication.

FRA is not authorized to impose a penalty on persons for violating information collection requirements which do not display a current OMB control number, if required. FRA intends to obtain current OMB control numbers for any new information collection requirements resulting from this rulemaking action prior to the effective date of the final

rule. The OMB control number, when assigned, will be announced by separate notice in the Federal Register.

D. Environmental Impact

FRA has evaluated this final rule in accordance with its “Procedures for Considering Environmental Impacts” (FRA's Procedures) (64 FR 28545, May 26, 1999) as required by the National Environmental Policy Act (42 U.S.C. 4321 et seq.), other environmental statutes, Executive Orders, and related regulatory requirements. FRA has determined that this action is not a major FRA action (requiring the preparation of an environmental impact statement or environmental assessment) because it is categorically excluded from detailed environmental review pursuant to section 4(c)(20) of FRA’s Procedures. 64 FR 28547, May 26, 1999. In accordance with section 4(c) and (e) of FRA’s Procedures, the agency has further concluded that no extraordinary circumstances exist with respect to this final rule that triggered the need for a more detailed environmental review. As a result, FRA finds that this final rule is not a major Federal action significantly affecting the quality of the human environment.

E. Federalism Implications

Executive Order 13132, “Federalism” (64 FR 43255, Aug. 10, 1999), requires FRA to develop an accountable process to ensure “meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.” “Policies that have federalism implications” are defined in the Executive Order to include regulations that have “substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.” Under Executive

Order 13132, the agency may not issue a regulation with federalism implications that imposes substantial direct compliance costs and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, the agency consults with State and local governments, or the agency consults with State and local government officials early in the process of developing the regulation. Where a regulation has federalism implications and preempts State law, the agency seeks to consult with State and local officials in the process of developing the regulation.

This final rule has been analyzed in accordance with the principles and criteria contained in Executive Order 13132. FRA has determined that the final rule will not have substantial direct effects on the States, on the relationship between the national government and the States, nor on the distribution of power and responsibilities among the various levels of government. In addition, FRA has determined that the final rule will not impose substantial direct compliance costs on State and local governments. Therefore, the consultation and funding requirements of Executive Order 13132 do not apply.

However, this final rule could have preemptive effect by operation of law under certain provisions of the Federal railroad safety statutes, specifically the former Federal Railroad Safety Act of 1970 (former FRSA), repealed and recodified at 49 U.S.C 20106, and the former Locomotive-Boiler Inspection Act (former LBIA), repealed and recodified at 49 U.S.C. 20701-20703. See Pub. L. 103-272. The former FRSA provides that States may not adopt or continue in effect any law, regulation, or order related to railroad safety or security that covers the subject matter of a regulation prescribed or

order issued by the Secretary of Transportation (with respect to railroad safety matters) or the Secretary of Homeland Security (with respect to railroad security matters), except when the State law, regulation, or order qualifies under the “local safety or security hazard” exception to § 20106. Moreover, the former LBIA has been interpreted by the Supreme Court as preempting the entire field of locomotive safety. See Napier v. Atlantic Coast R.R., 272 U.S. 605, 611; 47 S.Ct. 207, 209 (1926).

In sum, FRA has analyzed this final rule in accordance with the principles and criteria contained in Executive Order 13132. As explained above, FRA has determined that this final rule has no federalism implications, other than the possible preemption of State laws under the former FRSA and the former LBIA. Accordingly, FRA has determined that preparation of a federalism summary impact statement for this final rule is not required.

F. Unfunded Mandates Reform Act of 1995

Pursuant to Section 201 of the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4, 2 U.S.C. 1531), each Federal agency “shall, unless otherwise prohibited by law, assess the effects of Federal regulatory actions on State, local, and tribal governments, and the private sector (other than to the extent that such regulations incorporate requirements specifically set forth in law).” Section 202 of the Act (2 U.S.C. 1532) further requires that “before promulgating any general notice of proposed rulemaking that is likely to result in the promulgation of any rule that includes any Federal mandate that may result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of \$140,800,000 or more in any 1 year, and before promulgating any final rule for which a general notice of proposed rulemaking was published, the

agency shall prepare a written statement” detailing the effect on State, local, and tribal governments and the private sector. This final rule will not result in the expenditure, in the aggregate, of \$140,800,000 or more in any one year, and thus preparation of such a statement is not required.

G. Energy Impact

Executive Order 13211 requires Federal agencies to prepare a Statement of Energy Effects for any “significant energy action.” See 66 FR 28355 (May 22, 2001). Under the Executive Order a “significant energy action” is defined as any action by an agency that promulgates or is expected to lead to the promulgation of a final rule or regulation, including notices of inquiry, advance notices of proposed rulemaking, and notices of proposed rulemaking: (1)(i) that is a significant regulatory action under Executive Order 12866 or any successor order, and (ii) is likely to have a significant adverse effect on the supply, distribution, or use of energy; or (2) that is designated by the Administrator of the Office of Information and Regulatory Affairs as a significant energy action. FRA has evaluated this final rule in accordance with Executive Order 13211. FRA has determined that this final rule is not likely to have a significant adverse effect on the supply, distribution, or use of energy. Consequently, FRA has determined that this final rule is not a “significant energy action” within the meaning of the Executive Order.

H. Privacy Act Statement

Anyone is able to search the electronic form of all comments received into any of DOT’s dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc). You may

review DOT's complete Privacy Act Statement published in the Federal Register on April 11, 2000 (65 FR 19477-78), or you may visit <http://DocketsInfo.dot.gov>.

I. Executive Order 12988 (Civil Justice Reform)

This rule meets applicable standards in sections 3(a) and 3(b)(2) of Executive Order 12988, Civil Justice Reform, to minimize litigation, eliminate ambiguity, and reduce burden.

**List of Subjects in 49 CFR Part 220**

Communications, Penalties, Railroads, Railroad safety.

**The Rule**

In consideration of the foregoing, FRA amends chapter II, subtitle B of title 49, Code of Federal Regulations, as follows:

**PART 220—[AMENDED]**

1. The authority citation for Part 220 is revised to read as follows:

**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 1.49.

2. Section 220.1 is revised to read as follows:

**§ 220.1 Scope.**

This part prescribes minimum requirements governing the use of wireless communications in connection with railroad operations. In addition, this part sets forth prohibitions, restrictions, and requirements that apply to the use of personal and railroad-supplied cellular telephones and other electronic devices. So long as these minimum requirements are met, railroads may adopt additional or more stringent requirements.

**§ 220.2 [Removed and Reserved]**



3. Section 220.2 is removed and reserved.

4. Section 220.5 is amended by revising the introductory text; adding definitions in alphabetical order for “Associate Administrator for Railroad Safety/Chief Safety Officer,” “Authorized business purpose,” “Earpiece,” “Electronic device,” “Fouling a track,” “FRA,” “In deadhead status,” “Medical device,” “Personal electronic device,” “Railroad operating employee,” “Railroad-supplied electronic device,” and “Switching operation”; and revising the definition of “Train” to read as follows:

**§ 220.5 Definitions.**

As used in this part, the term—

\* \* \* \* \*

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.

\* \* \* \* \*

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.

\* \* \* \* \*

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.

\* \* \* \* \*

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.

\* \* \* \* \*

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-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.

\* \* \* \* \*

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.

\* \* \* \* \*

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.

\*\*\*\*\*

5. Add a new subpart C to part 220 to read as follows:

### **Subpart C—Electronic Devices**

Sec.

- |         |                                                                                       |
|---------|---------------------------------------------------------------------------------------|
| 220.301 | Purpose and application.                                                              |
| 220.302 | Operating rules implementing the requirements of this subpart.                        |
| 220.303 | General use of electronic devices.                                                    |
| 220.305 | Use of personal electronic devices.                                                   |
| 220.307 | Use of railroad-supplied electronic devices.                                          |
| 220.309 | Permitted uses; exceptions to other restrictions.                                     |
| 220.311 | Railroad operating employees in deadhead status.                                      |
| 220.313 | Instruction.                                                                          |
| 220.315 | Operational tests and inspections; further restrictions on use of electronic devices. |

### **Subpart C—Electronic Devices**

#### **§ 220.301 Purpose and application.**

(a) The purpose of this subpart is to reduce safety risks resulting from railroad operating employees being distracted by the inappropriate use of electronic devices, such as mobile telephones (cell phones or cellular phones) and laptop computers.

(b) The applicability of this subpart is governed by § 220.3; this subpart, however, does not affect the use of working wireless communications pursuant to subparts A and B of this part.

(c) The restrictions of this subpart C do not apply--

(1) To the working radio; or

(2) When a working radio failure occurs and an electronic device is used in accordance with railroad rules.

**§ 220.302 Operating rules implementing the requirements of this subpart.**

Each railroad shall adopt operating rules that implement the requirements of this subpart.

**§ 220.303 General use of electronic devices.**

A railroad operating employee shall not use an electronic device if that use would interfere with the employee's or another railroad operating employee's performance of safety-related duties. No individual in the cab of a controlling locomotive shall use an electronic device if that use would interfere with a railroad operating employee's performance of safety-related duties.

**§ 220.305 Use of personal electronic devices.**

A railroad operating employee must have each personal electronic device turned off with any earpiece removed from the ear—

(a) When on a moving train;

- (b) When any member of the crew is--
  - (1) On the ground, or
  - (2) Riding rolling equipment during a switching operation; or
- (c) When any railroad employee is assisting in preparation of the train for

movement.

**§ 220.307 Use of railroad-supplied electronic devices.**

(a) General restriction. A railroad operating employee may use a railroad-supplied electronic device only for an authorized business purpose as specified by the railroad in writing. An authorized business purpose involving the taking of a photograph or video must be approved by FRA. A railroad subject to this subpart must submit to FRA's Associate Administrator for Railroad Safety/Chief Safety Officer a document specifying in writing the authorized business purpose(s) involving the taking of a photograph or video for which a railroad-supplied electronic device may be used by the carrier's railroad operating employees.

(b) Use by locomotive engineers operating controls. A locomotive engineer operating the controls of a train shall not use a railroad-supplied electronic device--

- (1) When on a moving train;
- (2) When any member of the crew is--
  - (i) On the ground, or
  - (ii) Riding rolling equipment during a switching operation; or
- (3) When any railroad employee is assisting in preparation of the train for

movement.

(c) Use in freight and passenger locomotive cabs generally. In addition to the restrictions on locomotive engineers described in paragraph (b) of this section, a railroad operating employee who is not in deadhead status shall not use a railroad-supplied electronic device in the cab of a controlling locomotive unless—

- (1) A safety briefing that includes all crewmembers is held; and
- (2) All crewmembers agree that it is safe to use the device.

(d) Use outside freight locomotive cabs. A freight train crewmember who is not in deadhead status may use a railroad-supplied electronic device outside the cab of a controlling freight locomotive only if all of the following conditions are met:

- (1) The crewmember is not fouling a track; and
- (2) All crewmembers agree it is safe to use the device.

**§ 220.309 Permitted uses; exceptions to other restrictions.**

Notwithstanding any other limitations in this subpart, a railroad operating employee may use the following, if that use does not interfere with any employee's performance of safety-related duties--

(a) The digital storage and display function of an electronic device to refer to a railroad rule, special instruction, timetable, or other directive, if such use is authorized under a railroad operating rule or instruction.

(b) An electronic device as necessary to respond to an emergency situation involving the operation of the railroad or encountered while performing a duty for the railroad.

(c) An electronic device to take a photograph of a safety hazard or a violation of a rail safety law, regulation, order, or standard, provided that—

(1) A camera that is part of a cell phone or other similar multi-functional electronic device is not included in this exception unless it is a railroad-supplied device and is used for an authorized business purpose;

(2) The camera, unless otherwise permitted, is turned off immediately after the documentation has been made; and

(3) If the camera is used in the cab of a moving train, the use is only by a crewmember other than the locomotive engineer.

(d) A stand-alone calculator if used for an authorized business purpose.

(e) A medical device that is consistent with the railroad's standards for medical fitness for duty.

(f) A wireless communication device to conduct train or switching operations if the railroad operating employee is part of a crew assigned to a train that is exempt under § 220.9(b) from the requirement of a working radio when the employing railroad has fewer than 400,000 annual employee work hours.

**§ 220.311 Railroad operating employees in deadhead status.**

(a) Notwithstanding any other restrictions in this subpart, a railroad operating employee who is in deadhead status and not inside the cab of a controlling locomotive may use an electronic device only if the employee is not using the device in such a way that interferes with any railroad operating employee's personal safety or performance of safety-related duties.

(b) A railroad operating employee who is in deadhead status and located inside the cab of a controlling locomotive must have each electronic device turned off with any earpiece removed from the ear—



- (1) When on a moving train;
- (2) When any member of the crew is--
  - (i) On the ground, or
  - (ii) Riding rolling equipment during a switching operation; or
- (3) When any railroad employee is assisting in preparation of the train for movement.

**§ 220.313 Instruction.**

(a) Program. Beginning [INSERT DATE 90 DAYS FROM THE DATE OF PUBLICATION IN THE FEDERAL REGISTER], 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 [INSERT DATE 180 DAYS FROM DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(1) Beginning [INSERT DATE 180 DAYS FROM DATE OF PUBLICATION IN THE FEDERAL REGISTER], no employee shall perform work requiring compliance with the operating rules implementing the requirements of this subpart unless the employee has been instructed on requirements of this subpart within the previous three years.

(2) The records of successful completion of instruction and examination required by this section shall document the instruction of each employee under this subpart.

(c) Records. Written records documenting successful completion of instruction and examination of each employee and of his or her supervisors shall be made and shall be retained at the railroad's system headquarters and at the division headquarters for each division where the employee is assigned for three calendar years after the end of the calendar year to which they relate and made available to representatives of FRA for

inspection and copying during normal business hours. Each railroad to which this part applies is authorized to retain a program, or any records maintained to prove compliance with such a program, by electronic recordkeeping in accordance with §§ 217.9(g) and 217.11(c) of this chapter.

(d) Approval process. Upon review of the program of instruction and examination required by this section, the Associate Administrator for Railroad Safety/Chief Safety Officer may, for cause stated, disapprove the program. Notification of such disapproval shall be made in writing and specify the basis for the disapproval.

(1) If the Associate Administrator for Railroad Safety/Chief Safety Officer disapproves the program, the railroad has 35 days from the date of the written notification of such disapproval to--

(i) Amend its program and submit it to the Associate Administrator for Railroad Safety/Chief Safety Officer for approval; or

(ii) Provide a written response in support of the program to the Associate Administrator for Railroad Safety/Chief Safety Officer, who informs the railroad of FRA's final decision in writing.

(2) A failure to submit the program with the necessary revisions to the Associate Administrator for Railroad Safety/Chief Safety Officer in accordance with this paragraph is considered a failure to implement a program under this subpart.

**§ 220.315 Operational tests and inspections; further restrictions on use of electronic devices.**

(a) The railroad's program of operational tests and inspections under part 217 of this chapter shall be revised as necessary to include this subpart and shall specifically

include a minimum number of operational tests and inspections, subject to adjustment as appropriate.

(b) When conducting a test or inspection under part 217 of this chapter, a railroad officer, manager, or supervisor is prohibited from calling the personal electronic device or the railroad-supplied electronic device used by a railroad operating employee while the railroad officer, manager, or supervisor knows or should have known that—

- (1) The train to which the employee is assigned is moving;
- (2) The employee is--
  - (i) On the ground;
  - (ii) Riding rolling equipment during switching operations; or
  - (iii) Assisting in preparation of the train to which the employee is assigned

for movement.

6. Appendix C to part 220 is amended by adding footnote 2 to the first column heading “Section,” and adding an entry for subpart C to read as follows:

**APPENDIX C TO PART 220—SCHEDULE OF CIVIL PENALTIES <sup>1</sup>**

Section <sup>2</sup>	Violation	Willful Violation
* * * * *		
<b>Subpart C—Electronic Devices</b>		
220.302 Operating rules.....	9,500	17,000
220.303 General; interfering with safety-related duties.....	9,500	17,000
220.305 Personal electronic device turned on while prohibited.....	5,500	10,000
(a)-(c) Personal device in use while prohibited.....	9,500	17,000
220.307 Railroad-supplied device turned on while prohibited.....	5,500	10,000

Section <sup>2</sup>	Violation	Willful Violation
(a) Use not authorized by railroad in writing.....	9,500	17,000
(b)-(d) Railroad-supplied devices in use while prohibited.....	9,500	17,000
220.311 Railroad operating employees in deadhead status:		
(a).....	9,500	17,000
(b) Devices turned on while prohibited; or.....	5,500	10,000
device in use while prohibited.....	9,500	17,000
220.313 Program of instruction:		
(a)-(d).....	9,500	17,000
220.315 Operational tests and inspections:		
(a)-(b).....	9,500	17,000

<sup>1</sup> A penalty may be assessed against an individual only for a willful violation. The Administrator reserves the right to assess a penalty of up to \$100,000 for any violation where circumstances warrant. See 49 CFR part 209, appendix A.

<sup>2</sup> The penalty schedule uses section numbers from 49 CFR part 220. If more than one item is listed as a type of violation of a given section, each item is also designated by a “penalty code,” which is used to facilitate assessment of civil penalties, and which may or may not correspond to any subsection designation(s). For convenience, penalty citations will cite the CFR section and the penalty code, if any. FRA reserves the right, should litigation become necessary, to substitute in its complaint the CFR citation in place of the combined CFR and penalty code citation, should they differ.

Issued in Washington, DC, on September 17, 2010.

\_\_\_\_\_  
Karen J. Hedlund,  
Chief Counsel,  
Federal Railroad Administration.

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