DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

49 CFR Parts 223 and 239

[FRA Docket No. PTEP–1, Notice No. 3]

RIN 2130–AA96

Passenger Train Emergency Preparedness

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

ACTION: Final rule.

SUMMARY: FRA is issuing minimum Federal safety standards for the preparation, adoption, and implementation of emergency preparedness plans by railroads connected with the operation of passenger trains, including all railroads hosting the operations of rail passenger service. The rule also requires each affected railroad to instruct its employees on the provisions of its plan. Emergency preparedness plans must address such subjects as communication, employee training and qualification, joint operations, tunnel safety, liaison with emergency responders, on-board emergency equipment, and passenger safety information. The plan adopted by each affected railroad will be subject to formal review and approval by FRA.

These emergency preparedness regulations constitute the second phase in a four-phase process that began in 1994. In the first phase, FRA encouraged railroads to examine their programs to determine what improvements could be made, while in the third phase, FRA will review the railroad plans to determine if all emergency preparedness issues have been adequately addressed within the varying contexts of railroad operations. In the fourth phase, FRA will review the implementation and effectiveness of these standards and related voluntary developments, and will address the need for further rulemaking activity.

The final rule does not apply to tourist and historic railroad operations. However, after appropriate consultation with the excursion railroad associations to determine appropriate applicability in light of financial, operational, or other factors unique to such operations, emergency preparedness requirements for these operations may be prescribed by FRA that are different from those affecting other types of passenger operations.

EFFECTIVE DATE: July 6, 1998.

ADDRESSES: Any petition for reconsideration should reference FRA Docket No. PTEP–1, Notice No. 3, and be submitted in triplicate to the Docket Clerk, Office of Chief Counsel, Federal Railroad Administration, 400 Seventh Street, S.W., Mail Stop 10, Washington, D.C. 20590.

FOR FURTHER INFORMATION CONTACT: Mr. Edward R. English, Director, Office of Safety Assurance and Compliance, FRA, 400 Seventh Street, S.W., RRS–10, Mail Stop 25, Washington, D.C. 20590 (telephone number: 202–632–3349), or David H. Kasminoff, Esq., Trial Attorney, Office of Chief Counsel, FRA, 400 Seventh Street, S.W., RCC–12, Mail Stop 10, Washington, D.C. 20590 (telephone: 202–632-3191).

SUPPLEMENTARY INFORMATION:

Background

On February 24, 1997, FRA published in the **Federal Register** a notice of proposed rulemaking (NPRM) to amend part 223, entitled Safety Glazing Standards—Locomotives, Passenger Cars and Cabooses,'' by revising § 223.5 and adding a new paragraph in § 223.9 to require the marking of emergency windows, and to add a new ''Part 239—Passenger Train Emergency Preparedness.'' 62 FR 8330. The proposed part 239 set forth minimum Federal safety standards for the preparation, adoption, and implementation of emergency preparedness plans by railroads connected with passenger train operations, including railroads hosting the operations of rail passenger service. In addition, the NPRM prescribed marking, inspection, maintenance, and repair requirements for all emergency window and door exits intended for egress by passengers or for access by emergency responders.

The overall safety record of conventional intercity and commuter passenger train operations in the United States has been exemplary. However, accidents continue to occur, often as a result of factors beyond the control of the passenger railroad. Further, the rail passenger operating environment in the United States is rapidly changing—technology is advancing, equipment is being designed for ever-higher speeds, and many potential new operators of passenger equipment are appearing. With this more complex operating environment, FRA must become more proactive to ensure that operators of passenger train service, as well as those railroads hosting passenger operations, engage in careful, advance planning to minimize the consequences of emergencies that could occur. Even minor incidents could easily develop into life-threatening events if they are not addressed in a timely and effective manner.

In recent years, passenger train accidents, such as the tragic ''Sunset Limited'' passenger train derailment near Mobile, Alabama in September 1993, have demonstrated the need to improve the way railroads respond in emergency situations. On September 22, 1993, at about 2:45 a.m., barges that were being pushed by the towboat ''Mauvilla'' in dense fog struck and displaced the Big Bayou Canot railroad bridge near Mobile, Alabama. At about 2:53 a.m., National Railroad Passenger Corporation (Amtrak) train no. 2, the ''Sunset Limited,'' en route from Los Angeles, California to Miami, Florida with 220 persons on board, struck the displaced bridge and derailed. The three locomotive units, the baggage and dormitory cars, and two of the six passenger cars fell into the water. The fuel tanks on the locomotive units ruptured, and the locomotive units and the baggage and dormitory cars caught fire. Forty-two passengers and five crewmembers were killed, and 103 passengers were injured. The towboat's four crewmembers were not injured.

In a report on the accident released on September 19, 1994, the National Transportation Safety Board (NTSB) determined that several circumstances hampered emergency response efforts. NTSB Railroad-Marine Accident Report 94/01. In its assessment of emergency response at the accident site, the NTSB noted that the location of the accident was remote (accessible only by rail, water, or air), fog in the area was dense (requiring the use of radar to navigate boats), limited modes of transportation were available for bringing in personnel and equipment, and the magnitude of the accident was great. Nevertheless, the NTSB concluded that, following the delay while emergency responders identified the location of the accident, emergency response activities were efficient and effective. The report did find, however, that Amtrak did not have an effective system in place to apprise passengers of train safety features, passengers were slowed during evacuation by the absence of emergency lighting on the passenger cars, and emergency responders were hindered by their inability to obtain an adequate passenger and crew list from Amtrak until the next day. The NTSB also noted that if the Mobile County Emergency Management Agency had held drills to simulate a train accident, the incident commander might have learned about Amtrak's procedure for accounting for passengers, and CSX Transportation, Inc. (CSX Transportation), the owner of the bridge and trackage, might have

obtained the correct telephone number to contact the U.S. Coast Guard.

Considerable effort has focused on how to mitigate casualties after a train accident occurs. In this regard, even before the occurrence of the tragic accident near Mobile, FRA had tasked DOT's Volpe National Transportation Systems Center (TSC), in Cambridge, Massachusetts, to perform research and to recommend emergency preparedness guidelines for passenger train operators. The results were published at the end of 1993 as a publication entitled ''Recommended Emergency Preparedness Guidelines for Passenger Trains'' (Volpe Report), which is available to the public through the National Technical Information Service, Springfield, VA 22161 (DOT/FRA/ORD–93–24—DOT–VNTSC–FRA–93–23). The publication references safety recommendations of the NTSB, as well as many other publications on the subject of emergency preparedness, and contains recommended guidelines designed to assist passenger train operating systems and emergency response organization management in evaluating and modifying or supplementing their emergency response plans. A copy of the Volpe Report has been placed in the public docket for this rulemaking.

The Volpe Report recommendations address guidelines relating to emergency plans, procedures, and training. In addition, guidelines are presented for passenger train and facility features intended to shorten emergency response time, improve the effectiveness of evacuating passengers, and minimize the effects of an emergency. The publication also lists inter-organizational emergency protocols, which include those of fire departments, emergency medical services (EMS), police departments, public utilities, hospitals, and local, State, regional, and Federal governments.

In an effort to be proactive after the accident near Mobile, FRA mailed the Volpe Report to all intercity passenger and commuter railroads, freight railroads, the United Transportation Union, and the Brotherhood of Locomotive Engineers in March 1994 for their information and guidance. Concurrent with this mailing, FRA invited the railroads to attend an agency-sponsored roundtable meeting in Washington, D.C., on June 9, 1994, to discuss the emergency preparedness issues addressed in the publication. The 23 persons attending the roundtable included representatives from FRA and the following other organizations:

Amtrak,
Long Island Rail Road (LIRR),
MTA Metro-North Railroad (METRO-NORTH),
Northeast Illinois Regional Commuter Railroad Corporation (METRA),
Peninsula Corridor Joint Powers Board (CALTRAIN),
Port Authority Trans-Hudson Corporation (PATH),
Southern California Regional Rail Authority (METROLINK),
Southeastern Pennsylvania Transportation Authority (SEPTA),
Tri-County Commuter Rail Authority (TRI-RAIL),
TSC, and
Virginia Railway Express (VRE).

During the meeting, FRA agreed to assist the passenger railroads in establishing improved working relationships with their host freight railroads. FRA also promised to help the passenger railroads in their emergency response efforts in larger metropolitan areas by contacting emergency response agencies and eliciting more cooperation between them. In addition, FRA stated that it would conduct field visits to several passenger railroads to study their equipment and their emergency response and training programs.

At that same meeting, the passenger railroads agreed to provide stronger supervisory oversight of their emergency response and training programs, and stated that they would offer additional, structured ''hands-on'' training to their train crews concerning the removal of emergency windows and passenger evacuation. They also agreed to develop programs for recurring passenger car inspections, emphasizing checking of emergency equipment such as windows, tools, and fire extinguishers. Further, they agreed to improve their methods of apprising passengers of emergency information, to include seat drops, placards inside each car, and messages in on-board newsletters. While FRA was encouraged that passenger railroads had already begun to incorporate the recommendations of the Volpe Report into their own emergency preparedness procedures and policies, more progress by the entire industry was needed.

As a result of concerns raised about the safety of the operation of rail passenger service, Congress enacted section 215 of the Federal Railroad Safety Authorization Act of 1994, Pub. L. No. 103–440, 108 Stat. 4619, 4623–4624 (November 2, 1994), entitled ''Passenger Car Safety Standards,'' which amended 49 U.S.C. 20133 to read as follows:

§ 20133. Passenger cars

(a) MINIMUM STANDARDS.—The Secretary of Transportation shall prescribe regulations establishing minimum standards for the safety of cars used by railroad carriers to transport passengers. Before prescribing such regulations, the Secretary shall consider—

(1) the crashworthiness of the cars;

(2) interior features (including luggage restraints, seat belts, and exposed surfaces) that may affect passenger safety;

(3) maintenance and inspection of the cars;

(4) emergency response procedures and equipment; and

(5) any operating rules and conditions that directly affect safety not otherwise governed by regulations.

The Secretary may make applicable some or all of the standards established under this subsection to cars existing at the time the regulations are prescribed, as well as to new cars, and the Secretary shall explain in the rulemaking document the basis for making such standards applicable to existing cars.

(b) INITIAL AND FINAL REGULATIONS.—(1) The Secretary shall prescribe initial regulations under subsection (a) within 3 years after the date of enactment of the Federal Railroad Safety Authorization Act of 1994. The initial regulations may exempt equipment used by tourist, historic, scenic, and excursion railroad carriers to transport passengers.

(2) The Secretary shall prescribe final regulations under subsection (a) within 5 years after such date of enactment.

(c) PERSONNEL.—The Secretary may establish within the Department of Transportation 2 additional full-time equivalent positions beyond the number permitted under existing law to assist with the drafting, prescribing, and implementation of regulations under this section.

(d) CONSULTATION.—In prescribing regulations, issuing orders, and making amendments under this section, the Secretary may consult with Amtrak, public authorities operating railroad passenger service, other railroad carriers transporting passengers, organizations of passengers, and organizations of employees. A consultation is not subject to the Federal Advisory Committee Act, (5 U.S.C. App.), but minutes of the consultation shall be placed in the public docket of the regulatory proceeding.

The Secretary of Transportation has delegated these rulemaking responsibilities to the Federal Railroad Administrator. 49 CFR 1.49(m).

FRA is committed to the maximum feasible use of collaborative processes in the development of safety regulations. Consistent with the intent of Congress that FRA consult with the railroad industry, FRA invited various organizations to participate in a passenger train emergency preparedness working group (Working Group) to focus on the issues related thereto and build the framework for the development of a Notice of Proposed Rulemaking (NPRM) and, ultimately, the final rule. FRA held its first Working Group meeting on August 8, 1995. The 33-member Working Group was comprised of

representatives from FRA and the following other organizations:

American Public Transit Association (APTA),
Amtrak,
Association of American Railroads (AAR),
Brotherhood of Locomotive Engineers (BLE),
CALTRAIN,
LIRR,
Maryland Mass Transit Administration (MARC),
Massachusetts Bay Transportation Authority (MBTA),
METRA,
METRO–NORTH,
METROLINK,
National Association of Railroad Passengers (NARP),
NTSB,
New Jersey Transit Rail Operations (NJTR),
Northern Indiana Commuter Transportation District (NICTD),
PATH,
Safe Travel America (STA),
SEPTA,
TRI–RAIL,
TSC,
United Transportation Union (UTU), and
VRE.

Regulations covering comprehensive safety standards for rail passenger equipment—inspection, testing, and maintenance of passenger equipment; equipment design and performance criteria related to passenger and crew survivability in the event of a train accident; and the safe operation of passenger train service—supplementing existing railroad safety standards, are covered by a separate rulemaking and are being addressed by a separate working group. The NPRM on passenger equipment safety standards was published in the **Federal Register** on September 23, 1997. 62 FR 49728. Persons wishing to receive more information regarding this other rulemaking should refer to FRA Docket No. PCSS–1 and contact either Mr. Edward Pritchard, Acting Staff Director, Motive Power and Equipment Division, Office of Safety Assurance and Compliance, FRA, 400 Seventh Street, S.W., RRS–14, Mail Stop 25, Washington, D.C. 20590 (telephone 202–632–3348), or Daniel L. Alpert, Esq., Trial Attorney, Office of Chief Counsel, FRA, 400 Seventh Street, S.W., Washington, D.C. 20590 (telephone 202–632–3186).

Both the proposed rule and final rule on passenger train emergency preparedness were developed by FRA in consultation with the Working Group. The proposal incorporated comments submitted by the Working Group in response to a preliminary draft of the proposed rule text, and all comments submitted in response to the NPRM were provided to members of the Working Group for their consideration in preparation of the final rule. The Working Group then helped FRA develop the final rule based on a consensus process, with facts and analysis flowing from both the Working Group's deliberations and information submitted by all commenters on the NPRM. In accordance with 49 U.S.C. 20133(d), the evolving positions of the Working Group members—as reflected in the minutes of the group meetings and associated documentation, together with data provided by the membership during their deliberations—have been placed in the public docket of this rulemaking.

In announcing the first meeting of the Working Group on August 8, 1995, FRA stated that the purpose of the meeting was to provide an opportunity to collectively focus on evaluating issues related to passenger train emergency preparedness, as well as to develop and formulate plans and programs that would culminate in a final rule. The discussion focused on the key issues of emergency notification, training of railroad employees and emergency responders, suitability of on-board emergency equipment, and the Volpe Report. While FRA did not limit the Working Group's discussions, the agency requested that, at a minimum, the following topics and issues should be considered and addressed during the consultation process for possible inclusion in the rule:

- Types of safety equipment that should be required in each passenger car (*e.g.*, fire extinguishers, saws, hammers, and flashlights) including where the equipment should be located, who should have access to it, and how to avoid pilferage;
- Training for railroad employees on the use of on-board emergency equipment;
- Frequency of inspection of on-board emergency equipment;
- Effective marking of emergency windows on each passenger car;
- Informing passengers about safety procedures and emergency equipment, including locations of exit doors and windows;
- Demonstrations by on-board crewmembers of emergency procedures and exits after major station stops;
- Communication capabilities of on-board crewmembers;
- Requiring on-board crewmembers to be trained to provide cardio-pulmonary resuscitation (CPR) or first aid treatment or both;
- Ensuring that on-board crewmembers have contact telephone numbers for control centers and local authorities;
- Requiring preparation of an emergency preparedness plan, including periodic exercises to test employee knowledge of proper procedures involving passenger illness or injury, stalled trains, evacuation procedures, derailments, collisions, severe weather, and security threats;
- Coordinating applicable portions of emergency preparedness plans between passenger railroads and freight railroads that host these passenger operations;
- Extent to which safety action plans should be regulated in terms of content or format, and whether such plans should be subject to FRA review and approval;
- Training for auxiliary individuals participating in passenger emergencies (*e.g.*, control center employees, on-board service staff, and appropriate supervisory and maintenance personnel);
- Training for emergency responders along passenger corridor routes;
- Accounting for the unique emergency preparedness concerns raised by passenger operations through tunnels, on elevated structures, and in electrified territory;
- Level of training specificity required for each category of employee;
- Requiring passenger railroads to develop and update inter-organizational emergency protocols with local communities, in order to augment safety action plans;
- Providing emergency responders with accurate passenger counts; and
- Emergency lighting in passenger cars (*e.g.*, floor strip lighting, flood lighting, and emergency exit lighting), including standards for testing and reliability.

FRA deliberated at length with members of the Working Group about what the rule would demand of affected railroads, in order to achieve the goal of optimizing their level of preparedness when faced with passenger train emergencies. The consensus was that the final rule needed to be flexible in its requirements to allow each railroad to address the unique characteristics of its individual operation. The Working Group recommended that FRA require each affected railroad to prepare a formal emergency preparedness plan covering broad elements, such as: employee and emergency-responder training; on-board crewmember responsibilities; communication between the train crew and the control center, and between the control center and the emergency responders; delineation of passenger railroad and freight railroad responsibilities in cases of joint operations; and operations in tunnels or over elevated structures.

However, the group urged FRA to afford railroads considerable latitude to design and administer emergency preparedness plans that best address each railroad's specific safety issues and concerns, with each plan then subject to review and approval by FRA.

FRA incorporated the Working Group's recommendations into a draft NPRM, and mailed the draft to the group on December 14, 1995, along with a copy of the minutes of the first meeting of the Working Group. Copies of both documents, and other relevant enclosures, were placed in the public docket for this rulemaking. The 34-member Working Group held its second meeting on February 6–7, 1996, and was comprised of representatives from the same organizations in attendance at the first Working Group meeting. The Working Group reviewed the draft and presented its comments, and a copy of the minutes of the second meeting of the group is also included in the rulemaking docket. The Working Group's comments were then incorporated into the NPRM that was published in the **Federal Register** on February 24, 1997. 62 FR 8330.

While FRA has focused on crafting a rule containing comprehensive requirements in connection with railroads adopting, implementing, and complying with their emergency preparedness plans, many details remained unresolved at the NPRM stage concerning the enforcement obligations that FRA should impose in the final rule. Among the broad range of possibilities, FRA noted that the final rule could impose a ''reasonable care'' standard and focus on achieving substantial compliance, with an emphasis on determining whether each railroad has demonstrated a genuine good faith effort to fulfill each of the elements of its emergency preparedness plan. Under this approach, for example, FRA would verify whether a railroad has established a training program for its employees on the applicable provisions of the emergency preparedness plan, and could impose a civil penalty on the railroad for failing to comply with this basic element of its emergency preparedness plan. However, if FRA concluded that the railroad had properly adopted a training program, but during the occurrence of an actual emergency several employees failed (under the stress of the situation) to fulfill all of their responsibilities under the emergency preparedness plan, FRA would likely not penalize either the railroad or the individuals. Also, if a railroad failed to designate an employee to maintain a current list of emergency telephone numbers, FRA could clearly penalize the railroad for this omission. However, if a railroad's plan properly provided for the maintenance of the list of emergency telephone numbers, but one telephone number on a long list of accurate numbers was found by FRA to be out of date, and thus incorrect, FRA could use its prosecutorial discretion to elect not to impose a civil penalty on the railroad.

As an alternative, FRA noted in the NPRM that the agency could maintain strict oversight by requiring compliance with every individual element of the emergency preparedness plan, and impose a civil penalty in every instance in which a railroad failed to achieve compliance. Accordingly, under this approach, a railroad could be penalized for failing to constantly update its list of emergency telephone numbers, neglecting to distribute applicable portions of its emergency preparedness plan to each and every on-line emergency responder, or operating a train with an incorrect type of on-board emergency equipment. Rather than stressing a determination of the overall level of emergency preparedness achieved by a railroad before an emergency ever occurs, this enforcement philosophy would specifically focus on whether the railroad in fact complied with all of the written emergency plan procedures for implementing each plan element. FRA invited commenters to address the questions of what compliance obligations should exist in the final rule, in the context of requiring railroads to adopt and implement procedures for achieving emergency preparedness, and what enforcement policy should be exercised by the agency regarding those obligations. Commenters were also asked to review the language of the section-by-section analysis and rule text of the proposed rule and to offer suggestions on whether FRA's expectations for compliance with the emergency preparedness plan elements were too rigid, or not strict enough.

Although FRA did not receive many written comments on how the agency should define its enforcement philosophy concerning the final rule, the consensus of the Working Group was that FRA should not penalize a railroad that has displayed its best efforts in achieving compliance and that FRA should focus on evaluating the overall quality of the emergency preparedness plan rather than on finding possible minor deficiencies. The Working Group also stated that FRA should not necessarily measure the success of an emergency preparedness plan based solely upon the outcome of an emergency situation. In this regard, the Working Group noted that even if a railroad meticulously prepares a comprehensive and detailed emergency preparedness plan, the severity level of an emergency and the ''real life'' reactions to a crisis situation by a railroad's employees (even assuming that the railroad properly trained the employees on the applicable plan's provisions in accordance with § 239.101(a)(2)) may prevent a railroad from achieving a favorable result in a specific emergency scenario. Accordingly, the Working Group urged FRA to evaluate a railroad's response to an emergency situation based upon how precisely the railroad adopted and complied with its written emergency preparedness plan, and not necessarily upon the actual results of the plan's implementation.

Consistent with both the Working Group's recommendations and FRA's stated policy in 49 CFR part 209 with respect to deciding whether enforcement action is the best method for addressing noncompliance, representatives of FRA and States participating under 49 CFR part 212 will consider a number of different factors before recommending the assessment of a civil penalty involving the requirements of this rule. These factors include:

- The inherent seriousness of the violation;
- The kind and degree of potential safety hazard presented by the violation under the circumstances;
- Any actual harm to persons or property already caused by the violation;
- The offending person's general level of compliance;
- The offending person's recent history of compliance with the particular rule involved, especially at the particular location involved;
- Whether a remedy other than a civil penalty (ranging from a warning to an emergency order) is appropriate under the circumstances; and
- Other factors relevant in the immediate circumstances.

In drafting the final rule, FRA has incorporated relevant information derived from the investigation of the accident involving Amtrak train 1, the ''Sunset Limited,'' which occurred in Hyder, Arizona on October 9, 1995. In that accident, the initial notification was made by the Amtrak locomotive engineer to the Southern Pacific Transportation Company (SP) train dispatcher's office in Denver, Colorado, which then notified the appropriate local emergency response agencies. The SP yardmaster in Phoenix Yard also dialed 911 after hearing the engineer's

radio transmissions to the train dispatcher.

While the local emergency responders stated that the accident was handled well by all parties involved, the responders noted that they were hampered in reaching the accident site by extremely rough terrain, initially negotiable only by four-wheel drive vehicles until graders and earth movers created a trail for conventional vehicles. The responders were somewhat confused by being provided with only a milepost location instead of a more familiar identifier. The responders were also frustrated by the lack of an accurate passenger count, but Amtrak has stated that once it has satellite cellular telephone capabilities train conductors will report passenger counts to a central telephone number after leaving each station. In addition, the responders indicated that, although the emergency lighting did not function on the overturned passenger cars, passengers were able to disembark through the car doors and emergency windows.

FRA has also included requirements in the final rule relating to emergency egress from passenger trains, based upon information obtained from the investigations of the two more recent train accidents in New Jersey and Maryland. In the first accident, a near head-on collision occurred on February 9, 1996 between NJTR trains 1254 and 1107 at milepost 2.8, on the borderline of Secaucus and Jersey City, New Jersey. Of the 331 passengers and crew on both trains, two crewmembers and one passenger were fatally injured, and an additional 162 passengers reported minor injuries. In the second accident, a near head-on collision occurred on February 16, 1996 between MARC train 286 and Amtrak train 29 on CSX Transportation, at Silver Spring, Maryland, milepost 8.3. The accident resulted in 11 fatalities, involving three crewmembers and eight passengers, and at least 12 non-fatal injuries to passengers of the MARC train.

While many of the questions raised by the New Jersey and Maryland train accidents are currently being addressed by the working group which is considering regulations covering rail passenger equipment safety, the important issue of emergency egress is being addressed by this emergency preparedness rulemaking. Specifically, the Maryland accident raised serious concerns as to whether MARC passengers had sufficient information about the location and operation of emergency exits to enable them to find and use those exits in an emergency or accident. FRA believes that in addition to marking the emergency exits, all commuter and intercity passenger railroads should review their practices for providing this information. On February 20, 1996, FRA issued Emergency Order No. 20 (Notice No. 1), which required prompt action to immediately enhance passenger train operating rules and emergency egress and to develop an interim system safety plan addressing cab car forward and multiple unit (MU) operations. 61 FR 6876, Feb. 22, 1996. In pertinent part, Notice No. 1 of the Emergency Order stated:

> [t]here is a need to ensure that emergency exits are clearly marked and in operable condition on all passenger lines, regardless of the equipment used or train control system. FRA's regulations generally require that all passenger cars be equipped with at least four emergency opening windows, which must be designed to permit rapid and easy removal during a crisis situation. The investigation of the Silver Spring accident has raised some concerns that at least some of the occupants of the MARC train attempted unsuccessfully to exit through the windows. Whether those same people eventually were among those who exited safely, or whether those persons were attempting to open windows that were not emergency windows is not known at this time. However, there is sufficient reason for concern to require that measures be taken to ensure that such windows are readily identifiable and operable when they are needed. Accordingly, the order requires that any emergency windows that are not already legibly marked as such on the inside and outside be so marked, and that a representative sample of all such windows be examined to ensure operability. (FRA Safety Glazing Standards, 49 CFR Part 223, require that each passenger car have a minimum of four emergency window exits ''designed to permit rapid and easy removal during a crisis situation.'')

61 FR 6880, Feb. 22, 1996.

On February 29, 1996, FRA issued Notice No. 2 to Emergency Order No. 20 to refine three aspects of the original order, including providing more detailed guidance on the emergency egress sampling provision. 61 FR 8703, Mar. 5, 1996. In pertinent part, Notice No. 2 of the Emergency Order stated:

> The original order required but did not set parameters for testing a representative sample of emergency exits. The alteration to the emergency egress provisions requires that sampling of emergency window exits be conducted in conformity with either of two alternate methods commonly recognized for such efforts. This modification provides a degree of uniformity industry wide. These methods require sampling meeting a 95 percent confidence level that all emergency window exits operate properly (i.e., the methods do not accept a defect rate of 5 percent). Although the original order would have required testing all exits on a specific series or type of car if one such car had a defective window exit, the amended order permits the use of these commonly accepted sampling techniques to determine how many additional windows in [sic] test. In general, these principles require that the greater the percentage of windows initially found defective, the greater the percentage of windows that will have to be tested.
>
> In addition, FRA has modified the emergency egress portion of the order to clarify that the exterior marking requirement applies to those windows that may be employed for access by emergency responders, which may be windows other than, or in addition to, those designed for emergency egress for passengers. In addition, FRA has modified the interim system safety plan portion of the order to require discussion of the railroad's programs and plans for liaison with and training of emergency responders with respect to emergency access to passengers. The original order required discussion only of methods used to inform passengers of the location and method of emergency exits.

61 FR 8703, Mar. 5, 1996.

On March 12, 1996, in response to the MARC train accident in Silver Spring, Maryland on February 16, 1996, the NTSB issued ''Safety Recommendations'' to both the Maryland Mass Transit Administration (R–96–4 through R–96–6) and FRA (R–96–7). The NTSB was concerned because the emergency quick-release mechanisms for the exterior doors on MARC's Sumitomo rail cars were located in a secured cabinet some distance from the doors that they control, and the emergency controls for each door were not readily accessible and identifiable. The NTSB recommended that emergency quick-release mechanisms for exterior doors on MARC cars be well marked and relocated, so that they are immediately adjacent to the door control and readily accessible for emergency escape. The NTSB also noted that the left and right rear exterior side doors of the first car and the front interior end door and the right front exterior door of the second car were jammed, and observed that none of the car doors had removable windows or pop-out emergency escape panels (kick panels) for use in an emergency.

In addition, the NTSB stated that several train passengers were unaware of the locations of emergency exits, and none knew how to operate them. The NTSB found that the interior emergency window decals were not prominently displayed and that one car had no interior emergency window decals. Also, the exterior emergency decals were often faded or obliterated, and the information on them, when legible, directed emergency responders to another sign at the end of the car for instructions on how to open emergency

exits. The NTSB recommended that all emergency exits be clearly identified, with easily understood operating instructions prominently located on each car's interior, for use by passengers, and on each car's exterior, for use by emergency responders.

Based upon its investigation, the NTSB recommended that FRA:

> Inspect all commuter rail equipment to determine whether it has: (1) easily accessible interior emergency quick-release mechanisms adjacent to exterior passageway doors; (2) removable windows or kick panels in interior and exterior passageway doors; and (3) prominently displayed retroreflective signage marking all interior and exterior emergency exits. If any commuter equipment lacks one or more or these features, take appropriate emergency measures to ensure corrective action until these measures are incorporated into minimum passenger car safety standards. (Class 1, Urgent Action) (R–96–7)

Safety Recommendation R–96–7 at page 3.

On March 26, 1996, FRA convened a joint meeting of the Passenger Train Emergency Preparedness Working Group and the Passenger Equipment Safety Standards Working Group to discuss the NTSB's recommendations and incorporate the Safety Board's findings, as appropriate, into each working group's rulemaking proceeding. Fifty-seven members from 21 different organizations attended the joint meeting. Although some of the recommendations involving structural modifications to rail equipment are being dealt with by the Passenger Equipment Safety Standards Working Group, the remaining NTSB recommendations involving marking, inspection, maintenance, and repair of emergency exits are reflected in § 223.9(d), entitled ''Requirements for new or rebuilt equipment,'' and § 239.17, entitled ''Emergency exits.'' The Section-by-Section Analysis contains a detailed discussion of FRA's new requirements, particularly in light of the two 1996 accidents in New Jersey and Maryland and the NTSB's safety investigations and recommendations.

In a letter to FRA dated June 24, 1996, Donald N. Nelson, President of Metro-North and Chairperson of APTA's Commuter Railroad Committee, announced that commuter railroads nationwide were implementing a series of rail passenger safety initiatives building on the provisions of FRA's Emergency Order No. 20 and the NTSB's Safety Recommendations R–96–4 through R–96–7. In pertinent part, all commuter rail authorities committed to early voluntary implementation of the emergency preparedness requirements proposed in the NPRM, including requiring inspection and testing of all emergency window exits as part of routine car maintenance to ensure correct operation and ease of egress, offering emergency responder training for every jurisdiction within each commuter railroad's service area, and educating passengers on the use of emergency exits on commuter trains. The commuter railroads also indicated that each one will ensure the safety of its operation by adopting a comprehensive system safety plan that:

> (a) Defines the overall safety effort, how it is to be implemented and the staff required to maintain it;
> (b) Establishes the safety interface within the railroad, as well as with its key outside agencies;
> (c) Clearly indicates Senior Management support for implementing the safety plan and the railroad's overall commitment to safety;
> (d) Establishes the safety philosophy of the organization and provides the means for implementation;
> (e) Defines the authority and responsibilities of the safety organization and delineates the safety related authority and responsibilities of other departments; and
> (f) Incorporates safety goals and objectives into the overall corporate strategic plan.

APTA's Commuter Railroad Committee letter at pages 1 and 2.

As part of the ongoing review process within DOT, and subsequent to the Working Group's previous opportunities to review the rule text of the NPRM, FRA implemented changes to the draft proposed regulatory text and preamble. FRA initiated those changes in order to strengthen the rule's requirements and establish more objective criteria for FRA's review of each railroad's emergency preparedness plan. In a letter dated December 27, 1996, FRA sent a copy of the revised proposed regulatory text to members of the Working Group, and requested comments on issues that the members wished to see included in the preamble section of the proposal. FRA requested that all comments be submitted to FRA by the close of business on January 8, 1997. The NPRM was then published in the **Federal Register** on February 24, 1997.

In a letter to the Working Group dated August 8, 1997, FRA noted that it had completed its review of the oral and written comments on the NPRM. As part of the drafting process of the final rule, FRA invited members of the Working Group to attend a meeting on August 28, 1997 to discuss a number of significant issues that had been identified by the commenters and to consider FRA's recommendations. Based upon the helpful participation and cooperation of the Working Group at that meeting, FRA then completed the final rule. A copy of the minutes of the August 28, 1997 Working Group meeting is included in the public docket for this rulemaking, and a detailed discussion of the meeting follows in the ''Discussion of Comments and Conclusions'' portion of this final rule.

Development of the Passenger Safety Program

As discussed above, this final rule is one element of a comprehensive effort to improve the safety of rail passenger service. In addition to this rulemaking, FRA is currently dealing with related issues in several contexts. Recent actions concerning passenger safety needs have included, for instance, Emergency Order No. 20, which addressed, on an interim basis, key issues regarding railroad operating rules, inspection of required emergency window exits, and emergency exit signage and marking.

In the Passenger Equipment Safety Standards Working Group, FRA is examining possible requirements for improved emergency egress features for both retrofit and new construction. Affected railroads have completed the removal of latches requiring special tools for access to manual releases on powered doors. Separately, FRA is reviewing the totality of emergency egress requirements and the issue of their overall adequacy, including the relocation of manual releases to locations immediately adjacent to end vestibule doors. FRA anticipates that these efforts will be advanced through the collaborative rulemaking process. However, if necessary to ensure prompt action, FRA may propose specific requirements based upon its own staff analysis.

In the context of improving railroad communications, FRA's Railroad Safety Advisory Committee (RSAC) established a working group to specifically address communication facilities and procedures, with a strong emphasis on passenger train emergency requirements. The NPRM in this proceeding was published on June 26, 1997, reflecting the consensus recommendations of the RSAC. The final rule will address the need for redundant communications capability on all passenger trains. Although that rulemaking will establish minimum safety requirements with respect to communications equipment, it should be noted that intercity and commuter railroads already make extensive provision for ensuring communication capabilities during emergencies.

FRA is engaged in a four-phase process to address emergency preparedness. In the first phase, in 1994,

FRA distributed the Volpe Report (as described above) and encouraged railroads to examine their existing programs to determine what improvements could be made. The present rulemaking represents the second step in this process, formalizing a planning requirement and identifying certain mandatory elements. The third phase will begin as FRA reviews railroad plans to determine that the issues presented by the Volpe Report and the rule have been adequately addressed within the varying contexts of the commuter authority operations. FRA will conduct a detailed review of each plan. Following preliminary review and final approval of written plan submissions, FRA will determine how the program is being implemented in the field. FRA will also be interested in learning how this effort is being integrated into the overall system safety planning process that commuter authorities have agreed to undertake. FRA is optimistic that this approach will yield positive results, promoting creativity and cross-fertilization of the emergency preparedness planning process through FRA, APTA, and other channels. This give-and-take approach should facilitate standardization of matters involving interface with passengers, while permitting continued adaptation of programs to local needs.

The fourth phase will involve FRA's review, after gaining at least a full year of actual experience under the standards enacted here, of the implementation and effectiveness of the standards and related voluntary developments. In this phase of activity, FRA will work with interested parties to evaluate whether further rulemaking or other action might be necessary to ensure that, for each program element, standards and practices are sufficiently precise and stringent to achieve the desired improvements in emergency preparedness. Further, this review will determine whether experience in working with emergency responders indicates that additional program elements should be addressed.

Discussion of Comments and Conclusions

A total of 15 responses were received by FRA concerning the NPRM. Prior to the two public hearings that were held in Chicago, Illinois and New York, New York, five organizations submitted written comments: American Association of Private Railroad Car Owners, Inc. (AAPRCO); LIRR; METRA; METROLINK; and UTU. At the public hearing held in Chicago on April 4, 1997, six organizations were represented: APTA; Des Plaines, Illinois Fire Department; Office of Emergency Management of DuPage County, Illinois; Illinois Law Enforcement Training Standards Board; METRA; and the Village of Wheeling, Illinois. At the public hearing held in New York City on April 7, 1997, four organizations were represented: APTA; BLE; Omniglow Corporation (Omniglow); and UTU. Ten organizations and one individual submitted post-hearing written comments: AAPRCO; AAR; Amtrak; APTA; CALTRAIN; Littleton, Colorado Fire Department; LIRR; NICTD; NTSB; UTU; and Kieran Darcy.

In a letter to the members of the Working Group dated August 8, 1997, FRA noted that a significant number of issues and concerns had been raised by commenters on the NPRM. In the spirit of continuing the meaningful partnership on development of the emergency preparedness rule, FRA convened a meeting of the Working Group in Washington, D.C. on August 28 1997, in order to discuss the major issues addressed in the comments and at the public hearings and consider changes to the proposal for inclusion in the final rule. Among the issues discussed at this meeting were the: categories of employees required to be ''qualified'' personnel for purposes of carrying out responsibilities under the emergency preparedness plan; types and numbers of emergency simulations required of railroads; elements of passenger information programs; the process of formal review and approval of the emergency preparedness plan by FRA; and adoption of a single emergency preparedness plan for each passenger service operation by the passenger railroad and its host railroad(s). Discussions follow with respect to the primary issues raised by the commenters and/or discussed by the Working Group during the consultative process. In light of the comments received, FRA has reconsidered some of the proposals.

1. *FRA proposed that a minimum of one on-board crewmember on a train be qualified under the plan. Should FRA revise the definition of ''crewmember'' in the final rule to exclude on-board service personnel from the category of on-board staff that a railroad must qualify under the applicable provisions of its emergency preparedness plan? Should FRA increase the minimum number of crewmembers that must be qualified?*

The NPRM defined a ''crewmember'' as ''a person other than a passenger who performs either: (1) On-board functions connected with the movement of the train or (2) On-board service,'' and proposed that ''each passenger train shall have a minimum of one on-board crewmember who is qualified under the applicable emergency preparedness plan's provisions.'' 62 FR at 8356, 8357. FRA acknowledges the safety benefit in having each railroad provide emergency preparedness training to every on-board employee (including employees of contractors), and anticipates that railroads will voluntarily elect to train most, if not all, on-board personnel in emergency response procedures, but FRA recognizes the practical limits of an expansive definition of ''crewmember.''

Among the comments received, APTA noted that the proposed definition of ''crewmember'' is overbroad, and brings in classes of workers such as security forces, service providers, marketing staff, survey takers, and hosts. Certain contract vendors providing services such as food and beverage are neither railroad personnel nor passengers, yet would appear to fall under the proposed definition. Also, some commuter operations lease out a bar or club car, and APTA believes that those personnel should not be included in the definition. The additional training expenses associated with qualifying this category of non-operating railroad employees under the railroad's emergency preparedness plan would not be cost effective. APTA, therefore, requested that the definition of ''crewmember'' be revised to cover only operating personnel. Also, since on-board service personnel typically work for Amtrak in intercity service, APTA stated that the concept should not be applied to commuter railroads.

METROLINK commented that some of its conductors perform the function of fare enforcement conductors, and should be excluded from the definition of ''crewmember.'' In addition, METROLINK noted that since it may contract out food service on some of its intercity trains, these contract workers should also be excluded from coverage in the final rule.

The UTU believed that a passenger train should not be dispatched unless the conductor is the qualified crewmember under the emergency preparedness plan, and noted that in serious accidents, the engineer cannot respond because of personal injury or damage to the locomotive radio system. In addition, the UTU stated that on-board personnel are not qualified on the physical characteristics of the railroad and may be asleep at the time of an accident. If a train has a crewmember who is qualified under the emergency preparedness plan, along with a conductor from a freight railroad who is qualified on the physical characteristics of the railroad, the two individuals

could coordinate emergency efforts. The BLE stated that the training that is developed for the qualified individual responsible for communications must include the engineer in order to reflect a redundancy factor for on-board personnel, and noted that the final rule should not count on-board crewmembers employed as service attendants as qualified crewmembers.

Upon careful consideration of the comments, FRA concludes that rail passenger safety will be enhanced by limiting the definition of ''crewmember'' to exclude on-board railroad and contractor employees who have little knowledge of emergency preparedness issues and railroad operations (e.g., security forces, marketing staff), while simultaneously requiring that all operating employees (and sleeping car and coach attendants on trains operating in intercity service) be qualified under the emergency preparedness plan. In reaching this conclusion, FRA recognizes that individuals who merely sell food and beverages to passengers onboard a passenger train, but are not involved with the train's operation, may be incidental to the railroad's overall plan for emergency preparedness. However, FRA believes that sleeping car and coach attendants on intercity trains can play a very key role in precipitating passenger evacuation during the aftermath of an emergency.

Unlike passengers on commuter trains, who generally remain aboard their trains for short time periods and have minimal direct dealings with crewmembers, passengers traveling in overnight trains have frequent contact with their coach and sleeping car attendants. While commuter trains generally operate through densely populated metropolitan or suburban areas, intercity-passenger trains, by their very nature, face a greater likelihood that if an emergency situation occurs it will happen in a remote area not readily accessible by members of the emergency responder community. The location of the emergency, unclear jurisdictional authority, lack of road access, lack of emergency equipment, or unavailability of knowledgeable and skilled personnel could prevent police, emergency medical technicians, or other emergency response personnel from making a timely response and hamper evacuation. The coach and sleeping car attendants will be aware of the approximate number of passengers on board the intercity train and likely know how many passengers with impaired mobility may be unable to evacuate the train on their own through the emergency window and door exits or who risk injury if they try to do so. Accordingly, since these attendants could prove invaluable in assisting both the passengers and the emergency responders during the initial period after the occurrence of the emergency, FRA concludes that the emergency preparedness plan must provide for proper training of these individuals.

FRA also recognizes that in the aftermath of an emergency the crewmembers will have many important responsibilities, including maintaining contact with the control center, ensuring proper protection of the train, and providing for the safety of the passengers. If the emergency involves a collision or derailment, one or more of the crewmembers may be injured and unable to carry out his or her duties. In an effort to increase the number of crewmembers who will be available to implement the railroad's emergency preparedness plan, the final rule requires that all on-board operating employees be qualified under the applicable provisions of the emergency preparedness plan. See § 239.101(a)(2)(vi). Of course, in the event that a railroad operates a train with the engineer as the only crewmember, then the railroad will be in full compliance provided that the engineer is fully trained and qualified under the plan.

Accordingly, FRA is revising the definition of ''crewmember,'' as it applies for purposes of intercity service, to include both operating employees on board the train (i.e., railroad employees, or employees of contractors to railroads, who have been assigned to perform service subject to the Federal hours of service laws during a tour or duty) and individuals who serve as sleeping car or coach attendants. Instead of permitting an intercity train to operate with a minimum of only one crewmember who is qualified under the railroad's emergency preparedness plan, the final rule requires that all on-board operating employees be trained and qualified under the plan's provisions. However, a narrow exception will exist when a freight train crew serves as the relief crew on a passenger train. In this limited circumstance, the final rule permits the passenger train to operate, provided that at least one on-board operating crewmember from the passenger train is properly trained and qualified under the railroad's plan and available to perform excess service in the event of an emergency situation. See 49 U.S.C. 21102(a) and 21103. For purposes of all other categories of passenger train service, FRA is revising the definition of ''crewmember'' to apply only to operating employees on board the train (i.e., railroad employees, or employees of contractors to railroads, who have been assigned to perform service subject to the Federal hours of service laws during a tour or duty), but exclude persons who provide on-board food or beverage service or security protection. In addition, all of the on-board operating employees (along with sleeping car and coach attendants assigned to intercity service) must be trained and qualified under the plan's provisions.

2. *Should tabletop exercises not count toward the requirement to conduct emergency simulations, and instead should at least one full-scale simulation be required during the time period specified? If so, should the minimum number of activities be adjusted to reflect the increased quality of the simulation program? Should railroads be required to develop training programs for emergency responders and their organizations?*

Although FRA noted in the NPRM that a tabletop exercise is relatively easy to orchestrate, ''as it involves only a meeting room and knowledgeable managers and employees from the passenger train operator and the appropriate responding organizations who voluntarily participate,'' FRA stated that it might include a comprehensive requirement in the final rule involving multiple numbers of full-scale disaster simulations. See 62 FR at 8346. The NPRM set forth a requirement for railroads operating passenger train service to conduct emergency simulations, either full-scale or table exercises, in order to determine their capabilities to execute their emergency preparedness plans. 62 FR at 8257, 8258. The proposal required each commuter or short-haul railroad to conduct enough simulations to include each major line at least once during every two calendar years at least 50 percent of the total number of major lines during any given calendar year. Railroads providing intercity passenger train service were to conduct at least two emergency simulations during each calendar year for each business unit or other major organizational element.

Comments Received

Amtrak stressed that tabletop simulation exercises can accomplish many of the same objectives as full-scale exercises, but at a much lower cost. It noted that the actual emergency response activities required when real accidents occur also provide an ongoing source of preparedness and insight with respect to possible improvements. Amtrak also opined that tabletop simulations, plus actual emergency

response situations that inevitably occur, should be sufficient to accomplish the objectives of evaluating and improving the ability of railroads and emergency responders to function effectively in the event of an accident. Amtrak recommended that if the final rule requires some actual full-scale experiences each year, an actual response, accompanied by an appropriate debriefing and critique, satisfy that requirement.

APTA stated that the simulation requirement should be either deleted or made optional, and noted that commuter railroads agree with the intent of the regulation, but object to a prescriptive approach. APTA observed that simulations, especially full-scale ones, are time consuming, expensive, and benefit a small percentage of employees. It stated that in view of these factors, the requirement to perform simulations at all combined with the requirement to perform simulations on 50 percent of main lines each year, goes beyond what is necessary for emergency preparedness.

APTA also noted that since emergency responders are not required to attend, commuter railroads often hold full-scale training sessions that are poorly attended. It argued that each railroad should be permitted to maintain operational flexibility to determine the best way to involve emergency responders.

The LIRR noted that emergency response agency costs vary and are difficult to uantify, since the majority of fire departments and ambulance crews are volunteers. Since they are volunteers, it may be difficult for the LIRR to get them to attend many drills. However, there are costs for equipment usage (e.g., fuel) and for medical supplies (e.g., bandages and splints). The railroad noted that, including preparation, it takes two full months to plan a full-scale simulation, integrate it with the responding agencies, coordinate and integrate it with the railroad's own transportation people (track time, service disruptions, alternative means of transportation, development of the program and scenario), and then complete the drill. Internally, the LIRR uses tabletop exercises extensively for procedure review and testing. They are used in areas where it is difficult to get track time and run the railroad, and are less effective than practical, experiential drills and training because of the minimal amount of exposure to the emergency responders.

CALTRAIN commented that tabletop exercises should be accorded the same weight and emphasis as actual field drills. Tabletop exercises, with follow-up debrief and critique, are very effective and less administratively burdensome. Certain exercises, such as window removal or after-dark conditions, can be performed as part of a tabletop drill by moving to the nearest rail facility. Subsequent to the Working Group meeting held in Washington, D.C. on August 28, 1997, CALTRAIN recommended that any full activation of the emergency preparedness plan in either an actual accident or other emergency situation count as a simulation, instead of only triggering a 180-day extension of the timeframe in which to perform the full-scale simulation, while if no such activation occurred, then the two-year cycle would apply. Since a ''real'' activation would be fully evaluated and modifications would be made, a ''simulated'' drill would be burdensome and redundant. Also, while CALTRAIN makes reasonable efforts to contact and invite area agencies, attendance is not mandatory. It argued that the final rule should discuss ''best efforts to contact, train, and participate'' in drills, since response agencies have budgetary and other issues with which to contend that affects their ability to participate in emergency drills on any given day.

METRA commented that it has 13 major lines, and would have to hold 6.5 simulations each year under the proposal. It noted that the participants would also have to be trained before each simulation, and under proposed 49 CFR 239.105, debriefing and critique sessions would be held afterward. METRA assumes that responder preplanning requires three weeks, the actual simulation takes two to four weeks to plan and coordinate, and the critique is performed a week after the simulation and compiled and acted upon the following week, for a total of 58.5 weeks spent performing 6.5 simulations. Under the proposal, METRA contends that it would have to conduct more than five simulations per year due to its system size and number of major routes. Even if the personnel and budget could be found to plan and conduct this level of simulation every year, METRA believes that it is questionable that the region's emergency responders could participate at this level.

METRA states that the Illinois Law Enforcement and Standards Board has certified METRA's program for training all law enforcement personnel throughout Illinois, and requests that a ''Train the Trainer'' program be added to the final rule as a means of ensuring a qualified response to passenger train emergencies. METRA's concern is that many of the fire departments overlap to such an extent, that by performing the set number of route simulations in the proposal, some of the departments could be involved in three or more simulations per year. Because of liability and publicity concerns, most fire departments would elect to be fully involved, but too many simulations may dilute the aggressiveness of the emergency responders. METRA suggested that the number of required simulations should be reduced in the final rule to only two per year, and that videotaping of emergency simulations could be used in the preparation of training for future simulations.

In its comments, the NTSB expressed concern that a railroad could comply with the rule by only performing tabletop exercises each time it conducts an emergency simulation. The NTSB stated that a tabletop simulation exercise is not equal to a comprehensive full-scale exercise, since only a full-scale exercise involving personnel and equipment can demonstrate an organization's capability and readiness to respond to a disaster. It also noted that full-scale exercises best afford a railroad the ability to assess the effectiveness of its emergency response plan and to identify the resources necessary to support its plan in an actual emergency, as well as to uncover specific problems, and that emergency response personnel can only become familiar with railroad equipment by participating in full-scale search-and-rescue scenarios.

The Office of Emergency Management of DuPage County, Illinois commented that a simulation is a much better means of training emergency responders to respond to a significant emergency than a classroom alone. However, DuPage County has three METRA lines running through it (and a fourth in planning), and would have to perform two simulations annually in addition to meeting other Federal emergency planning requirements. The commenter noted that although a tabletop exercise is a great way to discuss policy and talk about what will likely happen, until a person actually goes into the field and stands next to the rail car or has to move injured persons off the second level of a rail car, it is impossible to know how one really does it.

The Des Plaines, Illinois Fire Department believes that its employees get more knowledge through individual training at the departmental level than they can from mass casualty situations or large-scale incidents, and notes that individual training ensures that all personnel go through the hours of classes and go out on a train to touch

it, open its doors, and take a window out. Employees can also attempt to extricate a dummy from the train. In a large-scale drill, personnel are assigned to sectors, and depending on the sector to which they are assigned, will obtain the knowledge of just that one piece of the mass casualty situation, and will not receive the broad spectrum.

The UTU commented that the railroads should concentrate on case histories more than large-scale drills. It stated that large-scale drills are expensive and time consuming, tie up the railroad, and do not provide much learning opportunity.

In light of the written comments and testimony at the two public hearings from members of the emergency response community, FRA has reconsidered its proposal and is eliminating the provision for performing a tabletop exercise in lieu of a full-scale exercise, but scaling back the simulation requirement to involve only one meaningful full-scale simulation (performed either annually or every two years depending on the size of the railroad). A railroad that is considered larger, i.e., its operation includes either at least 150 route miles or 200 million passenger miles annually, must conduct at least one full-scale simulation annually, regardless of the number of major lines or business organizational elements on its operation. Each railroad operating passenger train service is also required to develop a training program available to all on-line emergency responders who could reasonably be expected to respond during an emergency situation, with an emphasis upon access to railroad equipment, location of railroad facilities, and communications interface. The training program will provide information to emergency responders who may lack the opportunity to participate in an actual simulation. The railroads could either offer the training directly or make the training information and materials available to State training institutes, firefighter organizations (e.g., National Fire Protection Association), or State police academies.

The consensus of the commenters was that it takes each railroad months to plan a full-scale simulation, to conduct the drill, and to complete the debriefing and critique session. Although some full-scale simulation training is essential, many of the commenters (including members of local fire departments) stated that emergency responders also need ''hands-on'' training for railroad equipment, which is better effected through ''hands-on'' classroom training. Classroom training permits a railroad to run a number of evolutions, allows many groups of individuals to have access to the equipment to achieve equipment familiarization, and enables emergency responders to practice lifting the rail equipment. While disaster simulations key on one incident (e.g., a hazardous materials incident or a train collision and a resulting fire), a classroom scenario can cover many different types of incidents. One commenter noted that if it had to spend a disproportionate amount of its time conducting numerous simulations, it would be forced to scale back its current program for training members of the emergency responder community.

FRA agrees with the commenters that the financial and logistical costs of conducting full-scale simulations are significantly higher than those for tabletop simulations, including the opportunity costs of lost revenue and the need to take railroad track and equipment out of service during the simulation. FRA also acknowledges that during ''hands-on'' classroom training a greater number of individuals receive direct access to railroad equipment than occurs during a large-scale drill. FRA encourages each railroad to voluntarily conduct tabletop exercises to identify the emergency response capabilities of its personnel in terms of their knowledge of procedures and equipment. However, FRA has decided that the safety objectives of this rulemaking are best served by requiring railroads to conduct at least a minimal number of comprehensive, full-scale simulations to determine whether a railroad is adequately prepared for the likely variety of emergency scenarios that could occur on its lines.

In reaching its decision to focus on a smaller number of larger scale simulations, FRA also acknowledged that under regulations established by the Federal Emergency Assistance Agency (FEMA), States are eligible to receive financial assistance for disaster preparedness under the Disaster Preparedness Improvement Grant Program. See 44 CFR Part 300. Under this program, States can receive FEMA money for training and to test and exercise procedures for their efforts in disaster response. While emergency responder organizations can receive funds to participate in railroad accident exercises and simulations, many of these same responder groups must also budget their limited time and resources in preparing for all other types of potential disasters that could strike their communities, e.g., airplane crashes, floods, and earthquakes. FRA recognized that if the final rule required railroads to conduct significant numbers of full-scale simulations, and they received full participation from the emergency responder community, the limited funds available from FEMA might prove inadequate to meet the overall disaster-preparedness needs of the States and local jurisdictions.

Intercity operations present special challenges. Amtrak noted that full-scale simulations cause significant burdens, and argued that the final rule should permit tabletop simulations in lieu of full-scale ones. As an operator of seven different commuter services in this country, Amtrak noted that it would be involved in a great number of simulations on commuter lines, as well as its intercity service, and stated that full-scale emergency exercises involve weeks of preparation, commitment of physical resources, and expenditure of funds for actual implementation of the exercise. Track and equipment would be out of service during the placement, conduct, and removal of equipment from the drill site. Significant disruption of normal operations on a rail line could occur in connection with conducting a simulation. Passengers and shippers could be inconvenienced and equipment utilization adversely affected.

3. *What elements should be included in passenger information programs? Should surveys be required in the final rule?*

The NPRM required each railroad to conspicuously and legibly post emergency instructions inside all passenger cars (e.g., on car bulkhead signs, seatback decals, or seat cards) and use one or more additional methods to provide safety awareness information (i.e., on-board announcements, laminated wallet cards, ticket envelopes, timetables, station signs or video monitors, public service announcements, or seat drops). 62 FR at 8357. The proposal also expected each railroad to survey representative samples of passengers at least annually to determine the effectiveness of its passenger awareness program activities, and to improve its program, as appropriate based on the information developed. 62 FR at 8357.

APTA commented that while commuter railroads should be required to develop and use passenger emergency awareness programs, the features of the programs should be left to each commuter railroad's discretion. It stated that the final rule should be based on performance, not the command-and-control approach in the proposal. APTA also argued that the prescription favoring certain types of signage should be removed from the final rule, and the safety awareness requirement changed

to merely list examples of possible methods of disseminating safety awareness information. APTA noted that each commuter railroad has its own unique approach to developing and using tools to make passengers aware of emergency instructions inside passenger cars, and should retain flexibility to find the right mix of passenger communication techniques. APTA contended that unless the passenger information requirement allows a railroad latitude to use innovative means or new technology to deliver safety information, a railroad would have to apply for a waiver to develop or use the new program or technology, thus delaying its introduction.

The LIRR also commented on the issue of passenger awareness program activities. The railroad suggested that safety awareness information could be printed on a pocket-sized card in order to remind customers of the basics of what to do in the event of an emergency situation. FRA notes that § 239.101(a)(7)(ii), as proposed, already permits a railroad to disseminate information to passengers on ''laminated wallet cards.'' 62 FR at 8357.

FRA agrees with the two commenters that requiring railroads to choose among only the seven listed additional methods of providing safety awareness information to their customers is too restrictive, and could discourage railroads from being innovative. FRA fully expects most railroads to use either on-board service announcements, laminated wallet cards, ticket envelopes, timetables, station signs or video monitors, public service announcements, or seat drops as the second means of ensuring the effectiveness of their passenger safety awareness programs. However, FRA encourages the use of alternate but equally effective approaches, especially if validated by information deduced from the debriefing and critique sessions held after passenger train emergency situations or simulations.

FRA is not, however, revising the requirement that railroads post emergency instructions inside all passenger cars. In the event of an emergency, passengers may experience panic and momentarily forget any information that may have been conveyed by the crew before the train's departure (e.g., through an on-board announcement). FRA believes that an important part of the successful implementation of this rule depends on railroads posting convenient and conspicuous reminders to their passengers of the important safety procedures to follow in the event of an emergency. Such a requirement will also provide a measure of consistency, benefiting passengers who use more than one service provider.

Upon review of the comments on the passenger survey requirement, FRA concludes that the financial cost to each passenger railroad of developing and conducting a survey capable of reaching a statistically significant cross-section of its customer population in order to periodically update and improve its passenger safety awareness information greatly exceeds any potential benefit. Accordingly, FRA is deleting this requirement from the final rule.

In proposing the survey requirement, FRA presumed that railroads would merely include additional questions on customer satisfaction surveys currently used to assess passenger comfort and assist railroads in timetable planning. FRA assumed that the additional costs to the railroad industry would therefore be minimal. However, three railroads and APTA commented on FRA's proposal, convincing FRA that unless the rule required each railroad to employ a rigorous and scientific survey methodology, most oral and written surveys would likely be completed only by those passengers who are either regular riders already familiar with emergency procedures or dissatisfied riders who have complaints about train service. Without such a financially burdensome requirement, the survey results would be of little or no value to the railroads in verifying passenger awareness of the location(s) on the passenger car of safety information or knowledge of safety procedures to be followed in the event of an emergency. Accordingly, since any changes made by the railroads to their passenger awareness programs might be predicated upon inaccurate or incomplete information, FRA believes that a survey requirement would likely not benefit passenger safety.

Consistent with FRA's conclusion, APTA commented that although passenger surveys may be useful in determining passenger safety awareness, there is no guarantee that they will be useful in fact. APTA stated that since completion of the survey is voluntary on the part of the public, the survey would not provide any real knowledge to the railroad of passenger awareness of emergency preparedness.

APTA also disagreed with FRA's estimate that the survey requirement would entail no additional cost to each railroad, noting that DOT recently estimated that on-board transit surveys cost $12 per completed survey (DOT–97–08, as reported in the Urban Transportation Monitor). Based upon 360 million passenger trips daily and a sample size of one percent, APTA concluded that the total cost to survey commuter rail passengers would be $21,600,000 ($360/2 \times .01 \times \$12.00$). Although APTA realized that the cost might be smaller, depending on the number of surveys done and number of questions asked, it stressed that the final cost would be more than incidental.

Amtrak commented that the survey requirement is unnecessary and undesirable, and could undermine the public's opinion of the safety of train travel. It noted that no other transportation mode is required to conduct surveys of passengers' levels of knowledge of safety information or procedures. Instead of performing mandatory surveys, Amtrak recommended that railroads focus on providing passengers with the information necessary for them to function in the event of an emergency, as is currently done in the airline industry. Amtrak shared APTA's concern that since public participation in the survey is voluntary, railroads would have serious concerns about the objectivity and validity of the results obtained.

NICTD opposed the use of passenger surveys to determine knowledge or compliance and stated that despite the rule's flexibility in the methodology of surveys, surveys would not in and of themselves measurably contribute to overall passenger education concerning emergency situations. NICTD stated that the education and ongoing training of train crews concerning emergency situations is more productive and cost effective, since train crews are ultimately responsible for dealing with passengers in these situations.

NICTD also questioned the cost/benefit factor of having employees orally survey passengers aboard trains or at train stops, arguing that the use of written surveys distributed to passengers boarding trains, or provided as seat drops, would not guarantee completion of the forms. Further, NICTD stressed that the requirement to survey a ''representative sample of passengers'' each calendar year cannot be assured by the survey process, whether the survey is done orally or in writing. Oral surveys may be viewed by passengers as annoying, who will then refuse to cooperate, and written surveys will likely be completed only by those passengers who are inclined to respond.

The LIRR commented that it performs at least one customer-satisfaction survey per year, at a cost of $155,000 per survey, and on a case-by-case basis performs targeted surveys to assist in a decision-making process. The LIRR's Market Development area input shows

that the response rate should be at least 45 percent to allow for valid projection of the sample findings to the whole population. However, the LIRR's normal response rate of mail-back surveys that it has conducted in the past, without incentives, is only 15 percent.

4. *Should FRA modify the requirement that the agency conduct a formal review and approval of each railroad's emergency preparedness plan within 180 days of receipt of the plan from the railroad?*

The NPRM stated that within 180 days of receipt of each initial emergency preparedness plan, and within 60 days in the case of a railroad commencing or hosting passenger operations after the initial deadline for plan submissions, FRA would conduct a formal review of the plan. 62 FR at 8358. FRA would then notify the railroad of the results of the review, whether the plan had been approved by FRA, and if not approved, the specific points in which the plan was deficient. 62 FR at 8358. If the plan was not approved by FRA, the railroad was required to amend its plan to correct all deficiencies (and provide FRA with a corrected copy) not later than 30 days following receipt of FRA's written notice of disapproval. 62 FR at 8358.

APTA commented that FRA should remove the time limit for approval of the emergency preparedness plan, and return to the original consensus recommendation of the Working Group that there be no deadlines. APTA stated that it doubted that FRA would be able to turn around the plans to the commuter rail systems within the specified timeframe, and recommended that FRA should adopt a consultative approach to emergency preparedness instead of the approach included in the NPRM.

In response to APTA's concerns, FRA is adopting a bifurcated approach to approval of the emergency preparedness plan in the final rule. The final rule specifies that within 90 days of receipt of each initial plan, and within 45 days in the case of a railroad commencing operations after the initial deadline for plan submissions, FRA will conduct a limited, preliminary review to determine if the required elements of the emergency preparedness rule are sufficiently addressed and discussed in the railroad's emergency preparedness plan submission. For example, this initial review will determine if the railroad has included a section in its plan on liaison relationships with on-line emergency responders, but will not yet involve field verification by FRA safety inspectors that the railroad is in fact inviting these responders to attend training programs on access to railroad equipment. After this initial review, as appropriate, FRA will then grant or deny conditional approval of the plan in writing. Within 18 months of receipt of each emergency preparedness plan, and within 180 days in the case of a railroad commencing operations after the initial deadlines for plan submissions, FRA will then complete a comprehensive review, consisting of ongoing dialogues with rail management and labor union representatives and field analysis and verification of the railroad's implementation of the plan's provisions, followed by final approval or denial.

The bifurcated approach to approval of the emergency preparedness plan will permit FRA to quickly review each plan for procedural compliance and immediately determine if the railroad has at least considered all required plan elements. However, FRA will then have a much longer timeframe in which to evaluate the plan's substantive sufficiency and the railroad's actual implementation. Without this change in the final rule, FRA would have had to choose between delaying many railroads from adopting their emergency preparedness plans or accepting some railroad plan submissions on good faith with little more than a cursory review. Either option would compromise the safety of railroad passengers and train crews in the event of a passenger train emergency situation.

5. *Should the final rule require a joint submission of one emergency preparedness plan by each railroad that provides or operates passenger train service and (as applicable) each railroad that hosts such service?*

In the section of the NPRM addressing joint operations, FRA stated that each freight railroad hosting passenger train service would be required to have an emergency preparedness plan addressing its specific responsibilities, and each railroad operating passenger train service over the line of a freight railroad would be required to coordinate the applicable portions of its emergency preparedness plan with the corresponding portions of the freight railroad's plan. 62 FR 8357. The purpose for the requirement was to ensure an optimal level of emergency preparedness on the part of every railroad involved in the operation of a particular passenger train service. In the section of the NPRM addressing the filing of the emergency preparedness plan, each affected railroad would be required to file its plan with FRA within 180 days of the effective date of the rule, or at least 90 days before commencing passenger operations, whichever is later. 62 FR at 8358.

It has become apparent to FRA during the course of the comment period that there is a reluctance on the part of both freight and passenger railroads to accept full responsibility for the requisite implementation of all of the elements of an emergency preparedness plan. FRA is concerned that the consensus of the commenters is that each entity expects the other entity to be held accountable by FRA in the event that an emergency situation occurs and the provisions of the plan are improperly executed. In order to ensure that all railroads involved in a particular rail passenger service operation understand each one's crucial role in planning for emergency preparedness, instead of merely requiring coordination of applicable portions of multiple emergency preparedness plans, the Working Group recognized the need to include a joint submission requirement in the final rule.

CALTRAIN commented that under the proposal, passenger or commuter railroads are responsible for the relationships with host or tenant freight railroads. While CALTRAIN stated its intent to work closely with such railroads, it noted that it has no authority over the freight railroads and declined responsibility for their actions or omissions. CALTRAIN suggested that FRA focus on evidence of a ''good faith effort,'' since CALTRAIN cannot mandate actions and cannot enforce the conduct of external agencies. This commenter urged FRA to use its enforcement powers.

APTA agreed with FRA that the language in an early version of the proposal that was shared with the Working Group, which placed the entire responsibility for the joint operation on the host freight railroad, did not properly account for the responsibilities of both parties. Since the NPRM reversed that scenario, APTA recommends that FRA either delete or redraft § 239.103(a)(3) to assign a measure of responsibility to the host freight railroad. APTA argued that although the NPRM required coordination, it does not provide a mechanism to ensure cooperation by the freight railroad to coordinate emergency efforts. If a freight railroad refuses or is unwilling to cooperate, a commuter railroad lacks recourse. The commuter railroad could still be fined for not coordinating with an unwilling freight railroad. Consistent with APTA's observations, the LIRR commented that the final rule needs terminology that recognizes that there is some joint responsibility between all of the involved parties to a passenger operation.

In its comments, the AAR acknowledged that while freight railroads neither provide nor operate rail passenger service themselves, and are not subject to most of the rule's requirements, freight railroads still have certain emergency preparedness responsibilities. The AAR recommended that FRA not revise the proposed language of § 239.101(a)(3), since it is in a freight railroad's interest to coordinate with a passenger railroad to ensure emergency preparedness. The AAR rejected APTA's concern about freight railroads refusing to cooperate with the passenger railroads, arguing that APTA, or any other interested party, presented no data or evidence to indicate that passenger railroads have experienced problems from freight railroads refusing to coordinate emergency responses. The AAR believed that FRA would never fine a passenger railroad that demonstrates that it attempted to comply with the regulation, but was unable to coordinate with a freight railroad due to the freight railroad's refusal to cooperate.

Based upon careful consideration of the comments, FRA is requiring communication and coordination between all railroads affected by this rule involved in each passenger operation, by mandating the submission by the passenger railroad of one emergency preparedness plan that is jointly prepared. Accordingly, if a State or public authority provides commuter rail passenger train service by contracting with another railroad to actually operate the service, and the passenger operation is in turn hosted by a freight railroad, all three entities are required to work together and file one emergency preparedness plan for the operation setting forth each railroad's procedures and responsibilities under the plan. If for example, a passenger operation will fulfill none of the requirements of emergency planning, with the host railroad having all of the responsibilities under the plan, this fact must be clearly stated in the plan.

In the event of noncompliance by any or all of the entities involved in the implementation of the plan, FRA reserves the right to initiate appropriate enforcement action against all parties participating in the plan. Of course, FRA will intervene to assist any railroad that is having difficulty crafting a joint emergency preparedness plan, and help mediate a solution. While FRA might not initially seek an injunction to prevent a passenger train operation from operating due to a host railroad's failure to cooperate, FRA could initiate civil penalty action against the host railroad for its failure to comply with the requirements of part 239.

The portion of the emergency preparedness plan addressing the host railroad's responsibilities shall, at a minimum, include procedures for notifying emergency responder organizations and discuss the railroad's general capabilities for rendering assistance to an involved passenger railroad during an emergency situation. The host railroad must also address any physical and operating characteristics of its rail lines that may affect the safety of the rail passenger operations, e.g., evacuation of passengers from a train stalled in a tunnel or on an elevated structure.

Section-by-Section Analysis

As a number of the issues and provisions have been discussed and addressed in detail in the preceding discussions, this section-by-section analysis will explain the provisions of the final rule and changes from the NPRM by briefly highlighting the rationales or referring to the prior discussion. The discussions and conclusions contained above should be considered in conjunction with the analysis contained below. Each comment received has been fully considered by FRA in preparing this final rule.

FRA amends part 223 of title 49, Code of Federal Regulations by adding six new definitions and requiring railroads operating passenger train service to clearly mark emergency windows. FRA also adds part 239 to title 49, Code of Federal Regulations specifically devoted to prescribing minimum Federal safety standards concerning the preparation, adoption, and implementation of emergency preparedness plans by railroads connected with the operation of passenger trains.

1. Definitions: Section 223.5

Section 223.5 is reorganized and definitions of four important terms employed in the passenger train emergency preparedness regulations are added. The four new defined terms are ''emergency responder,'' ''passenger train service,'' ''person,'' and ''railroad.'' For ease of reference, FRA defines the term ''railroad'' so as to include the statutory (49 U.S.C. 20102) definitions of both ''railroad'' and ''railroad carrier'' and to clarify that those who provide railroad transportation directly or through an operating contractor are railroad carriers. Thus, the term ''railroad'' is clearly intended to include commuter authorities as well as rapid transit authorities whose operations are in an urban area and are connected with the general railroad system of transportation. These terms are intended to have the same meaning as in part 239 of this chapter. However, FRA does not intend for its definition of ''railroad'' in either this part or part 239 of this chapter to have any bearing on how the term is used for purposes of the regulatory activities of the Surface Transportation Board.

2. Requirements for New or Rebuilt Equipment: Section 223.9

FRA received no comments regarding proposed paragraph (d), and the paragraph is adopted as proposed. In accordance with the requirements of 49 CFR 223.9(c) and 223.15(c), all passenger cars must be equipped with at least four emergency windows, which must be designed to permit rapid and easy removal during a crisis situation. Section 223.9(d) requires that all windows intended by a railroad to be used during an emergency situation be properly marked inside and outside, and that the railroad post clear and understandable instructions for their use at or near the designated locations.

Section 223.9(d)(1) requires that the emergency windows be conspicuously and legibly marked on the inside of the car with luminescent material. FRA realizes that during an emergency a main power supply to the passenger cars may become inoperative and that crewmembers with portable flashlights may be unavailable. Since lack of clear identification or lighting could make it difficult for passengers to find the emergency exits, the rule requires luminescent material on all emergency windows to assist and speed passenger egress from the train during an emergency. The marking of the emergency windows must be conspicuous enough so that a reasonable person, even while enduring the stress and potential panic of an emergency evacuation, can determine where the closest and most accessible emergency route out of the car is located. In addition, while this subsection does not prescribe a particular brand, type, or color of luminescent paint or material that a railroad must use to identify a window exit, FRA intends each railroad to select a material durable enough to withstand the daily effects of passenger traffic, such as the contact that occurs as passengers enter and leave the cars.

METROLINK, in commenting on the proposed rule, noted that the last line of § 223.9(d) requires ''each railroad [to] post clear and legible operating instructions at or near such exits,'' stated that it assumes that the referenced instructions relate to the

doors rather than the windows. Contrary to METROLINK's assumption, the instructions required by this paragraph are for operating the emergency window exits. The requirements for posting operating instructions at or near emergency door exits are contained in § 239.107 of this chapter.

Section 223.9(d)(2) requires that the emergency windows intended for emergency access by emergency responders for extrication of passengers be marked with retroreflective material. Since FRA recognizes that not every window will be equipped for emergency access, railroads are required to choose a retroreflective, unique and easily recognizable symbol that will readily attract the attention of emergency responders. The final rule does not require a specific size or shape for the symbol, but FRA intends the railroad's emergency preparedness plan developed pursuant to § 239.101 of this chapter to contain a provision explaining emergency responder access (along with passenger car egress), consistent with the evacuation strategy formulated jointly by the passenger train operator and the emergency responder organizations, in accordance with the emergency responder liaison provision set forth in § 239.101(a)(5) of this chapter. Of course, while the final rule does not require emergency responders to participate in evacuation planning or strategy with the railroads, the railroads must offer liaison training and assistance.

The final rule allows a marking that could consist of a symbol or words (such as ''RESCUE ACCESS''). Although FRA stated in the proposed rule that it reserved the right to be more prescriptive in the final rule based upon a uniform pattern, and noted that FRA was working to identify an appropriate marking that might be capable of universal recognition, FRA has decided to retain the flexibility set forth in the proposal. However, if during the fourth phase of FRA's comprehensive effort to address passenger safety issues FRA determines that a uniform pattern or symbol is required, FRA may modify the marking requirements of § 223.9(d)(2) during a future rulemaking action.

The final rule also requires railroads to post clear and understandable instructions at designated locations describing how to operate the emergency windows. This paragraph does not mandate that railroads use specific words or phrases to guide the passengers and emergency responders. Instead, each railroad should evaluate the operational characteristics of its emergency windows, and select key words or diagrams that adequately inform the individuals who must use them. While railroads are encouraged to post comprehensive instructions, FRA also realizes that during an emergency situation every additional moment devoted to reading and understanding access or egress information places lives at risk. In addition, FRA expects passengers and emergency responders to be already familiar with the location and operation of the railroad's emergency windows as a result of emergency responder liaison activities and passenger awareness programs conducted in accordance with §§ 239.101(a)(5) and (a)(7).

3. Appendix B to 49 CFR Part 223

FRA is revising Appendix B to 49 C.F.R. part 223—Schedule of Civil Penalties, to include penalties for violations of the provisions of § 223.9(d) to be included in the final rule. Commenters were invited in the NPRM to submit suggestions to FRA describing the types of actions or omissions that would subject a person to the assessment of a civil penalty, and were also invited to recommend what penalties may be appropriate, based upon the relative seriousness of each type of violation. FRA did not receive any public comments nor did the Working Group present any recommendations to the agency on this topic. Accordingly, FRA has amended the penalty schedule based on its own analysis of the inherent seriousness of violating the marking requirements for emergency windows of part 223. The penalty schedule also changes the maximum penalty that FRA is authorized to assess for violations of the provisions of this part. The maximum penalty is raised from $20,000 to $22,000 for any violation where circumstances warrant. This change is intended to comply with the provisions of the Federal Civil Penalties Inflation Adjustment Act of 1990, Pub. L. 101–410, 104 Stat. 890, 28 U.S.C. 2461 note, as amended by the Debt Collection Improvement Act of 1996, Pub. L. 104–134, 110 Stat. 1321–373 (April 26, 1996), which requires Federal agencies to adjust civil monetary penalties to counter inflation's effect of diminishing the impact of these penalties. The inflation adjustment is to be calculated by increasing the maximum civil monetary penalty by the percentage that the Consumer Price Index for the month of June 1995 exceeds the Consumer Price Index for the month of June of the last calendar year in which the amount of the penalty was last set or adjusted. The initial adjustment, however, may not exceed 10 percent. The resulting $22,000 maximum penalty was determined by applying the criteria set forth in sections 4 and 5 of the statute to the maximum penalty otherwise provided for in the Federal railroad safety laws.

4. Purpose and Scope: Section 239.1

FRA did not receive any comments, and this section is adopted as proposed. Section 239.1(a) states that the purpose of this part is to reduce the magnitude of casualties in railroad operations by ensuring that railroads involved in passenger train operations can effectively and efficiently manage emergencies. Paragraph (b) states that these regulations provide minimum standards for the subjects addressed, and the affected railroads may adopt more stringent requirements, so long as they are not inconsistent with this part. FRA does not in any way intend that the subject matter of 49 CFR part 239, Passenger Train Emergency Preparedness, be read to impose burdens or requirements on emergency responders who either participate with railroads in emergency simulations involving the operation of passenger train service or respond to actual emergency situations, or on any other person who may be involved with the aftermath of a passenger train emergency not specified in proposed § 239.3 concerning applicability. Accordingly, FRA does not intend to restrict a State from adopting a law, rule, regulation, order, or standard affecting emergency responders unless it is inconsistent with 49 U.S.C. 20106.

5. Application: Section 239.3

As a general matter, FRA will apply this rule to all railroads that operate passenger train service on the general railroad system of transportation, provide commuter or other short-haul passenger train service in a metropolitan or suburban area, or host the operations of such passenger train service. A public authority that indirectly provides passenger train service by contracting out the actual operation to another railroad or independent contractor will be regulated by FRA as a railroad under the provisions of the final rule. Although the public authority will ultimately be responsible for the development and implementation of an emergency preparedness plan (along with all related recordkeeping requirements), the railroad or other independent contractor that operates the authority's passenger train service will be expected to fulfill all of the responsibilities under this part with respect to emergency preparedness planning, including implementation.

FRA has revised paragraph (a)(3) to state that all railroads hosting the operation of passenger train service are covered by the final rule. While FRA recognizes that the majority of host relationships are entered into by freight railroads, there are a number of instances where passenger operations (e.g., Amtrak) host other passenger operations over their trackage. Accordingly, the final rule has been revised to reflect this fact.

Paragraph (b)(1) of both the NPRM and final rule indicate that the rule does not apply to rapid transit operations in an urban area that are not connected with the general railroad system of transportation, and this paragraph is intended merely to clarify the circumstances under which rapid transit operations are subject to FRA jurisdiction under this part.

In a final rule published in the **Federal Register** on December 27, 1995, the Federal Transit Administration (FTA) announced that it would begin requiring states to oversee the safety of rail fixed guideways systems not regulated by FRA. 60 FR 67034; see 49 U.S.C. 5530, 49 CFR part 659. Under its statutory scheme, FTA does not directly enforce safety statutes or regulations against rail fixed guideway systems, nor does FTA have safety inspectors who enter upon the regulated properties to perform inspections. In accordance with FTA's statutory authority and the above rulemaking, FTA does not interpret what constitutes commuter rail or rapid transit, but instead regulates whatever rail fixed guideway systems that FRA does not.

As set forth in Appendix A to part 209 of this chapter, with the exception of self-contained urban rapid transit systems, FRA's statutory jurisdiction extends to all entities that can be construed as railroads by virtue of their providing non-highway ground transportation over rails or electromagnetic guideways, and will extend to future railroads using other technologies not yet in use. For policy reasons, FRA does not exercise jurisdiction under all of its regulations to the full extent permitted by statute. Based on its knowledge of where the safety problems were occurring at the time of its regulatory action and its assessment of the practical limitations on its role, FRA has, in each regulatory context, decided that the best option was to regulate something less than the total universe of railroads.

In light of the above, FRA may elect to limit the exercise of its jurisdiction over these entities for policy reasons. FRA currently withholds the exercise of its jurisdiction over rapid transit operations where conventional and light rail operations are separated in time (night/day hour specifications). In making this policy determination, FRA anticipates working with the FTA on a joint policy statement that will be published in the **Federal Register** and discuss the types of rapid transit systems covered by this rule that will be subject to FRA's jurisdiction and which ones will instead be subject to state safety oversight under FTA's jurisdiction. As part of this joint policy analysis by FRA and FTA, our two agencies will seek to coordinate more explicitly the requirements of FRA regulations and State safety oversight programs.

The final rule is structured to apply to intercity and commuter service (as well as rapid transit operations that operate over the general railroad system of transportation), not tourist operations. At a later time, FRA may propose application of the rule, or some portion thereof, to tourist, scenic, historic, and excursion railroads. FRA's regulatory authority permits it to tailor the applicability sections of its various regulations so as to expand or contract the populations of railroads covered by a particular set of regulations. FRA has had jurisdiction over all railroads since the Federal Railroad Safety Act of 1970 was enacted.

In considering the issue of requiring emergency preparedness planning by tourist and historic railroad operators in the context of this rulemaking, FRA has not yet had the opportunity to fully consult with those railroads and their associations to determine appropriate applicability in light of financial, operational, or other factors that may be unique to such railroad operations. After appropriate consultation with the excursion railroad associations takes place, emergency preparedness requirements for these operations may be prescribed by FRA that are different from those affecting other types of passenger train operations. These requirements may be more or less onerous, or simply different in detail, depending in part on the information gathered during FRA's consultation process.

The Federal Railroad Safety Authorization Act of 1994 instructed FRA to examine the unique circumstances of tourist railroads when establishing safety regulations. The Act, which amended 49 U.S.C. 20103, stated that:

> In prescribing regulations that pertain to railroad safety that affect tourist, historic, scenic, or excursion railroad carriers, the Secretary of Transportation shall take into consideration any financial, operational, or other factors that may be unique to such railroad carriers. The Secretary shall submit a report to Congress not later than September 30, 1995, on actions taken under this subsection.

Pub. L. No. 103–440, § 217, 108 Stat. 4619, 4624 (November 2, 1994). In addition, section 215 of that Act specifically permits FRA to exempt equipment used by tourist, historic, scenic, and excursion railroads to transport passengers from the initial regulations that were scheduled to be prescribed by November 2, 1997. 49 U.S.C. 20133(b)(1). In its report to Congress entitled ''Regulatory Actions Affecting Tourist Railroads,'' FRA responded to the direction in the statutory provision and also provided additional information related to tourist railroad safety for consideration of the Congress. FRA will address the emergency preparedness concerns for these unique types of operations at a later date in a separate rulemaking proceeding. To facilitate resolution of this issue, and a significant number of related issues, the Railroad Safety Advisory Committee (RSAC) has established a Tourist and Historic Railroads Working Group. As a matter of cost efficiency, the Working Group may elect to cover emergency preparedness planning for tourist railroads as part of a package of tourist-specific safety proposals during a multi-day consultation on several rulemaking dockets. FRA would then issue a Notice of Proposed Rulemaking addressing issues in several dockets that pertain to these smaller passenger operations.

In § 239.3(b)(2), FRA states that the requirements of this part will not apply to the operation of private passenger train cars, including business or office cars and circus trains. While FRA believes that a private passenger car operation should be held to the same basic level of emergency preparedness planning as other passenger train operations, FRA is taking into account the financial burden that would be imposed by requiring private passenger car owners and operators to conform to the requirements of this part. Private passenger cars are often hauled by host railroads such as Amtrak and commuter railroads, and these hosts often impose their own safety requirements on the operation of the private passenger cars. Pursuant to this part, the host railroads will already be required to have emergency preparedness plans in place to protect the safety of their own passengers; the private car passengers will presumably benefit from these plans even without the rule directly covering private car owners or operators. In the case of non-revenue

passengers, including employees and guests of railroads that are transported in business and office cars, as well as passengers traveling on circus trains, the railroads will provide for their safety in accordance with existing safety operating procedures and protocols relating to normal freight train operations.

6. Preemptive Effect: Section 239.5

FRA did not receive any comments, and this section is adopted as proposed. Section 239.5 informs the public as to FRA's views regarding the preemptive effect of the final rule. While the presence or absence of such a section does not in itself affect the preemptive effect of this part, it informs the public concerning the statutory provision which governs the preemptive effect of these rules. Section 20106 of title 49 of the United States Code provides that all regulations prescribed by the Secretary relating to railroad safety preempt any State law, regulation, or order covering the same subject matter, except a provision necessary to eliminate or reduce an essentially local safety hazard that is not incompatible with a Federal law, regulation, or order and that does not unreasonably burden interstate commerce. With the exception of a provision directed at an essentially local safety hazard, 49 U.S.C. 20106 preempts any State regulatory agency rule covering the same subject matter as these regulations proposed today.

Of course, the subject matter of these regulations covers only the preparation, adoption, and implementation of emergency preparedness plans for passenger train operations. Although the subject matter includes a requirement in § 239.101(a)(5) that railroads establish liaison relationships with their on-line emergency responders by developing and making available a training program emphasizing access to railroad equipment, location of railroad facilities, and communications interface, FRA is not requiring emergency responders to participate in these liaison activities. Accordingly, since FRA is only regulating the content of the training opportunities that railroads must offer to the responder community, States are in no way preempted from regulating any other training requirements or other activities of the non-railroad emergency responders who arrive at the scene of an emergency after a railroad's emergency preparedness plan has been activated consistent with part 239.

Further, FRA acknowledges that there may be special local interests concerning types and/or quantities of on-board emergency equipment that might need accommodating, particularly in cases of public authorities operating passenger train service within only one territory. Although national uniformity to the extent practicable of laws, regulations, and orders related to railroad safety is important, FRA does not want to decrease the level of emergency preparedness already in place on a passenger railroad.

7. Definitions: Section 239.7

This section contains an extensive set of definitions to introduce the regulations. FRA intends these definitions to clarify the meaning of important terms as they are used in the text of the final rule. The definitions are carefully worded in an attempt to minimize the potential for misinterpretation of the final rule. Several of the definitions introduce new concepts which require further discussion.

For a detailed discussion of FRA's decision to revise the definition of ''crewmember,'' see the preceding ''Discussion of Comments and Conclusions'' portion of this document under heading of item number 1. The definition of ''crewmember'' is primarily intended to cover persons who either perform on-board functions connected with the movement of a train and are subject to the Federal hours of service laws during a tour of duty (*e.g.*, a locomotive engineer, conductor) or provide on-board service in a sleeping car or coach assigned to intercity service, other than food, beverage, or security service (*e.g.*, an Amtrak sleeping car attendant), a deadheading employee can be covered by the definition as well. Accordingly, such an employee could count as a ''qualified'' employee under § 239.101(a)(2)(vi) of this part for purposes of meeting a passenger railroad's minimum on-board staffing requirements for its emergency preparedness plan when a freight train crew has relieved that passenger railroad's expired crew. During a passenger train emergency situation, off-duty employees are expected to assume their appropriate roles under the railroad's emergency preparedness plan and assist the passengers.

In commenting on the proposal, METROLINK indicated that on some trains it has conductors who perform the function of fare enforcement, and recommended that FRA exclude these individuals from the definition of ''crewmember.'' METROLINK also requested that FRA exclude contract food workers from the definition of ''crewmember.'' In accordance with FRA's revised definition of ''crewmember,'' these categories of employees are now excluded from coverage.

The term ''control center'' envisions not only the traditional railroad concept of a train dispatcher's office, but also railroad offices that are identified as ''control centers'' but only monitor railroad operations, and modern system operations centers such as those of CSX Transportation in Jacksonville, Florida and the Burlington Northern Santa Fe Corporation in Ft. Worth, Texas. The term does not include a location on a railroad with responsibility for the security of railroad property, personnel, or passengers.

It is very likely that control center personnel are located at facilities which are remote from the right-of-way. These facilities should consist of the necessary command, control, and communications equipment to maintain normal train operations, to control electric traction, and to maintain communications throughout the passenger train system. In addition to these functions, the control center should help coordinate responses to emergencies by using equipment such as radio communications systems, direct ''hotline'' telephones, wayside power removal controls, and ventilation controls under the direction of emergency responders, according to the protocols and procedures of the emergency preparedness plan.

Typical emergency scenarios encompassed by the term ''emergency'' or ''emergency situation'' involving a significant threat to the safety or health of one or more persons requiring immediate action may include one or more of the following: illness or injury; a stalled train in a tunnel or on a bridge; collision with a person, including suicides; collision or derailment; fire; collision or derailment with a fire; collision or derailment with water immersion; severe weather conditions; natural disasters; and security situations (*e.g.*, bombings, bomb threats, hijacking, civil disorders, and other acts of terrorism). The definition of ''emergency'' or ''emergency situation'' has been changed in the final rule to include examples of some of the more common scenarios that would require a railroad to activate its emergency preparedness plan. However, regardless of whether a particular emergency illustration is specifically listed in the definition, FRA expects a railroad to activate its emergency preparedness plan anytime an unexpected event related to the operation of its passenger train service involves a significant threat to the safety or health of one or more persons requiring immediate action.

The NPRM defined ''emergency responder'' as ''a qualified member of a police or fire department, or other organization involved with public safety, who responds to a passenger train emergency.'' 62 FR at 8356. In its comments, APTA requested that FRA delete the word ''qualified'' because it implies that someone on the railroad will determine an emergency responder's qualifications. APTA stated that at an accident scene, a commuter railroad lacks the practical capability to determine an emergency responder's qualifications, and on-board personnel do not have the time to determine qualifications. The LIRR noted that emergency responder qualifications are dictated by police and fire departments, not the railroads.

In including the word ''qualified'' in the proposed definition of ''emergency responder,'' FRA never intended to place a burden on the railroads to determine the professional qualifications of emergency responders. It was assumed that the railroads would cooperate fully with any individual sent by an organization involved with public safety in response to a passenger train emergency, based solely upon that organization's own determination of its employee's qualifications. However, in response to the concerns of the two commenters, FRA has deleted the word ''qualified'' from the definition of ''emergency responder,'' and also revised the definition to clarify that a member of an emergency responder organization may coordinate as well as directly provide emergency services.

The AAR commented that the definition of ''joint operations'' is open to various interpretations, and suggested that FRA revise the definition in the final rule to state that ''joint operations means rail operations conducted by more than one railroad, except as necessary for the purpose of interchange.'' FRA agrees with this recommendation, and never intended for the final rule to apply to joint operations in instances when the sole purpose for using the trackage is interchange. Accordingly, the definition of ''joint operations'' in the final rule has been revised to exclude interchange situations.

The term ''qualified,'' as used in the rule, means employees who are trained under an applicable emergency preparedness plan's components and implies no provision or requirement for Federal certification of persons who perform those functions.

The definition of ''railroad'' is based upon 49 U.S.C. 20102(1) and (2), and encompasses any person providing railroad transportation directly or indirectly, including a commuter rail authority that provides railroad transportation by contracting out the operation of the railroad to another person, as well as any form of nonhighway ground transportation that runs on rails or electromagnetic guideways, but excludes urban rapid transit not connected to the general system.

The terms explained here are not exhaustive of the definitions included in § 239.7 of this part. This introduction merely provides a sampling of the most important concepts of the final rule. Many other terms are defined and explained in the section-by-section analysis when analyzing the actual final rule text to which they apply.

8. Responsibility for Compliance: Section 239.9

FRA did not receive any comments, and this section is adopted as proposed. Section 239.9 clarifies FRA's position that the requirements contained in the final rules are applicable to any ''person,'' including a contractor, that performs any function required by the final rule. Although all sections of the final rule address the duties of a railroad, FRA intends that any person who performs any action required by this part on behalf of a railroad is required to perform that action in the same manner as required of a railroad or be subject to FRA enforcement action. For example, if an independent contractor is hired by a railroad to maintain its records of inspection, maintenance, and repair of emergency window and door exits, pursuant to § 239.107, the contractor is required to perform those duties in the same manner as required by a railroad.

9. Penalties: Section 239.11

Section 239.11 identifies the penalties that FRA may impose upon any person, including a railroad or an independent contractor providing goods or services to a railroad, that violates any requirement of this part. These penalties are authorized by 49 U.S.C. 21301, 21304, and 21311, formerly contained in § 209 of the Federal Railroad Safety Act of 1970 (Safety Act) (49 U.S.C. 20101–20117, 20131, 20133–20141, 20143, 21301, 21302, 21304, 21311, 24902, and 24905, and §§ 4(b)(1), (i), and (t) of Pub. L. 103–272, formerly codified at 45 U.S.C. 421, 431 *et seq.*). The penalty provision parallels penalty provisions included in numerous other regulations issued by FRA under authority of the provisions of law formerly contained in the Safety Act. Essentially, any person who violates any requirement of this part or causes the violation of any such requirement will be subject to a civil penalty of at least $500 and not more than $11,000 per violation. Civil penalties may be assessed against individuals only for willful violations, and where a grossly negligent violation or a pattern of repeated violations creates an imminent hazard of death or injury to persons, or causes death or injury, a penalty not to exceed $22,000 per violation may be assessed. In addition, each day a violation continues will constitute a separate offense. Finally, a person may be subject to criminal penalties for knowingly and willfully falsifying reports required by these regulations. FRA believes that the inclusion of penalty provisions for failure to comply with the regulations is important in ensuring that compliance is achieved not only in terms of developing and implementing emergency preparedness plans, but also to better determine if railroads are planning ahead to minimize the consequences of emergencies that could occur.

The penalty schedule also implements the maximum penalty that FRA is authorized to assess for violations of the provisions of this part. The maximum penalty reflects an increase from $10,000 to $11,000 for violations and an increase from $20,000 to $22,000 for willful violations. This change is intended to comply with the provisions of the Federal Civil Penalties Inflation Adjustment Act of 1990, Pub. L. 101–410, 104 Stat. 890, 28 U.S.C. 2461 note, as amended by § 31001(s)(1) of the Debt Collection Improvement Act of 1996, Pub. L. 104–134, 110 Stat. 1321–373 (April 26, 1996), which requires Federal agencies to adjust civil monetary penalties to counter inflation's effect of diminishing the impact of these penalties. The inflation adjustment is to be calculated by increasing the maximum civil monetary penalty by the percentage that the Consumer Price Index for the month of June 1995 exceeds the Consumer Price Index for the month of June of the last calendar year in which the amount of the penalty was last set or adjusted. The initial adjustment, however, may not exceed 10 percent. The resulting $11,000 and $22,000 maximum penalties were determined by applying the criteria set forth in sections 4 and 5 of the statute to the maximum penalties otherwise provided for in the Federal railroad safety laws.

Although the penalty provision broadly provides that any person who violates or causes the violation of any requirement of 49 CFR part 239 is subject to a civil penalty, members of the Working Group were concerned

about the possibilities of theft of its on-board emergency equipment and/or vandalism of its passenger cars, and wanted FRA's permission to post warnings to members of the general public that committing such acts could subject them to Federal penalties. FRA encourages railroads to notify their passengers (and any potential vandal or trespasser) that in addition to any Federal or state criminal statutes that exist to prohibit vandalism, theft, trespassing, or tampering involving railroad equipment, property, or operations, FRA may impose a civil penalty upon any individual who willfully causes a railroad to be in violation of any requirement of this part. Take for example, a railroad that supplies each of its passenger cars with one fire extinguisher and one pry bar, and provides each of its on-board crewmembers with one flashlight. By equipping its train with all of these items, the railroad would be in full compliance with the minimum requirements of paragraph 239.101(a)(6)(i) of this part. Accordingly, if unbeknownst to the railroad, a vandal pilfers a pry bar from one of the passenger cars while the train is in service FRA can impose a civil penalty upon that individual for causing the railroad to be in violation of 49 CFR part 239. FRA recommends that in addition to posting written warnings on and in passenger cars, railroads use on-board announcements to remind their passengers of the serious consequences that can result from placing the railroad in violation of the important safety requirements of this part.

The final rule includes a schedule of civil penalties in an Appendix A to 49 CFR part 239, to be used in connection with this part. Commenters were invited to submit suggestions to FRA describing the types of actions or omissions under each regulatory section that would subject a person to the assessment of a civil penalty. Commenters were also invited to recommend what penalties may be appropriate, based upon the relative seriousness of each type of violation. FRA did not receive any public comments nor did the Working Group present any recommendations to the agency on this topic. Accordingly, FRA has drafted the penalty schedule based on its own analysis of the inherent seriousness of violating the requirements of part 239 of this chapter.

10. Waivers: Section 239.13

Section 239.13 identifies FRA's ability to grant waivers of compliance with the requirements of this rule. Requests for such waivers can be filed by any interested party. In reviewing the request, FRA would conduct a factual investigation to determine whether there was a basis to deviate from the general criteria without compromising or risking a diminution of rail safety.

11. Information Collection: Section 239.15

FRA is adding this section to note that it is inserting the OMB approval number for the information collection requirements of this rule for part 239, since OMB has completed its review and granted approval. This section also identifies the sections of part 239 that contain information collection requirements.

12. Emergency preparedness plan: Section 239.101

In drafting the final rule, FRA recognized that the specific operations of each individual passenger train system must be considered in the development and implementation of effective emergency preparedness programs. Factors which should be considered include system sizes and route locations, types of passenger cars and motive power units, types of right-of-way structures and wayside facilities, and numbers of passengers carried, as well as internal railroad organizations and outside emergency response resources. Under the final rule, each railroad subject to the regulation is required to establish an emergency preparedness plan designed to safely manage emergencies and minimize subsequent trauma and injury to passengers and on-board railroad personnel. The plan must reflect the railroad's policies, plans, and readiness procedures for addressing emergencies. The railroad is expected to employ its best efforts, under the circumstances of the emergency situation, to execute the provisions of its plan.

In their development of emergency preparedness plans, FRA encourages railroads to integrate, as practicable, the recommended guidelines contained in the Volpe Report. The report provides a comprehensive degree of specificity. While the final rule does not require the special level of detail reflected in the Volpe Report, FRA advocates that railroads voluntarily incorporate such elements and items as appropriate into the development of their own emergency preparedness plans, and reject recommendations only after judicious consideration.

While FRA stresses that each railroad should retain latitude in developing an emergency preparedness plan appropriate for its operations, the plan must provide a comprehensive overview, make clear and positive statements to railroad employees, and contain implementation details concerning the roles, responsibilities, and expectations for employee participation. The plan does not have to be one single document with each section applying to every railroad that is a party to the plan or to every affected railroad employee and location; instead, the plan may consist of multiple documents, with a separate section of the plan detailing the specific responsibilities for each job category or function or railroad or all. In instances where a railroad hosts the operations of a passenger railroad, both railroads have to address issues of emergency preparedness. The rule requires the host railroad to jointly develop the applicable portions of an emergency preparedness plan with the operating passenger railroad, uniquely dealing with the passenger operations not otherwise addressed. A detailed discussion of the requirement to jointly adopt a single emergency preparedness plan for the passenger service is included in the preceding ''Discussion of Comments and Conclusions'' portion of this document under item number 5.

The majority of passenger train operational difficulties are handled effectively and do not become emergencies. Since in many instances a train crew can immediately take action to resolve a problem and potential emergency without evacuating the train, existing emergency preparedness policies deemphasize immediate evacuation from trains located between stations unless passengers and crews are in immediate danger. Accordingly, in most situations, after notifying the control center that a problem exists and receiving permission, the train crew will move the train to the nearest station or safe location (e.g., outside a tunnel) before taking further action. If the train crew is unable to resolve the situation, railroad personnel or outside emergency responders may be sent to the emergency scene to provide mechanical aid, alternate transportation, or medical assistance.

The effectiveness of a railroad's overall response under its emergency preparedness plan will be greatly influenced by the type of emergency with which the train crew is presented (e.g., injury or illness, stalled train, suicide or accidental collision with a person, derailment or collision, smoke or fire, severe weather conditions or natural disasters, and vandalism or sabotage). The response will also be affected by the characteristics and type of train involved and the functional status of electrical and mechanical systems, including lighting, ventilation,

and public address systems. In addition, the operational environment (e.g., a train is located in a tunnel, on an elevated structure, or in electrified territory), and the type of right-of-way structure or wayside facility must be addressed, as appropriate, in each railroad's emergency preparedness plan.

The emergency preparedness plan must establish a chain of command which assigns functions and responsibilities to appropriate passenger railroad operating personnel, while recognizing the authority and responsibilities of emergency responders. Coordination is important to the ability of all parties to respond appropriately to an emergency, regardless of its size and location. Documentation, including applicable portions of the emergency preparedness plan, protocols, and procedures within rulebooks, manuals, and guidelines for control center employees and on-board personnel, provides the basic framework for coordination between all internal parties responding to an emergency. This internal documentation must address at least the following issues:

- Delineation of functions and responsibilities during emergencies for passenger railroad operating personnel, including control center personnel;
- Telephone numbers of railroad personnel and emergency responders who need to be notified;
- Criteria for determining whether an emergency exists and requires assistance from emergency responders;
- Procedures for determining the specific type, location, and severity of the emergency, and thus which response is appropriate;
- Procedures for notifying emergency responders; and
- Procedures and decision-making criteria for transferring incident responsibility from the passenger railroad operator to emergency responders.

Section 239.101 sets forth the general requirement that railroads shall develop and comply with their own emergency preparedness plans and written procedures to implement their own plans for addressing issues of emergency preparedness, that meet Federal minimum standards. Section 239.101(a) requires all railroads covered by part 239 to develop and implement written procedures to fulfill each applicable provision of this section. Depending on the nature of a railroad's operations, as well as on whether its operations involve a host railroad, different elements of this section may be fulfilled by more than one entity. While FRA requires all elements of this section to be addressed for each passenger train operation, the rule does not mandate that every element be addressed separately by each affected entity who is one of multiple parties to a single emergency preparedness plan. Accordingly, if a passenger train service operator relies on a freight railroad host to notify outside emergency responders after an emergency occurs, FRA would permit the freight railroad to set out its responsibility to address this element in its portion of the emergency preparedness plan. Provided that both entities properly coordinate their portions of the emergency preparedness plan (and include cross-reference citations to each other's sections of the plan), the passenger train service operator's portion of the plan could omit a particular item and still be in compliance with the final rule.

The final rule does not require that the public authority and the operating railroad or independent contractor each actively participate in performing duties in accordance with the joint filing with FRA of the emergency preparedness plan if the operating railroad or independent contractor is the only party performing a function under the regulation. However, each party's responsibility for compliance with this part must be clearly spelled out in the emergency preparedness plan that is filed with FRA for approval covering the entire passenger train service operation. After approval of the plan, FRA may hold the public authority or the other entity or both responsible for compliance with this part.

Based upon review of the comments and consultations with the Working Group, FRA is establishing the parameters for emergency preparedness plans in general, but will defer to the expertise of each individual railroad to adopt a suitable emergency preparedness plan for its railroad, in accordance with these parameters. As previously noted, the emergency preparedness plan may consist of multiple documents, with a separate document detailing the responsibilities of each category of employee under the railroad's plan. Each railroad is also encouraged to review the suggestions provided in the Volpe Report before developing its portion of the emergency preparedness plan in accordance with the requirements set forth in this section. In developing the plan, railroads are reminded that the goal of the final rule is to maximize the safety of passengers, railroad personnel, emergency response personnel, property, and the general public that come in contact with the railroad by providing for immediate notification of outside law enforcement officials and emergency responders. Railroads should not instruct their on-board employees to substitute as professional emergency responders and delay notification of appropriate railroad and outside officials.

Communication

Section 239.101(a)(1) sets forth the requirement that the passenger train crewmembers must communicate immediately and effectively with each other, as well as with the control center and the passengers. Typically, in an emergency situation the final rule anticipates that an on-board train crewmember will immediately contact the control center via a dependable on-board radio or an alternate means of communication (e.g., wayside railroad telephone, public telephone, private residence telephone, or cellular telephone) to advise appropriate railroad officials of the nature of the emergency and the type of assistance required. After this initial notification to the control center occurs, the passengers shall be informed of the emergency and provided directions. As appropriate, all passengers must be accounted for (particularly in sleeping compartments) so as to expedite evacuation, if necessary, and to avoid needless effort to search for ''missing'' persons, however, a passenger manifest is not required.

In its comments, METROLINK stated that the train crewmember should notify the passengers after consultation with the control center and the control center officer, unless the train must be evacuated immediately. The LIRR requested in its comments that FRA revise § 239.101(a)(1) in the final rule to require an on-board crewmember to remove all occupants of the train from imminent danger as a first step after he or she quickly and accurately assesses the passenger train emergency situation. The LIRR recommended that FRA adopt a performance-based standard, so instead of the rule requiring each railroad to provide specific levels of information to its passengers, the rule should permit general levels of information. The measure of success would be based upon whether the railroad successfully handled the emergency by ensuring the timely evacuation of its passengers.

APTA commented that crewmembers on commuter railroads need to have flexibility in what they tell passengers about an emergency situation, and noted that the proposal was ambiguous about the level of detailed information that must be provided. APTA also argued that since the proposal appeared to require crewmembers to tell all

passengers about the emergency, it could worsen an emergency situation by leading to inappropriate statements to passengers. APTA stressed that commuter railroad crewmembers are professionals, and should be empowered to use discretion in determining the appropriate information to tell passengers during and after an emergency.

FRA recognizes that each emergency situation is unique, and may require rapid decisionmaking and varied approaches by on-board crewmembers on how best to ensure the safety of the passengers. In response to APTA's concerns, proposed § 239.101(a)(1)(i) has been modified in the final rule by adding the words ''as appropriate'' in order to provide discretion to the on-board crewmembers as to when and how to inform the passengers about the nature of the emergency and the types of countermeasures that are in progress. FRA also replaced the words ''the train crewmember'' with the words ''an on-board crewmember'' in order to clarify that the crewmember who first notifies the control center does not necessarily have to be the same crewmember who communicates with the passengers. This change reflects the fact that generally it is the locomotive engineer who contacts the control center and the train conductor who keeps the passengers apprised of pertinent developments.

It is FRA's expectation that railroads will properly train their employees to perform the requisite life-saving functions after an emergency (e.g., relocation of passengers from a smoke-filled car to a safer section of the train or evacuation of the passengers from a derailed car), in conjunction with their responsibilities to assess the nature of the emergency and notify the control center as soon as practicable thereafter. Accordingly, while FRA may conclude in the course of investigating a specific train incident or accident that a particular employee's egregious mishandling of an emergency situation warrants individual enforcement action or enforcement action against the railroad, or both, the flexibility of the final rule is consistent with FRA's reluctance to strictly impose a precise order or manner in which on-board crewmembers must execute their individual responsibilities under the railroad's emergency preparedness plan. However, in the course of reviewing and approving emergency preparedness plans under § 239.201, FRA expects to see the railroads incorporating specific recommended practices as guidance to their employees concerning how they must respond to the various types of emergency situations most likely to occur during passenger operations, such as on-board fires, downed electrical power sources, or passenger injuries from a derailment.

Although the final rule does not require a railroad to use a specific means of communication, FRA expects the railroad to select a method that is effective and capable of reaching pertinent railroad control centers and on-board locations in order to comply with the notification requirement of this subsection. FRA further expects that railroads will voluntarily build redundancy into their emergency preparedness plans by outfitting their crewmembers with an immediately available backup means of communication, in the event that primary communications systems are either damaged during the emergency or otherwise rendered inoperative. For example, a cellular telephone could be made available for use by on-board crewmembers to contact the control center in the event the locomotive radio is inoperative. Also, on-board crewmembers could still maintain proper communication with the passengers, in the event that regular or emergency power was unavailable to operate the train's public address system, by using portable megaphones.

Although FRA had asked for comments on whether the final rule should expand the notification language of § 239.101(a)(1) to mandate a specific primary means of communication, and whether the final rule should also require each affected railroad to equip its passenger trains with a secondary means of communication in the event that the primary means is unavailable, no written comments were received on this issue. While the language of the final rule on this issue remains unchanged from the proposal, FRA expects the issue to be fully resolved in the context of the forthcoming revision of the Radio Standards and Procedures (49 CFR part 220). That rulemaking was tasked to the RSAC on April 1, 1996, and the NPRM was published in the **Federal Register** on June 26, 1997. 62 FR 34544. Among the proposals set forth in proposed § 220.9 of that NPRM, is a requirement that ''each occupied controlling locomotive in a train shall have a working radio, and each train shall also have communications redundancy.'' 62 FR at 34549, 34550, 34556. Persons wishing to receive more information regarding the NPRM on Railroad Communications should contact Mr. Gene Cox or Mr. Dennis Yachechak, Operating Practices Specialists, Office of Safety, FRA, 400 Seventh Street, S.W., Washington, D.C. 20590 (telephone numbers: 202–632–3504 (Cox); 202–632–3370 (Yachechak)), or Ms. Patricia V. Sun, Trial Attorney, Office of Chief Counsel, FRA, 400 Seventh Street, S.W., Washington, D.C. 20590 (telephone number: 202–632–3183).

While the final rule does not require that both ends of a train contain communication devices for use by a crewmember other than the engineer to directly contact the control center, FRA received comments from the UTU at the August 28 and September 2, 1997 Working Group meetings about the need for enhanced means of communications on trains, especially trains operating in intercity service. FRA is aware of devices, such as tone generators, that can enhance the communication capabilities of the radios already carried by each conductor and used to communicate with the engineer. If railroads voluntarily equip their trains with these devices in order to go beyond the minimum requirements of the final rule, then conductors may be able to directly communicate with the control center in the event that the engineer's radio communications equipment malfunctions or is damaged, or the engineer is incapacitated during the emergency situation. However, FRA recognizes that while portable radios can be placed on trains in a similar manner to equipping locomotives with mobile radios, portable radios may not be able to transmit to the control center due to distance, lower wattage, and smaller antennas. In the case of commuter railroads operating in push/pull service there will already be two mobile radios onboard, one at each end of the train.

It is FRA's understanding that many railroads publish an emergency toll-free telephone number in the employee timetable which connects with the control center office. Amtrak , while operating its intercity trains on a host railroad, will necessarily have access to those telephone numbers while on the host's property. Amtrak also has a nationwide toll-free telephone number which connects the caller (including private citizens) to the national Amtrak police desk in Washington, DC, which is manned around the clock. The final rule does not require that notification to the control center occur within a precisely measured number of minutes, rather it uses the words ''as soon as practicable'' in order to give railroads maximum flexibility. FRA expects that in the totality of the circumstances of the emergency situation, the train crewmembers will exercise their best judgment using the railroad's own emergency preparedness plan procedures.

Under current practice, Amtrak's notification of the emergency responders will vary slightly depending on whether or not the passenger train emergency occurs in Amtrak-dispatched territory. In territory where trains are dispatched by Amtrak, either the control center will directly notify the emergency responder or the control center will notify Amtrak police, who will then, as appropriate, notify pertinent emergency responders, State and federal agencies, and Amtrak supervisors. In territory where trains are not dispatched by Amtrak, the host railroad control center will directly notify the appropriate emergency responders, government agencies, and host railroad supervisors. Which emergency responders and agencies are notified depends on the nature of the emergency. Most control centers have emergency telephone numbers already in their computer systems, usually listed alphabetically by city, with hard copy backups.

In its comments, APTA requested that FRA modify § 239.101(a)(1)(ii) to increase the rule's flexibility concerning notifications by the control center to emergency responders, and permit the emergency preparedness plan to discuss the means by which the contacts will occur. APTA noted that not all commuter railroads have control centers in each emergency responder jurisdiction, and the control center in one State may control territory that passes into another State. There is no direct link, therefore, between the dispatcher and the emergency responders, and the railroad's police department is generally responsible for making these contacts.

In response to APTA's concerns, FRA is aware that because each railroad's operations are somewhat unique, the appropriate persons and organizations who must be notified will vary based upon the railroad's individual operating characteristics and the actual type of emergency that occurs. Accordingly, paragraph (a)(1)(ii) does not specify which emergency responder organizations (e.g., fire departments, helicopter rescue groups) or which categories of appropriate railroad officials that the control center must contact. Because the paragraph is already worded to provide maximize flexibility to railroads in designating the emergency contacts, FRA has not modified this paragraph in response to APTA's concerns.

FRA encourages each affected railroad to consider any reasonable method of notification when it drafts its emergency preparedness plan, so long as the notifications by the control center personnel occur promptly, whether by direct or indirect means. In this regard, FRA encourages railroads to consider the comments of Eric Sondeen of the Littleton, Colorado Fire Department, in drafting the section of their emergency preparedness plans that addresses communication. Among his comments, Mr. Sondeen recommended that railroads provide, on an annual basis, emergency dispatch center telephone numbers to all rail corridor emergency response agencies, including secondary telephone numbers. Mr. Sondeen also suggested that railroad crew timetables contain 24-hour civilian emergency response agency telephone numbers for contingency cellular telephone contacts by crewmembers.

METROLINK commented that each railroad should designate an employee function or position to be responsible for maintaining current emergency telephone numbers, rather than an individual employee. In response to this comment, FRA notes that paragraph (a)(1)(ii) does not specify which control center employees may be designated by the railroad to maintain the list of emergency telephone numbers. FRA concludes that the paragraph, as written, already permits a railroad great flexibility to select any relevant specific individual or general job category to maintain the lists, provided that the designation is properly set forth in the railroad's emergency preparedness plan submission. Accordingly, this paragraph is adopted as proposed. In addition, the term ''adjacent'' is not defined (e.g., a distance measurement from the passenger train experiencing the emergency to adjacent rail modes) for purposes of determining which other rail modes must be notified. Instead, consistent with the Working Group's request that the final rule provide each affected railroad with flexibility to implement the rule's provisions, this subsection requires that the emergency preparedness plan state how the railroad will achieve the appropriate notifications.

Although the final rule does not require railroad control center personnel to notify operators of pipelines and electric power companies that a passenger train emergency has occurred, FRA recognizes that pipelines and power lines can pose potentially serious hazards to rail passengers. On September 30, 1993, Amtrak Train No. 88, while being hosted on track owned by CSX Transportation, collided near Intercession City, Florida with a vehicle owned by Rountree Transport and Rigging, Inc. (NTSB Highway Accident Report (HAR) 95/01.) A natural gas pipeline was located in close proximity to the location of the passenger train accident, but no one notified the owner of the pipeline operation. Fortunately, an off-duty employee of the pipeline company viewed coverage of the accident on television approximately one hour after the accident, and notified the pipeline owner. Although CSX Transportation's emergency procedures manual stated that the first priority for its Operations Center dispatchers following an accident is to promptly notify appropriate local emergency response agencies when an emergency situation exists, CSX Transportation emergency procedures did not define the derailment of a train in an area occupied by a pipeline as an emergency condition. Among the NTSB's conclusions was that ''Osceola County emergency responders failed to determine and assess the risks posed by potentially hazardous pipelines at the accident site.'' NTSB/HAR 95/01 at page 50. The NTSB also noted in a footnote that one week before the collision an Osceola County fireman had attended a training session on pipeline emergency response actions that was sponsored by the pipeline company, but had not briefed others at the fire station about his training before the time of the accident. NTSB/HAR 95/01 at page 28, footnote 16.

Since the NPRM did not propose that railroads should be required to notify operators of pipelines and electric power companies when a passenger train accident occurs nearby, and FRA did not seek public comment on this issue, the final rule does not impose this additional notification requirement. However, based upon the many important safety issues that must be considered when a rail accident occurs, and in accord with the NTSB's findings concerning the accident that occurred near Intercession City, Florida in 1993, FRA encourages both railroads and members of the emergency responder community to voluntarily incorporate relevant information about pipelines and power line locations into their emergency preparedness planning. In addition, as part of the four-phase process of addressing emergency preparedness, FRA will review the implementation and effectiveness of paragraph (a)(1) and related voluntary developments, and evaluate whether further rulemaking activity or action is appropriate.

Initial Training

Section 239.101(a)(2) requires that the emergency preparedness plan provide for initial training, and then periodic training at least once every two years thereafter, of all railroad employees who

have responsibilities under the plan, and that the training address the role of each affected employee. Adequate training is integral to any safety program. This subsection recognizes that the successful implementation of an emergency preparedness plan depends upon the knowledge of the on-board and control center personnel about the system route characteristics, passenger cars and motive power units, and emergency plans, protocols, procedures, and on-board emergency equipment. An employee who has not been trained to react properly during an emergency situation may present a significant risk to railroad personnel and passengers. On-board employees must receive ''hands-on'' instruction concerning the location, function, and operation of on-board emergency equipment, stressing the following:

- Opening emergency window, roof, and door exits, with an emphasis on operating them during adverse conditions such as when a rail car is overturned;
- Use of emergency tools and fire extinguishers;
- Use of portable lighting when the main power source is unavailable on a passenger train; and
- Use of megaphones and public address systems (if they are provided by the railroad for communication purposes).

At the Working Group meeting held on August 28, 1997, some members questioned what FRA meant in paragraph (a)(2)(i)(E) by the phrase ''hands-on instruction.'' Some members of the group thought that it meant every employee being trained must actually open an emergency window and an emergency door exit on a passenger car, while others thought that a railroad would be in full compliance if only one employee were required to perform the ''hands-on'' exercise while hundreds of others received their training merely by observing. In addition, one member commented that since an emergency window used for demonstration purposes is costly to repair and requires taking the passenger car temporarily out of service to replace the rubber stripping, the final rule should permit employees to receive their ''hands-on'' training by watching a video presentation.

FRA recognizes the unique characteristics of the various railroad properties, and is reluctant to inhibit flexibility and creativity by imposing rigorous specifications in the rule text itself on how every railroad should perform ''hands-on'' training. However, FRA expects each railroad's emergency preparedness plan to address the means by which it proposes to train all of its on-board employees on the specific elements of: rail equipment familiarization; situational awareness; passenger evacuation; coordination of functions; and ''hands-on'' instruction. In this regard, FRA will not approve a plan that provides for ''hands-on'' training exclusively by allowing employees to watch a video, since watching a two-dimensional image of someone else demonstrating a means of emergency escape or using a piece of emergency equipment can be ineffectual. But, if a railroad wishes to use a video as an instructive tool in combination with a scale model of an emergency window (mock-up) containing a rubber pull strip, and the emergency preparedness plan provides for small groups of employees taking turns handling window glazing and practicing emergency escape using the mock-up, FRA would find this approach acceptable.

The final rule also requires appropriate training of control center personnel who effect the implementation of a railroad's emergency response plan. FRA expects the railroad to provide training only for the requisite control center employees designated under the plan to convey the nature and extent of a passenger train's emergency to the emergency responder organizations. Accordingly, FRA is not requiring training of other control center employees who perform merely incidental functions, e.g., a clerical or other office employee who receives a telephone call from a stalled train.

During the NPRM stage of this proceeding, FRA primarily envisioned the need for each railroad to provide appropriate training to its control center personnel on their duties after a passenger train emergency has already occurred (e.g., notifying outside emergency responders about a derailment). However, in light of a recent accident near Savannah, Georgia, FRA has revised the final rule to clarify that control center personnel may have important emergency-preparedness responsibilities even before a life-endangering situation turns into a passenger train emergency. Specifically, on October 9, 1997, an Amtrak train operating on track owned by CSX Transportation in Garden City, Georgia collided with a truck hauling a ''lowboy'' trailer (which has unusually low clearance between its underside and the ground) at a grade crossing. The truck had become stuck on the crossing. Prior to the collision, local police contacted CSX Transportation police, who alerted the CSX Transportation dispatching center in Jacksonville, Florida. The information concerning the stuck trailer reached the dispatcher of a nearby parallel line in the area, who saw no imminent risk because of an absence of rail traffic on this line. Unfortunately, the information did not reach the dispatcher of the line on which the lowboy trailer was actually stuck. Because the crew of the Amtrak train was not notified of the trailer's presence by the dispatcher and was not able to stop the train in time once it became visible, the Amtrak train collided with the trailer.

While the investigation of the accident is still in its early stages, the best information currently available supports certain preliminary conclusions. Information concerning the presence of the truck on the crossing was conveyed to CSX Transportation prior to the collision, but either the information was not sufficiently descriptive of the location of the incident or the information was not conveyed to the appropriate dispatcher, or both. In order to prevent the recurrence of such accidents, FRA and CSX Transportation agreed that CSX Transportation would require: continued emphasis on education of truckers; restricted speeds in zones where a highway-rail crossing collision may be imminent; precise identification of highway-rail crossings and immediate notification of hazards; a safety briefing for its dispatchers and supervisors on the scenario of the accident of October 9, 1997; and operational testing of its dispatchers and supervisors concerning avoidance of any possible collisions while the precise location of an obstruction or other hazard at a rail-highway crossing is being determined.

Consistent with the above discussion, FRA has revised the rule text to require that control center personnel receive territorial familiarization. FRA is aware that the railroad industry has a variety of methods available in order to accomplish this objective. These methods include, but are not limited to; review of trackage charts and operating timetables; familiarization train rides by train dispatchers through the territories in which they dispatch; and viewing of videotapes containing narration that describes the physical characteristics of the territory. FRA also expects each railroad's emergency preparedness plan to provide for a high degree of coordination and interface during all internal communications between personnel within the control center, particularly whenever a potential or actual emergency situation exists.

Initial Training Schedule

FRA recognizes that even after a railroad receives conditional approval of its emergency preparedness plan under § 239.201, the initial training of individual employees on their responsibilities under the emergency preparedness plan cannot occur immediately. Accordingly, new subparagraphs (iii) and (iv) have been substituted in § 239.101(a)(2) in order to establish an implementation schedule for this initial training. While each railroad will be held responsible by FRA for all other applicable provisions of its emergency preparedness plan that it can fully comply with immediately after the date of conditional approval (e.g., equipping each passenger car with one fire extinguisher in accordance with § 239.101(a)(6)(i)(A) or conducting a debriefing and critique session after a passenger train emergency simulation under § 239.105, the initial training can be spread out over a longer time period. In addition, during this implementation phase, the on-board staffing requirements of subparagraph (vi) of § 239.101(a)(2) will not apply.

During the Working Group meeting held on August 28, 1997, FRA did not receive any specific recommendations from members of the group on a precise implementation timetable for inclusion in the final rule. However, the Working Group agreed that the final rule needed to reflect the fact that railroads could not provide emergency preparedness training to every employee on the same day, and that the railroads would instead modify their other ongoing training programs to fulfill this new requirement. Upon careful consideration of this issue, FRA recognizes that smaller railroads (i.e, those whose operations include less than 150 route miles and less than 200 million passenger miles annually) generally operate less frequent service and employ fewer individuals in less hierarchical environments than do larger railroads and providers of intercity passenger service, and will therefore have an easier time providing emergency preparedness training from a logistical standpoint than will those larger service providers.

FRA anticipates that these smaller entities will also be able to offer this training to informal groups of employees without the need for carefully planned and organized training sessions. In addition, under the terms of the final rule, intercity service providers also have the added requirement to conduct training for persons performing on-board functions in a sleeping car or coach car (other than food, beverage, or security service). Accordingly, the final rule provides larger railroads and intercity railroads with more time in which to fully train their employees than it does smaller railroads in order to recognize the more complex organizational structure of these larger companies.

In the case of a railroad providing commuter or other short-haul passenger train service and whose operations include less than 150 route miles and less than 200 million passenger miles annually, the final rule permits the training to be completed up to 21 months after the effective date of the rule, which will be approximately one year after FRA grants conditional approval to the railroad. In the case of a railroad providing commuter or other short-haul passenger train service and whose operations include 150 or more route miles and 200 million or more passenger miles annually, or a railroad providing intercity passenger service (regardless of the number of route miles or passenger miles), the final rule permits the training to be completed up to 33 months after the effective date of the rule, which will be approximately two years after FRA grants conditional approval to the railroad. In addition, while each freight railroad hosting any category of passenger train service receives up to 21 months after the effective date of the final rule to train its employees, the implementation schedule for a passenger railroad hosting such service (e.g., Amtrak hosting the operations of NJTR in the state of New Jersey) is governed by subparagraphs (A)—(C) of § 239.101(a)(2)(iii), based upon either route miles and passenger miles or whether that host railroad provides intercity service. Accordingly, under a scenario of Amtrak hosting the operations of NJTR, Amtrak would receive up to 33 months in which to train its employees on their hosting responsibilities under the joint emergency preparedness plan covering the NJTR passenger operation.

In accordance with the implementation schedule, a railroad beginning passenger operations after the effective date of the final rule has either 90 or 180 days after beginning service, depending on the size or type of its operation, to train its employees on their responsibilities under the emergency preparedness plan. Any new employees who are hired by a railroad to perform either on-board or control center functions after the date on which the railroad receives conditional approval under § 239.201(b)(1), must receive their initial training within 90 days after commencing employment. During this 90-day time period, these employees would be permitted to function as crewmembers even though they had not yet become qualified under the emergency preparedness plan to perform the functions for which they will be responsible.

Periodic Training

The final rule affords the passenger railroad operator a time period of up to two years to provide each session of ''periodic'' training after the operator provides initial training in the emergency preparedness plan's provisions to its employees. The periodic training requirement is intended to inform railroad personnel of changes in procedures and equipment and ensure that their skills remain at a level that enables them to effectively execute their responsibilities under the emergency preparedness plan. In addition, the recurrent training will reinforce segments of the emergency preparedness plan for individuals who have not performed properly.

FRA concludes that the unique operating characteristics of all the different railroads subject to the final rule, as well as the financial costs involved with providing training, would make it impractical to include a calendar year or other more restrictive or specific requirement for periodic training in the final rule. As FRA recognized in drafting the NPRM, while the final rule places an upper limit of the term ''periodic'' at two years, anytime the provisions of an emergency preparedness plan are invoked during an actual emergency, that railroad receives an additional opportunity to evaluate the level of knowledge of its affected employees. However, since the final rule does not permit any level of activation of the railroad's emergency preparedness plan to count toward the training requirement, the railroad cannot count the event toward the periodic training requirement for those involved employees. However, FRA recognizes that affected railroad employees who receive ''real life'' training will still benefit from the experience, particularly whenever all five of the requirements of § 239.101(a)(2)(i) are addressed during the emergency and the employees also participate in the debriefing and critique session.

In the NPRM, FRA requested comments from railroads on the costs of implementing the on-board personnel training requirements of the rule. Specifically, FRA wanted to determine the extent of the current training that railroads already provide to their on-board employees (including emergency

preparedness training) as part of regular operating rules training programs. Comments were also requested concerning the estimated dollar amount of the incremental additional costs connected with modifying existing training programs to comply with this proposal. FRA was interested in ascertaining whether the training requirements would merely add *de minimis* costs to each railroad's existing training program or if compliance would entail moderate or significant additional costs.

The majority of the organizations that submitted comments on § 239.101(a)(2) recommended that FRA modify the requirement for employee training and qualification by permitting each railroad to provide periodic training at least once every three years, instead of at least once every two years. In this regard, Amtrak recommended that the periodic training requirement be changed to at least once every three years, to coincide with Amtrak's interval for refresher training on first aid. Although Amtrak stated that three years would provide sufficient frequency, it did not provide a reason. Amtrak also noted that railroads will provide their employees with interim updates when major changes to their emergency response programs occur.

APTA offered no comment on the frequency of periodic training for on-board personnel, but recommended a training cycle of three years for control center personnel. Consistent with the requirements of 49 CFR part 240 (Qualification and Certification of Locomotive Engineers), APTA stated that a three-year training cycle better fits the training programs of all commuter railroads, especially the larger ones. APTA also argued that a three-year training cycle would permit better scheduling of funding outlays for this important training activity.

CALTRAIN commented that a three-year cycle of formal training is preferable, since existing training drills regularly provide much of the required materials. CALTRAIN also stated that since formal training may require reassignment, a three-year training cycle better allows for budgeting and personnel reassignments during austere fiscal times.

The LIRR stated that a three-year qualification period for emergency preparedness training would meet the criteria set forth in the rule. However, the LIRR offered no supporting data for this assertion.

Rationale for Requiring Two-year Interval

In rejecting the request of various commenters to raise the time interval between periodic training cycles for on-board and control center employees to three years, FRA carefully considered both financial cost issues and the safety ramifications of weakening an integral element of emergency preparedness. Based upon FRA's analysis, the agency recognizes that railroads providing and hosting passenger train service will experience cost increases by being required to train their employees at least once every two years. However, FRA concludes that the effective and efficient management of passenger train emergencies begins with properly trained and knowledgeable railroad employees onboard the trains and in the control centers capable of quickly obtaining the assistance of emergency responders and ensuring the safety of the passengers. FRA believes that in order to maximize a railroad's level of emergency preparedness, frequent refresher training is essential, and any periodic requirement longer than at least once every two years increases the probability that a certain number of employees would become unfamiliar with their crucial emergency preparedness roles.

As discussed in the analysis of § 239.103, FRA requires railroads operating passenger train service to conduct full-scale emergency simulations to evaluate their overall emergency response capabilities and ensure that emergency preparedness plans, procedures, and equipment address the particular needs of various types of passengers. Emergency simulations can help railroads achieve these goals through careful selection of the time and location of the simulation and participation by personnel from the railroads, outside emergency responder organizations, and ''volunteer passengers.'' In addition to classroom training, simulations provide employees with a practical and realistic understanding of rules, procedures, trains, and right-of-way structures/wayside facilities as they relate to emergency response. FRA expects that the employee training provided in accordance with § 239.101(a)(2) will include instruction on the importance of full-scale emergency simulations in achieving successful implementation of the emergency preparedness plan.

First-Aid and CPR Training

Although § 239.101(a)(6)(ii) has been added to require railroads providing intercity service to equip each train with at least one first-aid kit (see the section-by-section analysis of this issue under the ''On-board emergency equipment'' heading for a detailed discussion of this requirement), the final rule does not require on-board personnel to receive training in first-aid or in CPR. Although FRA initially considered including these items as training requirements in the rule, or at least mandating that railroads offer employees the opportunity to receive this training, the consensus of the Working Group during the drafting of the NPRM was that both first-aid and CPR training should be excluded from the rule. The Working Group stressed that the goal of the rule is to ensure that emergency responders arrive promptly at the scene of an emergency, not to train on-board personnel to act as emergency responders. The Working Group also stated that even if FRA requires a railroad to offer first-aid and CPR training, no railroad can literally force an on-board crewmember to assist an ailing passenger. Further, trains with heavier passenger loadings are likely to have on board one or more medical professionals whose skills will be more extensive, and better practiced, than those of a crewmember whose primary and recurring duties do not include medical emergencies.

During the Working Group meeting on February 7, 1996, Amtrak stated that it is spending between $2.5 to $3 million by fiscal year 1998 to train the chiefs of on-board service and to provide for at least one employee on every train being trained to administer first-aid and perform CPR. Under the Amtrak plan, employees will not be required to use this training, merely to receive it. Despite the extent of Amtrak's commitment to voluntarily providing extensive first-aid and CPR training, Amtrak did not want these items required in the final rule. Another member of the Working Group, METROLINK, stated that it has served approximately eight million passengers in three years of operation, and has never had a passenger require CPR. METROLINK also noted that commuter railroads generally operate in populated areas, with professional emergency responders in most cases only minutes away. The LIRR stated that it offers CPR training to newly hired employees and shows a refresher film to employees every five years, but acknowledged that it cannot force employees to administer CPR. The railroad also noted that it would never want the engineer to leave the controls of the locomotive during an emergency. NJTR indicated that its train crews already have many duties to

perform during an emergency and that first-aid and CPR should be performed by emergency medical services personnel.

FRA invited commenters to submit their views on whether the final rule should include the issues of first-aid and CPR training. FRA noted that one option was to mandate that railroads offer their employees first-aid and CPR training, without requiring employees to actually use this training during an emergency. Under this scenario, a railroad employee who offered no assistance during an emergency, because he or she feared coming into contact with an injured or ill passenger's bodily fluids, would not violate these regulations. (The experience of the American Red Cross is that volunteers who receive first-aid and CPR training, and appropriate equipment, are motivated to provide needed assistance when the time comes.) The second option was to require not only that railroads train their employees in first-aid and CPR, but also mandate that employees use this training during an emergency.

The UTU commented that the final rule should make CPR training and first-aid training mandatory on a biannual basis, and require anyone who is properly trained and given proper equipment to offer assistance in an emergency. The UTU argued that each car should contain a first-aid kit and that each train should contain a doctor's kit in case a doctor is on board a train during an emergency situation. The UTU indicated that conductors on MARC trains receive a thorough emergency training program that includes CPR and first-aid training, and recommended that one conductor or assistant conductor be trained in emergency procedures for every 50 passengers on board a train. The UTU also noted that there would not be a delay in calling for help if the call is made quickly and the first-aid or CPR is then started. The UTU stated that employees who have not been trained with CPR will not be able to identify serious medical emergencies that truly require intervention by properly trained and equipped emergency personnel. Finally, the UTU expressed its doubt about METROLINK's assertion that none of its 8 million riders over the last three years had required CPR, and wondered about METROLINK's documentation for this statement.

CALTRAIN commented that employer-provided CPR training should be excluded from the final rule, due to potential liability issues. The Littleton, Colorado Fire Department stated that the final rule should require railroads to provide rail emergency and first-aid training to crewmembers on board both Amtrak and privately-operated passenger trains, as well as for the operating crews of all freight trains. Finally, the BLE noted that it was not opposed to a qualified person having skills in first-aid and CPR, but stated that although the engineer would benefit tremendously from first-aid training and CPR training, the engineer should remain on the locomotive and not be the principal person providing that response.

At the Working Group meeting held on August 28, 1997, the issue of requiring first-aid and CPR training was once again fully discussed. Although the UTU representative continued to recommend that FRA mandate that railroads provide this training and require its use in the event of an emergency situation, the preponderant recommendation to FRA from the railroad commenters (i.e., that this training remain optional) was unchanged from the NPRM stage of this proceeding. In making the decision to exclude first-aid and CPR training for railroad employees from the minimum requirements of emergency preparedness planning, FRA recognizes that the main objective of this rule is to ensure the prompt arrival of professional emergency responders at the scene if an emergency, not risk potential delays by encouraging on-board crewmembers to perform heroic efforts that may assist one individual passenger at the expense of the safety of the entire train. In addition, FRA is confident that since many members of the general public (including railroad employees) voluntarily obtain first-aid and CPR training, it is likely that someone knowledgeable will be aboard the train and available to assist in the event that medical professionals are delayed in responding to the emergency. However, FRA will continue to evaluate this issue through program review.

Passenger Manifests

The final rule also does not require railroads to record the number of passengers riding on their trains at any given time or to record how many people get on and off at each train stop. Although lack of an exact passenger manifest may delay emergency responders in determining when every passenger has been removed from a derailed or disabled train, the frequency with which many passenger trains pick up and discharge passengers would create logistical difficulties for a train operator. A train crew can usually provide a good estimate to emergency responders, so that they can respond with the necessary personnel and equipment. Moreover, it is doubtful that emergency responders would simply trust an exact passenger count provided by a train crew and cease looking for additional survivors of an emergency. Commenters were invited in the NPRM to offer proposals for training on-board crewmembers to track the exact number of passengers present on a train at any given moment, and to include suggestions on cost-efficient technology for achieving this goal. Since no comments were received, FRA has not included any passenger manifest-requirement in the final rule.

Testing

The term ''accurately measure'' is used in § 239.101(a)(2)(v)(A) relative to employee qualification in a broad sense to mean that the test will show to the railroad whether the employee has sufficient understanding of the emergency preparedness plan subject area for which he or she is responsible, and whether the employee can perform the duties required under the plan in a safe and effective manner. Proficiency must be demonstrated by successful completion of a written examination, but in addition may be illustrated by an interactive training program using a computer, a practical demonstration of understanding and ability, or an appropriate combination of these in accordance with this section.

This section permits railroads discretion to design the tests that will be employed (which for most railroads will entail some modification of their existing ''book of rules'' examination to include new subject areas), provided that the design addresses all relevant elements of the emergency preparedness plan. This section does not specify things like the number of questions to be asked or the passing score to be obtained. It does, however, contain the requirement that the test not be conducted with open reference books unless use of such materials is part of a test objective. This section also requires that the test be in writing. In deciding to require a written test, FRA is aware that the test-taking skills of some individuals may be deficient and that some persons may have literacy problems. However, FRA believes that minimum reading and comprehension skills are needed to assure proper execution of an emergency preparedness plan.

On-Board Staffing

Section 239.101(a)(2)(vi) has been revised and renumbered from the NPRM to require, as a general rule, that all on-board crewmembers be qualified to

perform the functions for which they are responsible under the applicable provisions of the railroad's emergency preparedness plan. For example, in the year 2002 (a date beyond the deadline for the completion of initial training under § 239.101(a)(2)(iii) by all existing railroads providing intercity passenger service), a train on an intercity railroad is scheduled to travel from Washington, D.C. to Atlanta, Georgia with a four-person operating crew fully trained under the applicable provisions of the railroad's emergency preparedness plan. However, the train crew also includes someone assigned to perform service as an attendant in a sleeping car (and not as a new railroad employee for purposes of § 239.101(a)(2)(iv)) who is not yet qualified under the plan's provisions to perform assigned functions. Although this train already has a fully trained and qualified crew operating the train, the intercity railroad would still not be in full compliance with the final rule since the crew includes one on-board crewmember who is not qualified under the emergency preparedness plan. (See the preceding ''Discussion of Comments and Conclusions'' portion of this document under the heading of item number 1 for a detailed discussion of FRA's decision to revise the definition of ''crewmember'' in § 239.7 and increase the on-board staffing requirements.) The one exception to the general rule, as set forth in subparagraph (B), applies if, for example, a fully-trained passenger train crew turns over the operation of its train to a freight railroad train crew that is not qualified under the passenger railroad's emergency preparedness plan. Provided that the passenger train is operated by the freight crew with at least one on-board crewmember of the passenger train present who is qualified under the passenger railroad's emergency preparedness plan and available to perform excess service under the Federal hours of service laws in the event of a passenger train emergency, there would be no violation of the final rule.

Joint Operations

Section 239.101(a)(3) has been revised from the NPRM, and now contains the requirement that each freight or passenger railroad hosting passenger train service shall communicate with that service's provider or operator or both and coordinate applicable portions of the one jointly-adopted emergency preparedness plan for that passenger service. One significant difference to the language of paragraph (a)(3) from the NPRM stage, is that the final rule prohibits a host railroad from utilizing a separate emergency preparedness plan in order to address its emergency preparedness responsibilities involving the service being hosted. (See the preceding ''Discussion of Comments and Conclusions'' portion of this document under the heading of item number 5 for a detailed discussion of the requirement that a joint emergency preparedness plan be submitted for each passenger train operation by all railroads involved with providing, operating, or hosting such passenger service.) The final rule also recognizes that while hosts of passenger train service are generally freight railroads, passenger railroads (e.g., Amtrak) may also serve as hosts.

The host railroads must prepare sections of the emergency preparedness plans addressing instances when they host the operations of rail passenger service over their lines. Even though freight railroads may neither provide nor operate rail passenger service themselves, and therefore not be subject to most requirements of the proposed rule, these railroads still have certain significant emergency preparedness responsibilities. The emergency preparedness plan sections addressing hosting by both freight and passenger railroads must, at a minimum, include procedures for making emergency responder notifications, and discuss general capabilities for rendering assistance to the involved hosted passenger railroads during emergency situations. The hosting railroads must address any physical and operating characteristics of their rail lines that may affect the safety of the hosted rail passenger operations, e.g., evacuating passengers from a train stalled in a tunnel or on an elevated structure.

FRA expects a railroad that operates rail passenger service over the line of another railroad to review all of the requirements imposed by the final rule with the host railroad, and coordinate their respective roles in implementing a coherent response to an emergency situation. While FRA presumes that the host railroad will bear primary responsibility for ensuring the emergency preparedness of any railroad permitted to operate intercity passenger or commuter trains over its line, the final rule does not restrict the host railroad and the operating railroad from assigning responsibility for compliance with this part via a private contractual arrangement. FRA is including the coordination requirement to ensure that all railroads involved in a particular rail passenger service operation understand each other's crucial role in planning for emergency preparedness.

Tunnels

Section 239.101(a)(4)(i) addresses FRA's requirements for compliance with this part by railroads with operations that include tunnels of considerable length, where immediate passenger egress is not feasible. Since FRA did not receive any comments on this issue, paragraph (a)(4) is adopted as proposed.

In order to limit the number of structures covered by this paragraph to the longer ones that could be expected to present more impediments to the safe and orderly withdrawal of passengers from a disabled train, tunnels of less than 1,000 feet are excluded. This limitation is reasonable, considering that intercity passenger trains seldom consist of less than four cars and often have many more cars than this, implying a minimum total train length of 400 or more feet. Most likely, a train of this or greater length will have either the head or rear end close to or outside of a tunnel portal should an unplanned stop occur in a tunnel less than 1,000 feet long.

Over the years, passenger train emergencies have occurred in tunnels where existing emergency procedures and tunnel characteristics, such as lighting and communication capabilities, were determined to be inadequate. In order to better evaluate tunnel safety issues related to emergency preparedness, FRA requested additional information from the railroad industry. The results were summarized in a report entitled ''Tunnel Safety Analysis'' (Tunnel Report), which was published by FRA in February 1990. A copy of the report was also made available to the rail passenger railroads for their information and guidance, and has been placed in the docket for this rulemaking. FRA encourages all railroads required to address tunnel safety in their emergency preparedness plans to consult the Tunnel Report for guidance. FRA is also aware that many State and local jurisdictions already impose site-specific regulations to address tunnel safety, and that most railroads with operations involving tunnels have long-standing internal emergency tunnel procedures.

Other Operating Considerations

FRA also did not receive any comments on § 239.101(a)(4)(ii), and has adopted paragraph (a)(4)(ii) as proposed. The paragraph requires that railroads operating on elevated structures, over drawbridges, and in electrified territory, incorporate emergency preparedness procedures into their plans to address these unique physical characteristics. For example, in an emergency in

electrified territory, the control center must be responsible for issuing instructions to deenergize the electrical power. Also, the train crew and emergency responders must know how, when, and when not to remove on-board power from the train, including traction power, train-lined (head-end) power to individual cars, and battery-source power. The prudent approach for everyone connected with a passenger train emergency, especially those individuals who have not received training in power isolation procedures, is to always assume that the electrical power is in the ''on'' position.

Also, railroad operations over bridges and trestles that cross over wetlands, lakes, rivers, or other bodies of water or over ravines (particularly those in isolated areas with no nearby roads) pose particular access problems for emergency responders. Helicopters or boats may provide the only logical approach to these locations.

Parallel Operations

Section 239.101(a)(4)(iii) recognizes that the emergency preparedness plans of certain freight and passenger railroads will need to address the unique safety concerns posed by adjacent rail modes of transportation. In commenting on paragraph (a)(4)(iii) as proposed, APTA stated that the final rule should not place the entire responsibility for the parallel operation on the passenger railroad, and should properly account for the shared responsibilities of both the passenger operation and the hosting freight railroad. Although coordination is required under the proposal, APTA argued that the NPRM did not provide a method to ensure cooperation with the freight railroad to coordinate emergency efforts. APTA noted that if a freight railroad refuses to cooperate, a commuter railroad lacks recourse, and could still face assessment of civil penalties for failing to coordinate with an unwilling freight railroad host. APTA requested that the final rule delete the words ''provide for coordination'' and replace them with the words ''shall seek to coordinate.'' APTA also indicated that the proposal did not take into account light and rapid transit rail operations that often run parallel to commuter operations.

In response to APTA's concerns, the final rule has been revised to include a requirement that all railroads that are parties to a passenger train operation's emergency preparedness plan must initiate reasonable and prudent actions to coordinate emergency efforts when adjacent rail modes of transportation run parallel to any of these railroads. By adding the words ''reasonable'' and ''prudent,'' FRA recognizes that coordination efforts may not always be successful if one of the railroad parties to the arrangement is unwilling to cooperate. While FRA will not penalize railroads that make good faith efforts to establish appropriate working relationships with adjacent rail modes of transportation, FRA expects each railroad to demonstrate that it made the necessary coordination attempts. In addition, upon notification and request, FRA will intervene to assist any railroad that is having difficulty coordinating emergency efforts, and help mediate a solution.

In response to APTA's comment that the proposal did not address light and rapid transit rail operations running parallel to commuter operations, FRA notes that the term ''rail modes of transportation'' is intended to cover all types of transit operations by rail or magnetic guideways running parallel to passenger railroad operations and their hosts. Accordingly, no change to the final rule was necessary.

In accordance with the requirements of this paragraph, employees of a host freight railroad to which this part applies, who have knowledge of or observe an emergency in a common corridor, e.g., fire, derailment, or intrusion by rapid transit rail equipment or motor vehicles, must be required by the emergency preparedness plan for the passenger operation to immediately convey that knowledge or information to the control center. The control center must attempt to determine the exact location of the incident, any condition that would affect safe passage by affected trains or road vehicles, and whether hazardous materials are involved, and then initiate appropriate responsive action. Under the terms of this revised paragraph, coordination of emergency efforts is required regardless of whether the host railroad is a freight railroad or another passenger operation.

Liaison With Emergency Responders

Many emergencies require response from outside emergency responder organizations in addition to the railroad. Proper coordination of roles between all of the organizations that may respond to an emergency is essential to ensure timely and effective response, since the number of passengers carried and the railroad operating environment may be quite different according to the type of service and routes. Paragraph 229.101(a)(5) recognizes that the successful implementation of any emergency preparedness plan depends upon the affected railroads maintaining current working relationships with the emergency responder organizations, so that each party can learn of the full preparedness capabilities that the other can offer during an emergency. In this regard, each railroad's emergency preparedness plan must provide for distribution to emergency responders of railroad equipment diagrams and manuals, right-of-way maps, information on physical characteristics such as tunnels, bridges, and electrified territory, and other related materials. In order to continually reinforce the familiarization of the emergency responder organizations with the railroads' protocols, procedures, operations, and equipment, the final rule requires railroads to periodically distribute applicable portions of the plan to emergency responders at least once every three years, even if no changes have been implemented. Further, since the knowledge and ability to carry out procedures and use emergency equipment are essential to the success of emergency response actions, the final rule requires the railroads to promptly notify emergency responders whenever material alterations to the plan occur (e.g., revisions to emergency exit information, pertinent changes in system route characteristics or railroad equipment operated on the system, or updates to names and telephone numbers of relevant contact officials on the railroad).

FRA wants to ensure that the emergency responders will receive the maximum amount of available information about a railroad's operations in advance of an emergency, and hopes that emergency responders will voluntarily study the material distributed and participate in emergency simulations. However, the final rule only requires that affected railroads make the operations information available to emergency responders, and that the responders merely be invited to participate in emergency simulations. FRA has no authority to penalize an emergency responder organization if it chooses to ignore the distributed information or refuses to attend simulations with the railroad. Likewise, the final rule does not hold a railroad accountable for an emergency responder organization's unwillingness to enter into a liaison relationship, provided that the railroad employed its best efforts to make the liaison opportunities known and available to the responders.

In addition to the requirement to periodically distribute applicable portions of the emergency preparedness plan to emergency responders (which has been moved from paragraph (a)(5)(i)

in the NPRM to paragraph (a)(5)(iii) in the final rule), FRA has added a new requirement as paragraph (a)(5)(i) mandating that each affected railroad develop and make available a training program for all on-line emergency responders who might be called upon to respond to an emergency. As set forth in the preceding ''Discussion of Comments and Conclusions'' portion of this document under the heading of item number 2, in conjunction with FRA's decision to scale back the simulation requirement of § 239.103 to involve only one meaningful full-scale simulation (performed either annually or every two years depending on the size of the railroad), FRA has added the training program provision in order to maximize the opportunity of the emergency responder community to obtain familiarity with railroad equipment, location of railroad facilities, and communications interface.

In paragraph (a)(5)(ii) of the final rule (which has been revised and renumbered from paragraph (a)(5)(iii) of the NPRM) FRA requires railroads to invite emergency responders to participate in emergency simulations. Since § 239.103 has been revised in the final rule to prohibit a railroad from counting a tabletop exercise toward the simulation requirement, any railroad electing to voluntarily conduct a tabletop exercise is not required by paragraph (a)(5)(ii) to invite members of the emergency responder community to attend. However, a railroad must employ its best efforts to invite all appropriate emergency responders to attend all of its full-scale simulations. Moreover, FRA expects each railroad to extend invitations to all full-scale simulations even if the railroad does not intend to count a particular simulation toward the minimum number required by § 239.103(b).

FRA recognizes that not every potential outside emergency responder will have the opportunity to attend a full-scale simulation or otherwise obtain realistic exposure to the unique emergency response challenges posed by railroad emergencies. In addition, even assuming that every affected railroad diligently distributes the pertinent portions of its current and updated emergency preparedness plan to appropriate members of the emergency responder community, descriptive information set forth in written materials is no substitute for formal training that includes meaningful hands-on experience with railroad equipment and an opportunity to ask questions of a live instructor.

In commenting on § 239.101(a)(5), APTA stated that all commuter railroads already attempt to share information with appropriate local emergency responders, and that this determination is based upon such factors as railroad operations and emergency responder capabilities. APTA argued that the proposed rule eliminates that discretion and flexibility and places a tremendous burden on commuter railroads to affirmatively seek out every emergency responder organization, whether or not that entity is a logical choice. APTA noted, for example, that paragraph (a)(5)(iii) of the proposed rule (which has been redesignated as paragraph (a)(5)(ii) in the final rule) would require MARC to invite the Washington, D.C. fire department to every simulation conducted on both of its main lines, even though the simulation is intended to benefit emergency responders in West Virginia. Instead, APTA indicated that MARC should be able to group emergency responders by region.

In addition, APTA requested clarification in the final rule of the requirement in § 239.101(a)(5)(ii) of the NPRM to maintain ''an awareness of each emergency responders' capabilities.'' APTA asked whether this requirement included the type of equipment, hazardous material capabilities, ambulance service, emergency medical technicians, and size of fire and police departments. Since each emergency responder determines the level and type of response to provide during an emergency, which may or may not reflect the limits of its capabilities, APTA also questioned how maintaining this information will benefit the railroad.

In its comments, METRA questioned how it could be expected to become aware of, much less maintain an awareness of, the capabilities of each emergency responder throughout six of the most densely populated counties in the country. METRA suggested that to maintain an awareness it could establish a program through its liaison, as mandated in the regulation, that any community involved with METRA's service would have to tell METRA if it upgraded or downgraded its facilities or equipment. A railroad should know if one community has a type of equipment needed for a rescue, for example, but need not know the internal workings of the community facilities.

A member of the public commented that there needs to be better coordination between emergency response teams and railroad operators. Although not all railroad accidents can be prevented, the commenter stated that coordination with emergency responders can save the lives of passengers experiencing health difficulties while riding trains, such as heart attacks.

CALTRAIN stated that while it works closely with local on-line emergency responders, it believes that rail properties are unable to know the detailed capabilities of each agency. CALTRAIN indicated that it relies on responders to summon the appropriate help, based in part upon the information provided to them by the railroad.

NICTD commented that it had already conducted two simulation drills with emergency responders during calendar year 1996. NICTD stated that it was already in the process of developing a training program with manuals on emergency evacuation of passengers from equipment for all emergency responder organizations servicing NICTD.

The Des Plaines, Illinois Fire Department stated that emergency telephone numbers are of paramount importance so that the fire department can establish contact and stop the trains so that responders can go down the rail lines in both directions. This commenter also noted that receipt of hands-on training is important.

The LIRR commented that members of the emergency responder community do not need the railroads to show them how to put out fires or splint fractures. Instead, the railroads need to train the responders on railroad equipment.

The UTU stated that it is important that emergency plans be updated and be distributed to the host railroads and emergency responders. The UTU believed that doing so would shorten response time, and make emergency responders more familiar with the railroad's physical characteristics and equipment.

In its comments, METROLINK stated that it operates through the jurisdictions of 33 different fire districts, over 50 ambulance companies, and 45 police agencies. METROLINK argued that it should not be a railroad's function to maintain an awareness of the capabilities of each emergency responder, and noted that it lacks the technical ability to know or understand when a ''significant change'' occurs in a responder's capability. METROLINK also noted that the proposed rule imposed no reciprocal responsibility on local emergency responders to notify railroads when their capabilities change. METROLINK contended that the emergency responders should be responsible for establishing mutual aid with other local agencies when situations outside their capacity arise.

Based upon the comments received, FRA concludes that it would be

impractical to require railroads to directly monitor the emergency preparedness and response capabilities of all of its on-line emergency responders, and has deleted the ''maintaining-awareness'' requirement of paragraph (a)(5)(ii) of the NPRM from the final rule. FRA recognizes that since the rule imposes no burden on emergency responders to advise railroads of their staffing capabilities or their inventories of specialized rescue equipment, the railroads would be hindered in their ability to immediately determine the most appropriate emergency response organizations to request assistance from after a passenger train emergency situation develops. Moreover, FRA expects that the central location of the emergency response contact (e.g., the 911 emergency operations center) will be fully aware of the capabilities of the nearest and/or best-equipped emergency responders, thereby being able to send the most appropriate responders to the location of a passenger train emergency. Accordingly, if a train derails and falls from a bridge into a river, FRA would expect the emergency responder organization that is contacted to summon a rescue company trained in water rescues if one is available.

In commenting on the proposal, Amtrak stated that while it agreed that it is reasonable to expect that the emergency preparedness plan information should be made available to any affected emergency responder, the final rule should permit railroads to fulfill this requirement by providing the information to entities that perform centralized functions of collecting information and disseminating it to emergency service providers, when and as needed. Amtrak recommended that the final rule not designate acceptable information repositories, but rather provide latitude for railroads to communicate effectively with local emergency responders through centralized communication entities rather than individually. Amtrak stressed that since its nationwide route system interfaces with over 15,000 emergency response agencies, it would not be feasible to keep all of them supplied with written instructions. Even if the final rule permitted electronic transmission of plan information, Amtrak urged that direct communication between individual railroads and each emergency responder organization not be required.

Subsequent to the public hearings, Amtrak submitted additional comments to FRA on July 1, 1997 concerning distribution of emergency preparedness plans to emergency responders. Amtrak stated that it agreed that applicable portions of the emergency preparedness plan should be readily available to any affected emergency responder, but believed that the regulations should not require direct communication between each individual emergency response agency and the railroad. Entities that perform centralized functions of information collection can disseminate this information to emergency responders as needed. Amtrak noted that these entities include the National Fire Protection Association (NFPA), the International Association of Police Chiefs (IAPC), the International Association of Fire Chiefs (IAFC), organizations for emergency medical services and emergency management agencies, and national trade magazines. These organizations could provide an effective conduit through which railroads can communicate with the emergency response agencies in the local communities to advise them of the availability of emergency plans.

FRA is aware of the great number of jurisdictions that intercity trains operate through, and that it is neither simple nor inexpensive for passenger train operators to provide material and familiarization to every outside emergency response organization within all individual communities along each route. Some commuter train operators have developed booklets and videotapes to illustrate equipment and describe entry and evacuation procedures for its trains and certain right-of-way facilities. However, FRA recognizes, based on Amtrak's statements made at both the pre-NPRM Working Group meetings and in its written comments, that because Amtrak operates through thousands of jurisdictions with thousands of potential emergency responder organizations located throughout the United States, it would have difficulty complying with this paragraph.

While FRA considers the establishment of liaison relationships between railroads involved with rail passenger operations and emergency responders crucial to achieving the goals of the proposed rule, the agency is also fully aware of the unique circumstances of Amtrak's operations. FRA had invited public comments on how Amtrak could best comply with the emergency responder liaison requirement, as set forth in the proposed rule. FRA asked whether the final rule should establish a different standard for railroads that operate in territories with large numbers of potential emergency responders to contact, and requested that any commenter proposing two or more sets of standards should also suggest what numerical or mileage criteria should be used to distinguish the railroads, and state how these differing standards would still ensure adequate levels of safety and emergency preparedness. Regrettably, the only commenter addressing this issue was Amtrak, and its comments dated July 1, 1997 are summarized above.

On September 2, 1997, six FRA representatives convened a meeting with seven members of Amtrak's management team at Amtrak's offices in Washington, D.C. to discuss issues relating to the final rule on Radio Communications as well as to emergency preparedness. A representative from the UTU was also in attendance. Minutes of that meeting have been placed in the public dockets of both rulemakings.

In pertinent part, FRA challenged Amtrak to provide information to FRA on how the railroad would ensure that the training materials and emergency preparedness plan information would reach the literally thousands of emergency responder organizations who might potentially respond to an emergency occurring along Amtrak's many routes. FRA recognizes that smaller commuter operations will be capable of training the limited number of potential emergency responders along their routes on their railroad equipment, but that Amtrak lacks the financial resources and personnel to directly contact thousands of organizations. At the conclusion of this meeting, FRA requested that Amtrak submit a proposal to FRA on how it expects to achieve compliance with the requirements of this paragraph.

In a letter dated October 27, 1997, Amtrak stated that it operates intercity passenger trains on a route system of more than 20,000 miles and reiterated that as many as 20,000 organizations provide emergency response services in the territories through which its trains operate. While Amtrak noted that it was not feasible to directly deal with all of these agencies, it acknowledged the importance of communication concerning Amtrak's emergency response plans, both before and during an emergency situation. To accomplish this objective, Amtrak proposed a process for advising these local entities of the availabilities of Amtrak's plans, distributing copies of these plans promptly when requested, and providing opportunities for dialogue concerning these plans. Amtrak also stressed that the process must provide an independent check to determine whether the emergency service responders are aware of the availability of Amtrak's materials and how they can

communicate with Amtrak about them during an emergency.

Amtrak stated that the wide dispersal of its operations is markedly different from those of commuter services, which are localized in relatively discrete urban areas. Amtrak encouraged FRA to develop a different standard for distribution of Amtrak's materials from that set forth in paragraph (a)(5)(i). In this regard, Amtrak recommended that this paragraph provide for consultation between Amtrak and FRA concerning the effectiveness of initial communication efforts and appropriate modifications for adoption over time.

Amtrak indicated that its emergency preparedness plan will be able via the Internet to emergency response agencies, as well as through printed documents. Amtrak will develop specific procedures to ensure reasonable security of the information so that it is not distributed without some reasonable assurance of the status and responsibility of the receiving party. Notice of future material changes in the emergency preparedness plan will be provided specifically to any parties that have previously indicated an interest in Amtrak's emergency response plans. Under Amtrak's proposal, emergency response agencies that have not contacted Amtrak would, upon accessing Amtrak's emergency response plans, not be alerted to changes. Amtrak believes that such specific notice would be unnecessary because these agencies had no specific prior understanding. However, agencies that had prior knowledge would be alerted to changes in facts or procedures as they occur.

Amtrak also stated that it will establish a dedicated toll-free telephone number, in operation 24 hours per day, that will deal only with actual emergencies and provide information concerning its emergency preparedness plan. General requests for information will be responded to on the next business day.

In order to alert local agencies to the availability of Amtrak's emergency preparedness plan, Amtrak requested inclusion of its contact telephone number in DOT's publication entitled ''North American Emergency Response Guidebook'' (ERG). Amtrak noted that the ERG is in the hands of virtually every emergency response agency in the United States, including fire and rescue, emergency medical services, law enforcement, and emergency management. Amtrak contended that just as CHEMTREC and CHEM-TEL are listed in the ERG, the Amtrak emergency preparedness and response toll-free telephone numbers should be included so that local agencies will know how to obtain information to familiarize themselves with Amtrak's operations on a proactive basis and where to turn during an emergency situation. Amtrak will also obtain paid advertising and other publicity through articles in trade publications for fire and rescue, emergency medical services, law enforcement, and similar agencies outlining emergency procedures and providing the railroad's contact telephone number. Another resource that Amtrak noted it uses in major metropolitan centers on the Northeast Corridor and other parts of the United States is Operation Respond. Operation Respond distributes software outlining floor plans and schematics of emergency procedures for Amtrak rolling stock and overhead views of the Northeast Corridor right-of-way.

To ensure the effectiveness of the types of efforts it has outlined, Amtrak believes that it should implement a specific sampling technique with which it could determine whether emergency agencies selected at random are aware of how to contact Amtrak in the event of an emergency, and obtain the type of information needed to promptly and effectively respond. Amtrak proposed conducting this sampling on an annual basis. Amtrak stated that the sampling could determine the degree to which agencies are aware of how to obtain such information and the type of actions that Amtrak may need to take in order to improve the awareness of agencies in general concerning the availability of information about Amtrak's emergency preparedness plan. However, Amtrak stressed that inclusion in the ERG is the most critical component of any effort to provide a focal point for contacting Amtrak.

FRA has carefully reviewed the contents of Amtrak's letter dated October 27, 1997, and is fully cognizant of Amtrak's desire that FRA reasonably regulate the need to effectively communicate with local emergency responder organizations concerning Amtrak's emergency preparedness plan without imposing an undue burden on the railroad. Because of the large number of emergency responders dispersed throughout Amtrak's territories of operation, FRA concludes that it is vitally important that Amtrak and the host freight railroads enter into close coordination and keep up-to-date instructions on how emergency response information is to be reported to emergency responders. In order for any railroad to successfully fulfill the requirements of this paragraph, positive communication links must exist between the railroad, its hosts (if applicable), and the emergency responder community. In this regard, the maintenance of accurate emergency telephone numbers for use by control centers in making emergency notifications in accordance with paragraph (a)(1)(ii) is even more crucial on a railroad the size of Amtrak.

FRA expects that in making its training program information and materials available to national or state training institutes, firefighter organizations, or police academies, as well as when it distributes applicable portions of its emergency preparedness plan, Amtrak will contact individuals in these organizations at the lowest possible levels that are feasible. FRA concludes that merely mailing this information to the main address for organization will be ineffective at achieving the local outreach efforts to the emergency responder community required by this final rule. While FRA acknowledges that for the rule to fully succeed Amtrak must have the assistance of these organizations starting at the highest levels, Amtrak may not delegate the responsibility for communication with local personnel to the top officials of these entities. FRA expects Amtrak to employ its best efforts to reach, whether directly or through the assistance of the hierarchy of national and state emergency response organizations, the local emergency responders along its rail lines who could reasonably be called upon to respond to an emergency situation.

In working with Amtrak as part of the review and approval process of § 239.201, FRA will fully consider all appropriate ideas and suggestions from the railroad on how it proposes to achieve the necessary liaison relationships with its on-line responders. While FRA will not impose unreasonable expectations on Amtrak, FRA will not permit Amtrak to ignore the vast number of potential emergency responder organizations with which the railroad must establish at least a minimal liaison contact.

Finally, in response to Amtrak's request to include its contact telephone number in DOT's ERG, FRA notes that the ERG is a guidebook published by the Research and Special Programs Administration (RSPA) (a modal administration within DOT) for firefighters, police and other emergency services personnel who may be the first to arrive during the initial phase of a transportation incident involving hazardous materials or dangerous goods. Although the ERG is not intended for use in a transportation incident involving only a passenger train, absent the additional involvement of hazardous

materials or dangerous goods, its wide distribution makes it an effective vehicle for reaching the emergency responder community. Accordingly, at FRA's request, RSPA has agreed to include this information in the next version of the ERG.

On-Board Emergency Equipment

The requirements of § 239.101(a)(6)(i) remain unchanged from the proposal: each railroad's emergency preparedness plan shall indicate the types of emergency equipment placed on board each passenger train and the location of such equipment on each passenger car. Although the final rule requires a minimum of only one fire extinguisher and one pry bar per passenger car, and one flashlight per on-board crewmember, FRA strongly encourages each railroad to voluntarily supplement this list of on-board emergency equipment. Further, FRA recognizes that there may be special local interests that might need to be accommodated, particularly in cases of public authorities operating passenger train service within only one territory. While national uniformity to the extent practicable of laws, regulations, and orders related to railroad safety is important, FRA does not wish to decrease the level of emergency preparedness already in place on a passenger railroad.

In reaching the decision to retain the same on-board emergency equipment requirements as proposed in the NPRM, FRA considered three sets of comments. The first commenter, APTA, said that since the use of metal pry bars by non-railroad personnel on electrified territory may create a significant safety hazard, the final rule should prohibit public access to them. APTA also noted that theft, tampering, and destruction of on-board emergency equipment are big problems for commuter railroads, and asked that the rule impose a Federal penalty for theft, vandalism, or tampering with emergency equipment, similar to penalties imposed by the Federal Aviation Administration for tampering with smoke detectors on airplanes. The second commenter, a private citizen, commented that in light of the number of possible unpreventable health emergencies that can occur on a train, the types of on-board emergency equipment should be expanded. He believed that this equipment, along with better emergency training of railroad employees, can save many lives.

The third commenter, the LIRR, indicated that while it supports the idea of having one fire extinguisher per passenger car, the LIRR's diesel fleet does not have any fire extinguishers at the present time, except on locomotives. The LIRR stated, however, that its entire diesel passenger coach fleet is scheduled to be replaced beginning in 1997. The LIRR noted that the Electric MU fleet operates in married pairs; the M1 fleet (758 total) was built between 1968–1972 and has one fire extinguisher per married pair, while the M3 fleet (174 total) was built in 1985–86 and has a fire extinguisher opposite each operating cab in every car. The modification of 758 M1 cars will require funding and time. The age of the M1 car fleet is reaching its useful life, and LIRR stated that it is beginning preparation of a capital investment to replace the M1 portion of the electric fleet. LIRR asked for relief for both the diesel and M1 fleet.

Regarding the issue of pry bars, the LIRR noted that it operates in an area 100 miles long with 11 branches, with 181 fire departments throughout Long Island, New York. The LIRR stated that the average response time of emergency responders is only approximately 10 minutes, and indicated that the responders are trained on LIRR equipment and have state-of-the-art rescue equipment. The LIRR believed that retrofitting of all LIRR equipment would not provide a higher level of safety than what is already provided by the responders, and thought that pry bars would be difficult to keep or maintain on railroad equipment open to the public. If LIRR is subject to the pry bar requirement, the railroad stated that it will seek relief through the waiver process.

In order to assist the agency in determining whether to revise the requirements of § 239.101(a)(6)(i), FRA asked for comment about whether special circumstances exist in local jurisdictions throughout the country on a categorical basis, requiring railroads to meet more stringent requirements than the minimum quantities of on-board emergency equipment set forth in the proposed rule. Specifically, FRA invited comments on what types and quantities of on-board emergency equipment railroads are currently required to carry pursuant to laws in the local jurisdictions in which they operate, and was curious as to the reasons for these more stringent requirements. Depending on the comments received, FRA noted that it might adopt the minimums set forth in the text of the proposed rule or decide to broaden the coverage of paragraph (a)(6)(i) by specifying additional types or quantities, or both, of on-board emergency equipment that some or all railroads must carry on each passenger car. FRA's decision to adopt paragraph (a)(6)(i) as proposed is based largely upon the fact that FRA received little public comment on this issue.

FRA recognizes that since the focus of this rule is to ensure that emergency responders arrive promptly at the scene of an accident, rather than to train on-board personnel to act as emergency responders, the rule must not impose onerous, irrelevant, or duplicative emergency equipment requirements on railroads. FRA is aware that emergency responder units will generally arrive at the scene of a passenger train emergency fully equipped with pry bars, pick axes, fire fighting equipment, and other assorted specialized rescue items. However, in deciding to mandate in the final rule that railroads must carry fire extinguishers, pry bars, and flashlights on board trains, FRA concluded that certain emergency situations can prove so life-threatening and time-sensitive that train crews and passengers must take immediate action to maximize the likelihood of survival.

Certainly, in the event of a small fire taking place on board a passenger train, the availability of a working fire extinguisher in each passenger car could prevent a minor problem from turning into a tragic event before emergency responders are able to respond to the emergency. Also, a fire may start in a small area or limited location on a train, where crewmembers or passengers might be capable of containing the fire (e.g., a smoldering cigarette on a passenger coach seat), thereby avoiding the need to involve outside emergency responders at all. While FRA recognizes that firefighters carry all sorts of rescue equipment, including pry bars, sometimes the threat from an emergency is so immediate and severe that there is no opportunity to wait for emergency responders to arrive and rescue people. Accordingly, the availability of a pry bar in each passenger car will enable crewmembers and passengers to exit the train through an emergency window exit in the event that the rubber stripping cannot be removed accordingly to plan and circumstances do not permit awaiting the arrival of emergency responders. Also, for example, a pry bar can be useful in prying open an end door on a passenger car that is lying on its side after a derailment. Finally, since emergencies can happen at night in isolated locations, a flashlight is an important tool for guiding passengers safely off the train during an evacuation and minimizing the likelihood of people tripping in the dark, unfamiliar landscape. In addition, flashlights can prove invaluable in the event that a train's primary and backup electrical

systems fail during the course of an emergency situation.

FRA recognizes that some railroads will have unique problems associated with meeting the minimum requirements of this paragraph, either due to certain atypical aspects of their operations, concerns about theft or vandalism, or compliance with laws in the local jurisdictions in which they currently operate. While FRA expects each railroad to make every effort to incorporate these minimum requirements into its emergency preparedness plan, FRA acknowledges that situations may arise where requiring strict adherence to the requirements of this paragraph may prevent or impede rail passenger transportation that is in the public interest. As a result, FRA intends that the emergency planning approach allow railroads to develop approaches to providing safe rail passenger transportation that do not meet all of the on-board emergency equipment standards, but compensate by providing alternatives that afford equivalent levels of safety. Accordingly, any railroad that believes it cannot or should not have to comply with the specific requirements of paragraph (a)(6)(i), may submit a waiver request to FRA in accordance with 49 CFR part 211. While submission of such a request does not guarantee it will be granted, every waiver request will be duly considered.

This paragraph does not require railroads to instruct their passengers about either the location or use of the on-board emergency equipment. As anticipated in the NPRM, FRA has crafted a final rule that avoids micromanagement of the provisions of a railroad's emergency preparedness plan. FRA recognizes that passengers might benefit from receiving routine instructions about the location and operation of on-board emergency equipment during each train trip, in the event that the crewmembers are injured or otherwise unable to access the equipment before the outside emergency responders arrive. However, FRA is also aware from its consultations with the Working Group that pilferage of on-board emergency equipment is a serious problem on many passenger railroads, and that specifically focusing the attention of passengers on where the equipment is located would only exacerbate the problem. Clearly, the equipment can only help both crewmembers and passengers during an emergency if it is available for proper use. Also, members of the Working Group stressed that regular riders on intercity or commuter operations are probably already familiar with the on-board emergency equipment by virtue of their frequent presence on the train, and would not benefit from any additional required information.

First-aid Kits on Intercity Passenger Trains

FRA has added as a new requirement to the final rule in paragraph 239.101(a)(6)(ii) concerning first-aid kits on intercity passenger trains. In commenting on the NPRM, the UTU requested that all passenger trains be equipped with a first-aid kit as an emergency tool, and urged that the kit contain personal protection equipment for the trained personnel who will be rendering first aid and CPR. At the very least, the UTU stated that the kit should contain rubber gloves, and the plastic gloves and the mouth shields for CPR. At the working group meeting held in Washington, D.C. on August 28, 1997, many of the members agreed that while commuter trains may operate in densely populated areas that are close to emergency medical services, intercity trains often operate through sparsely populated remote regions of the United States that have limited road access for use by emergency responders. Accordingly, to recognize the unique operational challenges presented by the operation of intercity service, FRA believes that crewmembers onboard each of these trains must have access to at least one first-aid kit that contains the necessary supplies to clean and dress a minor wound until professional responders can arrive at the scene.

Since FRA does not intend for the first-aid kit to substitute for appropriate medical attention from a physician or hospital, the final rule limits the minimum required contents of the first-aid kit to only gauze pads, bandages, wound cleaning agent, scissors, tweezers, adhesive tape, and latex gloves. Since proper use of these items should be self evident to both members of a train crew and the traveling public, the final rule does not impose any specific requirement on railroads to train their employees on the use of first-aid kits. Of course, FRA does not intend to discourage railroads from voluntarily incorporating such training into its emergency preparedness program.

In response to APTA's concern about theft, tampering, and vandalism of on-board emergency equipment by both railroad passengers and other members of the public, FRA has included language in the section-by-section analysis of § 239.11 to remind the general public that FRA may impose a civil penalty upon any individual who willfully causes a railroad to be in violation of any requirement of this part. Take for example, a railroad that supplies each of its passenger cars with one fire extinguisher and one pry bar, and provides each of its on-board crewmembers with one flashlight. By equipping its train with all of these items, the railroad would then be in full compliance with the minimum requirements of § 239.101(a)(6)(i). Accordingly, if, unbeknownst to the railroad, a vandal pilfers a fire extinguisher from one of the passenger cars while the train is in service FRA can impose a civil penalty upon that vandal for causing the railroad to be in violation of 49 CFR part 239.

For purposes of enforcement by FRA of § 239.101(a)(6)(i) and (ii), the phrase ''in service'' means a passenger car that is in passenger service, i.e., the passenger car is carrying, or available to carry, fare-paying passengers. A passenger car is not in service if it is: being hauled for repairs and is not carrying passengers; in a repair shop or on a repair track; on a storage track and is not carrying passengers; or is moving without passengers in deadhead status. FRA will impose a civil penalty for passenger equipment that is missing on-Board emergency equipment or first-aid kits (in the case of railroads providing intercity passenger train service) only if the railroad had actual knowledge of the facts giving rise to the violation, or a reasonable person acting in the circumstances and exercising reasonable care would have had that knowledge. Accordingly, since FRA is not employing a strict liability standard in enforcing § 239.101(a)(6), FRA would ordinarily not impose a civil penalty on the railroad for the actions of a vandal. However, once the railroad personally discovers or is otherwise notified that a piece of emergency equipment or a first-aid kit is missing, FRA expects the railroad to replace the missing item before the passenger car (or train, as appropriate) is again placed in service on a subsequent calendar day. In this regard, FRA will expect each railroad to ensure its compliance with § 239.101(a)(6) by performing whatever daily interior mechanical inspection requirements that eventually result from the rulemaking on passenger equipment safety standards. See proposed § 238.305 of this chapter. 62 FR 49772, 49773, and 49808.

On-board Emergency Lighting

The rulemaking on passenger equipment safety standards will address the issue of permanent emergency lighting on passenger rail cars. Whatever requirements eventually appear in the new set of regulations at 49 CFR part 238, § 239.101(a)(6)(iii) states that

auxiliary portable lighting must be available for assistance in an emergency and should be routinely maintained and replaced as necessary. Section 239.101(a)(6)(ii) has been renumbered in the final rule due to addition of the requirement for first-aid kits on intercity passenger trains. Further, the final rule specifies the duration times for both brilliant illumination and continuous or intermittent illumination after the onset of an emergency situation. The final rule does not require that every rail passenger car have such lighting, but the train itself must carry enough portable lighting to facilitate orderly passenger evacuation.

In its comments on this issue at the NPRM stage of this proceeding, METROLINK stated that FRA needed to define the clause ''auxiliary portable lighting must be accessible,'' and questioned whether a flashlight is an acceptable form of such lighting. FRA intends for a handheld flashlight, such as a ''D'' cell flashlight, to be one of the means of satisfying the auxiliary portable lighting requirement; the final rule text has been expanded to include a handheld flashlight as an example of an auxiliary portable lighting source. Further, FRA considers auxiliary portable lighting as accessible when the lighting sources are reasonably available for use by a train's crew and its passengers within several minutes of the onset of the emergency. Since every emergency situation is unique, FRA cannot expect a railroad to determine in advance precise locations for locating the auxiliary portable lighting so that every passenger and crewmember on the train is always within immediate reach of the lighting. Accordingly, FRA expects each railroad to act reasonably and make its best educated guess, based upon its types of rail equipment and the nature of its operations, on where to place auxiliary lighting so that it will likely be accessible after the onset of an emergency.

Omniglow commented that chemiluminescence is the production of light from a non-heat generating chemical reaction, and utilizes a fluorescent molecule, a key intermediate, and a catalyst. Omniglow stated that the key chemical components are separated by a specially designed capsule contained within a larger, translucent plastic form, and that when light is desired, the outer plastic container is manipulated by the consumer, breaking the inner ampule, which allows the ingredients to mix and produce light. After arguing that each rail passenger car should be equipped with portable lighting capable of fostering passenger evacuation, and noting that FRA will permit a handled flashlight, such as a flashlight with a ''D'' cell, to be one of the means of satisfying the auxiliary portable lighting requirement, Omniglow stated that its 15'' high intensity lightstick would satisfy this requirement. In this regard, Omniglow observed that its lightstick is a high-intensity, non-explosive, non-hazardous, weatherproof light source, with a four year shelf life.

FRA will not endorse the product of a specific company by determining whether a railroad's use of that product will enable it to comply with the emergency lighting requirements of this paragraph. The only issue before FRA in evaluating whether a source of auxiliary portable lighting satisfies a railroad's emergency planning need is whether the lighting is both accessible during an emergency and provides the requisite levels and time intervals of illumination, as specified in paragraph 239.101(a)(6)(iii)(A) and (B). If a railroad can satisfy the regulatory parameters of this paragraph by using Omniglow's lightsticks, FRA will take no exception to the product's use.

Safety-Awareness Programs for Passengers

Finally, paragraph 239.101(a)(7) requires railroads to make passengers aware of emergency procedures to follow before an emergency situation develops, thus enabling them to respond properly during the emergency. All passenger awareness efforts must emphasize that passengers must follow the directions of the train crew during an emergency. If passengers are on a disabled train, but are not injured or facing imminent danger, they could safely await the arrival of trained emergency responders with appropriate evacuation equipment. However, in a serious emergency involving smoke or fire, passengers may have to evacuate the train before emergency responders arrive. Thus, operators of rail passenger service should take steps to increase passenger awareness about basic evacuation procedures. Since passengers could inadvertently jeopardize their own safety, it is appropriate for them to take the initiative only if the crewmembers are incapacitated.

Passenger railroads must educate passengers about their role in cooperating in emergencies by conspicuously and legibly posting emergency instructions inside each passenger car, and by utilizing at least one or more additional methods, including those designated in this paragraph, to provide safety awareness information. The suggested methods include distributing pamphlets, posting information in stations on signs or on video monitors, and the review of procedures by crewmembers via public address announcements. However, as set forth in the preceding ''Discussion of Comments and Conclusions'' portion of this document under the heading of item number 3, FRA also encourages railroads to pursue alternative innovative means of conveying passenger safety information. All brochures and signage must emphasize that passengers must follow the directions of the train crew during an emergency.

Although paragraph 239.101(a)(7)(ii)(A) permits a railroad to fulfill the secondary passenger education requirement of the final rule by making on-board announcements, FRA does not specify the frequency with which these announcements should be made during a train run. FRA believes that, with regard to intercity service, announcements are appropriate after at least each major passenger pick-up point, and commenters were invited in the NPRM to suggest ways of providing safety information to all new riders without becoming repetitious to the remaining passengers. Since no public comments were received on this specific issue, FRA has elected to permit broad flexibility to railroads in determining the appropriate frequency of on-board announcements in the event that they select this secondary method to disseminate information to passengers. In addition, while the final rule requires railroads to utilize only one additional method to distribute safety awareness information to the traveling public, FRA encourages railroads to employ as many of the options as possible based on operating and budgetary considerations.

Despite FRA's encouragement of the use of innovative techniques, the information in the various sources of passenger safety awareness information must be consistent in content and sufficient for first-time users of the railroad, but not so overwhelming as to arouse undue concern. All information must be printed or spoken in English, but railroads serving large non-English speaking communities should consider providing information in other languages as well. Materials for persons who are visually impaired should be printed in large type format and in braille. Finally, for persons with other types of disabilities, appropriate passenger awareness materials should provide information about evacuation policies and procedures and other emergency actions, to the extent practicable.

Passenger awareness education should include information that may permit passengers to accomplish the following:

- Recognize and immediately report potential emergencies to crewmembers;
- Recognize hazards;
- Recognize and know how and when to operate appropriate emergency-related features and equipment, such as fire extinguishers, train doors, and emergency exits; and
- Recognize the potential special needs of fellow passengers during an emergency, such as children, the elderly, and disabled persons.

FRA had asked for public comment on whether the final rule should include fixed timeframes in which railroads must provide their passengers with additional methods of safety awareness information, and urged commenters to supply scientific or sociological data and/or cost estimates in support of their suggested time intervals. The general recommendation of the commenters was that the final rule should leave the features of the awareness programs to each railroad's discretion, and that the key component of this requirement should be flexibility so that railroads can utilize the right mix of passenger communication techniques.

Based upon FRA's consideration of this issue, instead of specifying fixed maximum time intervals between utilizing the additional forms of program activity, FRA will allow the railroads to determine the optimal frequency that best serves their passengers and their operations. FRA expects that as the traveling public grows more accustomed to reading and understanding the emergency instructions posted inside all passenger cars on bulkhead signs, seatback decals, or seat cards the need for redundant reminders (e.g., on-board announcements, ticket envelope safety information, or public service announcements), especially at frequent time intervals, will greatly diminish. Moreover, depending on the additional method selected, different time intervals may be appropriate. For example, while it may be suitable for a railroad to distribute safety awareness information on a seat drop every three months, the railroad may conclude that it should arrange for public service announcements on a weekly basis.

Passenger Surveys

Paragraph 239.101(a)(7)(iii) of the NPRM would have required railroads to perform surveys of their passengers in order to learn how successful the passenger awareness program activities are in apprising passengers of the procedures that must be followed during an emergency. As set forth in the preceding ''Discussion of Comments and Conclusions'' portion of this document under the heading of item number 3, the survey requirement and its accompanying recordkeeping burden have been deleted from the final rule.

13. Passenger Train Emergency Simulations: Section 239.103

Section 239.103 recognizes that one of the most effective training techniques is a simulation of specific emergency scenarios. Simulations may vary from a small-scale drill or tabletop exercise for just one train crew or control center operator, to a full-scale emergency exercise involving several levels of railroad management that includes the voluntary participation of fire departments, ambulance and emergency medical service units, local police, sheriff and state police organizations, local emergency auxiliary groups, and state and federal regulatory agencies. While simulations are primarily designed to demonstrate that railroad employees can quickly and efficiently manage an emergency situation to ensure that emergency responders arrive quickly, simulations are also intended to determine whether train crews are properly trained to get passengers out of an imperiled train.

As FRA noted in the NPRM, the tabletop exercise is the simplest to stage, as it involves only a meeting room and knowledgeable managers and employees from the passenger train operator and the appropriate responding organizations who voluntarily participate. For an imaginary emergency, the actions to be taken by the appropriate personnel are described; the time, equipment, and personnel necessary are estimated; and potential problems are predicted. Conflicts of functional areas, lack of equipment, procedural weaknesses or omissions, communication difficulties, and confusing terminology are among the problems which can be identified.

Passenger train operators can drill their train crews, other on-board personnel, supervisors, and control center operators on emergency operating procedures by posing a hypothetical emergency for employees to resolve without dispatching emergency responders to the scene. A drill could also involve the voluntary participation of personnel of a particular response organization, e.g., a fire department. The same type of problems as indicated for the tabletop exercise can be identified, and the actual response capabilities of personnel in terms of their knowledge of procedures and equipment can be evaluated.

FRA recognizes that full-scale emergency exercises require weeks of carefully organized plans involving all participating organizations and involve the expenditure of funds for both the training and the actual full-scale exercise. Recording or videotaping the scenes and conversations in key areas of the exercise itself can serve as valuable classroom training for later years. A full-scale exercise is the total application of the resources of the passenger railroad operator and the voluntarily participating emergency response organizations. Such an exercise can reveal the degree of familiarity of both the passenger train system and emergency response organization personnel with train operations, the physical layout of trains, right-of-way structures and wayside facilities, emergency exits, and emergency equipment. Thus, shortcomings in the emergency preparedness plan and specific response protocols and procedures, as well as equipment, can be identified and corrected.

In the NPRM, FRA questioned whether tabletop exercises should be afforded the same weight in the final rule as full-scale simulations for purposes of demonstrating the readiness of a railroad to successfully react to a passenger train emergency. FRA also stated that the final rule might require that each railroad conduct a minimum number of its simulations as full-scale exercises. In this regard, FRA was skeptical as to whether a tabletop exercise could equal the comprehensiveness of a full-scale exercise and be a highly effective means of determining whether a railroad is adequately prepared for the likely variety of emergency scenarios that could occur on its lines, as well as an important training tool for the train crews, control center employees, and members of the emergency responder community who elect to participate. In contemplating during the NPRM stage of this proceeding whether to strengthen the emergency simulation requirement, FRA was aware that realistic full-scale simulations that enable all participants to practice using the on-board emergency equipment and emergency exits (and encourage the emergency responders to become personally familiar with passenger equipment and applicable railroad operations) could prove invaluable in helping railroads and the emergency responder community to manage real emergencies in ways that tabletop exercises cannot. However, FRA was also aware that the financial and logistical costs of

conducting full-scale simulations are undoubtedly higher, including the need to close railroad tracks during the hours of the simulation, opportunity costs for the railroads due to lost use of the passenger equipment that is employed in the simulations, unavailability of firefighting and rescue equipment for other emergencies while the simulations are being conducted, and salary costs for many or all of the simulation participants.

In order to best determine whether the final rule should require full-scale emergency simulations in conjunction with tabletop exercises, or perhaps in place of such exercises, FRA noted that it would carefully weigh the expected costs and potential benefits of all available options. FRA sought public comment on the perceived effectiveness of both full-scale emergency simulations and tabletop exercises, including a discussion of whether tabletop exercises can achieve the equivalent level of emergency preparedness as full-scale simulations. FRA was particularly interested in receiving comments from the emergency responder community, especially from those members who have participated in either emergency simulations or actual emergency situations with railroads.

Based upon FRA's review of the public comments and our careful consideration of the significant issues concerning emergency simulations, FRA has modified § 239.103 to require that all of the simulations that a railroad must perform are done full scale. While FRA still encourages railroads to supplement their emergency preparedness planning by voluntarily conducting tabletop exercises in addition to full-scale emergency simulations, FRA concludes that the safety objectives of emergency-preparedness planning are best served by railroads conducting at least a minimal number of comprehensive, full-scale exercises. FRA believes that the combination of full-scale simulations and the requirement contained in § 239.101(a)(5) for each railroad to develop a training program available to all on-line emergency responders who could reasonably be expected to respond during a passenger train emergency situation, enable railroads to best prepare for the likely varieties of emergency scenarios that could occur on their lines. A detailed discussion of the change in the simulation requirement from the NPRM stage of this proceeding, as well as a general discussion of the new requirement that railroads develop training programs for emergency responders and their organizations, is included in the preceding ''Discussion of Comments and Conclusions'' portion of this document under item number 2.

To achieve a maximum level of effectiveness, full-scale drills and exercises should reinforce classroom training in emergency response and passenger evacuation for the passenger train operator personnel and the emergency response units who voluntarily participate. Procedures should also be included to teach personnel to identify the emergency and distinguish its unique demands, and to follow through with the appropriate responses. In addition, the full-scale drills and exercises should be planned to minimize hazards which could create an actual emergency or cause injuries and to provide a mechanism for simultaneous testing and reinforcement of emergency operating procedures for specific types of emergencies and evacuation procedures. Moreover, the full-scale drills and exercises should test the communication capabilities and coordination of the passenger operator with the emergency responders, as well as the operability and effectiveness of emergency equipment.

Paragraph (b) has been modified to require each railroad that provides commuter or other short-haul passenger train service to conduct a full-scale emergency simulation at least once during every two calendar years, provided that its operations include less than 150 route miles and less than 200 million passenger miles annually. For larger commuter or other short-haul passenger operations, i.e., those whose operations include at least 150 route miles or at least 200 million passenger miles annually, a full-scale simulation is required at least once during each calendar year. For all intercity passenger operations, regardless of the number of route miles or passenger miles, a full-scale simulation is required at least once during each calendar year. The final rules does not distinguish on the basis of major lines for purposes of permitting railroads to select locations for their emergency simulations. However, in crafting the final rule to limit the number of required simulations, FRA recognizes that full-scale simulations carry higher financial and logistical costs than do tabletop exercises, and that railroads will reach a greater representative sample of the emergency responder community by offering training programs in accordance with § 239.101(a)(5) to responders who may lack opportunities to partake in actual simulations.

Since FRA has determined that a train crew on a commuter or other short-haul operation will usually operate a train along the same line for an extended period of time, and that emergency responder organization personnel tend to be line-specific in terms of their familiarity with a railroad's operations, it is crucial that each affected railroad provide adequate opportunities along all of its major lines for its employees and the responder community to obtain emergency response information and training opportunities. While FRA anticipates that each commuter or short-haul railroad will conduct full-scale emergency simulations as frequently as possible on its entire system, the final rule supplements the revised simulation requirement with the comprehensive liaison requirements of § 239.101(a)(5) so that each railroad can best reach the most heavily traveled portions of its system while conserving limited resources. In this regard, FRA recognizes that while emergency responder organizations tend to be densely located along the major lines of commuter and short-haul railroad operations, it is not necessary for each railroad to run full-scale simulations on all of its major lines according to a fixed timetable, provided that the railroad maintains proper liaison relationships with the affected responders.

In addition to the final rule setting forth the requirement for each affected railroad to perform its full-scale emergency simulations without regard to whether the railroad specifically includes all of its major lines, FRA also does not expect the railroad to require all of its employees who are trained under the emergency preparedness plan to attend the simulations. Moreover, FRA does not expect each railroad to invite all potential emergency responders to participate who are located along the portion of the railroad subject to the simulation. While FRA hopes that over the long term all railroad employees involved in the operation of passenger train service, as well as all applicable members of the emergency responder community, will have the opportunity to participate in this valuable training exercise and enhance their individual emergency preparedness skills, the simulations are also intended to identify shortcomings in each railroad's emergency preparedness plan and specific response protocols and procedures. The railroad must discuss the identified weaknesses and overall effectiveness of the emergency preparedness plan with the simulation participants at the debriefing and critique session held under § 239.105, and then initiate any appropriate improvements and/or amendments to the plan. As part of this

review process, the railroad is also expected to revise its employee training program under § 239.101(a)(2) and modify its liaison relationships with members of the emergency responder community established under § 239.101(a)(5), based upon the identified shortcomings of the railroad's emergency-preparedness planning. Accordingly, while the final rule does not mandate that affected railroads conduct numerous simulations along all of its major lines so as to include every possible participant, FRA concludes that the lessons learned from the mandatory debriefing and critique sessions and the interactions that occur within the required liaison relationships will have far reaching benefits.

In order to ensure that each affected railroad evaluates its overall emergency response capabilities through careful selection of the appropriate scenarios and locations on its lines for the emergency simulations, the final rule requires each railroad to organize simulations that will adequately test the performance of the railroad's program over time under the variety of emergency situations that could reasonably be expected to occur on the operation. For example, a railroad operating in territory that includes underground tunnels will need to conduct simulations to test the railroad's ability to ensure employee and passenger safety during an emergency situation occurring in this unique environment. Adequate lighting and sources of air in tunnels and underwater tubes are critical for successful passenger evacuation during emergencies. Further, emergency responders depend on sufficient lighting for visibility during fire suppression and rescue operations. If the railroad intends to evacuate passengers by using cross passages and/or fire doors leading to the opposite track area, or a separate center passageway between the adjacent track areas, the simulation should include practice in the requisite evacuation protocols and procedures.

In the case of a railroad providing intercity passenger service involving a number of lines operated over long distances, such as the coast-to-coast service provided by Amtrak, the need for the railroad to carefully plan its simulations and concurrently examine the effectiveness of its emergency preparedness plan under a variety of scenarios becomes crucial. Many of Amtrak's lines run for hundreds of miles through remote locations that could include risks from tunnel mishaps, natural disasters (e.g., fires, floods, and earthquakes), hazardous material leaks, and/or acts of terrorism. Further, because of the length of time required to travel these lines, the same train will be operated by more than one crew and may involve operation over the line of a freight railroad. Since Amtrak's lines traverse numerous populated communities throughout the United States, an emergency situation could require the assistance of any number of potentially thousands of emergency responders from these locations.

While FRA is not requiring operators of intercity service to conduct additional emergency simulations along its lines in order to reach a greater proportion of employees and members of the emergency response community, we do expect such railroads to plan simulations that sufficiently test the elements of their emergency preparedness plan under the variety of circumstances that could occur in intercity service. Although FRA recognizes that the length and diversity of Amtrak's operations limit the potential benefits from resources spent on conducting emergency simulations, the final rule requires Amtrak to conduct a minimum of only one full-scale emergency simulation per calendar year on any selected portion of its entire system, without regard to whether the simulation takes place on a particular business unit or other major organizational element. Although FRA considered imposing more rigorous requirements in the final rule on Amtrak (and other operators of intercity service) in order to ensure the requisite level of emergency preparedness, FRA will instead rely upon the thoroughness of the liaison activities and programs initiated by Amtrak in accordance with § 239.101(a)(5).

A detailed discussion of FRA's liaison-relationship expectations for Amtrak is included in the preceding ''Section-by-Section Analysis'' portion of this document under § 239.101(a)(5). That discussion section outlines Amtrak's September 2, 1997 meeting with FRA, during which the participants discussed the issue of developing a program for distributing Amtrak's emergency preparedness plan to emergency service providers located in areas through which Amtrak operates, and also summarizes Amtrak's written submission to FRA dated October 27, 1997 addressing the same topic.

By considering each of the emergency scenarios that could possibly occur on the different segments of the railroad (e.g., simulations of a derailment at a remote location where emergency responder assistance is not immediately available, an on-board fire inside a tunnel or on a bridge, a derailment involving a freight train carrying a hazardous materials spill, etc.), Amtrak can carefully design a program to fulfill its overall emergency response needs. By combining optimal use of the required minimum number of emergency simulations with a comprehensive training program offered to emergency responders as part of the liaison relationship, FRA concludes that a passenger railroad as diverse as Amtrak (which operates coast-to-coast service under a wide variety of operating conditions through the jurisdictions of numerous emergency responders) can best achieve the emergency preparedness goals of this rule throughout its entire system without expending a disproportionate amount of its limited resources.

Since FRA has decided to scale back the simulation requirement to involve only one meaningful full-scale simulation (performed either annually or every two years depending on the size of the railroad), FRA believes it is imperative that all railroads be required to study and evaluate their emergency response capabilities in controlled settings enabling them to carefully plan their full-scale emergency scenarios. Accordingly, FRA has modified the final rule to prohibit a railroad from counting either a tabletop exercise or the activation of its emergency preparedness plan during an actual emergency situation toward the simulation requirement.

However, since FRA recognizes that full-scale emergency exercises require extensive planning and commitment of human resources, the final rule permits a railroad to postpone a scheduled full-scale simulation for up to 180 days beyond the applicable calendar year completion date if the railroad has activated its emergency response plan after a major emergency. The postponement period permits the railroad to properly deal with the aftermath of an actual major emergency, defined in paragraph (d) to cover an unexpected event related to passenger operations that results in serious injury or death to one or more persons combined with reportable property damage, without the added stress or logistical burden of immediately conducting a simulation. During this postponement, FRA expects the railroad to measure the effectiveness of its emergency preparedness plan in conjunction with the debriefing and critique session held pursuant to § 239.105, and then improve or amend its plan, or both, as appropriate, in accordance with the information developed. Paragraph (c) also requires

the railroad to modify the rescheduled simulation, if appropriate, based upon the lessons learned from its response to the actual emergency.

Although paragraph (c) allows a limited exception under which a railroad may postpone a scheduled full-scale simulation, the calendar timetable remains the same. Take, for example, a commuter railroad whose operations include 250 million passenger miles annually and has a full-scale emergency simulation scheduled for December 1 of calendar year 2001, but has a major emergency situation occur on November 15. In accordance with the terms of § 239.103(b)(2), the railroad is required to conduct a minimum of one full-scale emergency simulation during calendar year 2001 and another one during calendar year 2002. Although, § 239.103(c) permits the railroad the option of postponing its full-scale simulation for calendar year 2001 from December 1, 2001 until June 29, 2002, the deadline for the full-scale simulation for calendar year 2002 (assuming that the postpone exception of paragraph (c) does not become an issue during calendar year 2002) remains at December 31, 2002.

14. Debriefing and Critique: Section 239.105

Section 239.105 recognizes the value of conducting a formal evaluation process after the occurrence of either an actual emergency situation or a full-scale emergency simulation exercise to determine what lessons can be learned. To increase the effectiveness of the evaluation of an emergency simulation, railroad personnel should be designated as evaluators to provide a perspective on how well the emergency preparedness plan and procedures were carried out. Although not required by the final rule, railroads are also encouraged to invite outside emergency response organizations and other outside observers to participate as evaluators. Evaluators should be given copies of the railroad's emergency preparedness plan before the simulation is conducted, and a preliminary meeting should be held to familiarize the evaluators with the drill or exercise and assign functional areas of concern for evaluation (*e.g.*, communications, evacuation times). Depending on the elaborateness of the simulation, evaluators may also choose to use video cameras to record the sequence of events, actions of personnel, and use of emergency equipment.

FRA did not propose a specific deadline in the NPRM by which each railroad must conduct its debriefing and critique session after each passenger train emergency situation or full-scale simulation. In addition, FRA did not receive any public comments or recommendations from members of the Working Group on an appropriate timeframe. In order to encourage railroads to conduct the required debriefing and critique sessions in a timely and reasonable period of time, thereby maximizing the railroad's emergency-preparedness benefits from the experience, FRA has revised the final rule to require that these sessions be held no later than 60 days after the emergency situation or simulation takes place. Of course, while FRA is providing a maximum timeframe of 60 days, FRA expects that, in the majority of cases, railroads will hold these valuable sessions within only 30 days of the emergency situation or simulation.

The purpose of a debriefing and critique session is to review with railroad personnel the reports of evaluators, to present comments or observations from other persons, and to assess the need for any remedial action, either to correct deficiencies or to generally improve the effectiveness of the emergency operations and procedures. In addition, the debriefing and critique session provides an excellent opportunity for the railroad to determine the effectiveness of its passenger awareness program activities. For example, if an emergency situation requires passengers to evacuate the train, the session should determine if everyone onboard correctly followed the safety instructions of the crewmembers and was aware of the emergency window and door exit locations and their means of operation.

Persons responsible for conducting the sessions should be instructed by the railroad to ask questions that will test emergency preparedness procedures, assess training, and evaluate equipment. After a simulation, these persons shall debrief all participants (including simulated victims, if any) who can offer valuable insights and thus help the railroad to revise its procedures. The debriefing session should help to determine what emergency preparedness or response procedures could not be used because of the special circumstances of either the train or the passengers, and whether coordination between the railroad and the emergency responders requires improvement.

The above method of conducting post-simulation debriefing and critique sessions should also be used by railroads to evaluate reactions to actual emergencies. Weaknesses in emergency preparedness procedures and equipment and areas for improving training should be identified, and the railroad shall amend its emergency preparedness plan in accordance with § 239.201. All persons involved shall be debriefed.

Although FRA did not receive any substantive comments on the need to conduct debriefing and critique sessions in order to accomplish the stated goal of improving the effectiveness of emergency preparedness plans, some commenters did request that FRA explicitly state in the rule text the circumstances under which the requirement to conduct a debriefing and critique session would be triggered. In this regard, Amtrak commented that debriefing and critique sessions can be useful in determining the effectiveness of emergency response procedures and in developing improvements, but represent substantial undertakings by railroad personnel (possibly including both an operating and host railroad) and representatives of emergency response agencies. Amtrak recommended that FRA not require full debriefing and critique sessions after accidents where no threat to passengers on the train requiring a possible evacuation or other similar major response existed. Where there was such a threat, Amtrak suggested that FRA require a full debriefing and critique session only after situations during which the Incident Command System (ICS), or an equivalent multi-jurisdictional emergency response system, was activated. Amtrak noted that the ICS was originally developed by the National Fire Academy, and had been endorsed by FEMA, EPA, and DOT. When such systems are activated, the participation and resources of numerous local emergency response agencies and the railroad must be coordinated; this coordination is the most meaningful test of an emergency response plan's effectiveness.

Amtrak stated that for situations when the ICS was not activated, a smaller-scale debriefing and critique session might be appropriate. Amtrak acknowledged that the proposal did not require a debriefing and critique session after each grade crossing or trespasser accident, but requested that this exception be stated explicitly in the rule text. Amtrak also requested that the rule text exclude a debriefing and critique session when there is no risk to persons on the train that would require the type of evacuation or other emergency response contemplated by the regulations. Amtrak opined that there is little benefit to performing post-accident evaluations when there was no risk to persons on the train that required a prompt, coordinated response involving both railroads and emergency

responders. Since Amtrak is involved in approximately one grade crossing or trespasser incident every other day, a requirement to conduct a debriefing and critique session after such occurrences would be burdensome.

CALTRAIN commented that the debriefing requirement fails to establish the threshold or norms that trigger a debriefing and critique session. CALTRAIN argued that this decision should be made by railroad management, with the exception of simulation drills and tabletop exercises, which typically conclude with a debriefing and critique.

APTA commented that under the proposal, a commuter railroad must conduct a debriefing after every passenger train emergency. APTA suggested that FRA revise the rule to add a threshold before the debriefing requirement is triggered, and recommended that the requirement be triggered only when a major emergency affects five or more passengers. As proposed, APTA argued that the provision would be costly to comply with and annoy passengers, without any corresponding benefit to rail safety. For example, a passenger heart attack would trigger the debriefing requirement. In addition, APTA noted that the opportunity for passenger fraud is much greater, since a passenger being debriefed may attempt to collect money from the railroad for a nonexistent injury.

Although METROLINK did not address the issue of establishing a threshold level in the final rule that would trigger the debriefing and critique requirement, it did comment before issuance of the NPRM that if a commuter railroad did a tabletop exercise or simulation, it could not follow the criteria of the proposal for a debriefing. During a table exercise or simulation, a railroad does not usually notify the emergency responders via the normal means of communication, does not respond via normal emergency conditions (code three with lights and sirens), and does not involve real passengers in the simulation. As noted in FRA's preceding ''Discussion of Comments and Conclusions'' portion of this document (item number 2), as well as in the sectional analysis of § 239.103, the final rule prohibits a railroad from counting a tabletop exercise toward the simulation requirement of the final rule. Accordingly, METROLINK's concern is no longer relevant.

A substituted paragraph (b) has been added to § 239.105 to set forth the limited circumstances under which a debriefing and critique session is not required after a railroad has activated its emergency preparedness plan. Upon review of the comments, FRA recognizes the potentially significant commitment of resources that such a session can involve, and does not wish to impose this obligation on railroads unless the evaluation process would focus on ways to improve the effectiveness of the emergency preparedness plan in ways that would benefit passengers on board the train. Since emergency situations involving significant threats to the safety or health of train passengers that require immediate attention may entail a variety of unique fact patterns, the railroad employees and passengers involved in the invaluable debriefing and critique exercise can help individuals involved in future incidents benefit from a prompt and coordinated response from the railroad and the emergency responder community. However, because collisions of the type set forth in paragraph (b) occur with greater regularity and involve more predictable fact patterns (e.g., a motor vehicle at a gated crossing circumvents a lowered gate arm and is hit by a passenger train, with no one on the train suffering an injury), debriefing and critique sessions after these incidents would quickly become repetitive in nature. Accordingly, FRA would burden the railroads, yet achieve only a marginal benefit to rail safety.

In accordance with the above change in the final rule, while the term ''emergency or emergency situation'' is defined in § 239.7 of this part to include a collision with a person, including suicides, FRA does expect a railroad to conduct a debriefing and critique session after every grade crossing accident. Although the railroad would still be expected to invoke its emergency preparedness plan in the event of any grade crossing accident, the goal of this final rule is to ensure that railroads effectively and efficiently manage passenger train emergencies. Accordingly, FRA does not intend for the debriefing and critique requirements of this section to apply when an emergency situation involves only a motorist or pedestrian who has been injured or killed, but does not affect the passengers onboard the train. Of course, if a grade crossing accident leads to an evacuation of the passenger train (e.g., a gasoline truck collides with the side of a passenger train, and diesel fuel begins to leak from the locomotive, creating the risk of a fire or an explosion), then a railroad must conduct a post-accident debriefing and critique session. In addition, a railroad cannot count its activation of the emergency preparedness plan under these circumstances, or any other circumstances, for purposes of satisfying the emergency simulation requirements of § 239.103.

While a significant derailment with one or more injured passengers or a fire on a passenger train would undoubtedly involve significant threats to passenger safety, and therefore require a debriefing and critique session, the proposed rule left open the question of what other types of emergency situations would trigger the requirements of this section. The NPRM sought public comment on what sorts of situations, or ''significant threats,'' FRA should include in the final rule under the definition of ''emergency'' or ''emergency situation'' set forth in § 239.7. Although no comments were received, FRA has revised the definition of ''emergency'' or ''emergency situation'' in § 239.7 to include: derailments; a fatality at a grade crossing; a passenger or employee fatality, or an illness or injury to one or more crewmembers or passengers requiring admission to a hospital; an evacuation of a passenger train; and a security situation (e.g., a bomb threat).

The final rule does not prescribe an FRA form or other substantive questionnaire to be used at the debriefing and critique sessions, or set forth specific questions to be asked after a full-scale simulation or actual emergency. Paragraph (c) simply requires the railroad to determine, by whatever means it selects, the effectiveness of its emergency preparedness plan; specifically, the functional capabilities of the on-board communications equipment, the timeliness of the required emergency notifications, and the overall efficiency of the emergency responders and the emergency egress of the passengers. Although the requirements of paragraph (c) were included in the NPRM as paragraph (b), the requirements remain essentially unchanged under its new designation, except for some minor stylistic changes.

In the NPRM, FRA had invited comments on whether the final rule should specify additional types of issues that must be addressed by railroads at debriefing and critique sessions (in addition to the five issues required to be addressed in paragraph (c)), or whether each railroad should retain some flexibility to develop its own approach to conducting these sessions. FRA did not receive any comments on this issue. Upon further deliberation, FRA concludes that if a railroad rigorously analyzes its emergency response scenario in accordance with the five required subparagraphs to paragraph (c),

and corrects all relevant deficiencies identified by the debrief and critique session, there is no need to impose any additional requirements in the final rule. Nevertheless, still FRA encourages railroads to voluntarily discuss any or all of the following questions at their debriefing and critique sessions:

- Did on-board personnel try to initiate a radio call immediately?
- How long did it take for on-board personnel to reach and inform the control center of the emergency situation?
- What was the method of notification to the control center? Was the method an on-board radio or a wayside radio (if equipped)?
- Was there adequate radio communication equipment? Was it used properly? Did it work properly?
- Did on-board personnel know the proper emergency telephone number to call from the wayside telephone?
- Did on-board personnel identify him/herself to the control center by name and location?
- Did on-board personnel report the number (approximate or actual, as appropriate) and status of the passengers?
- Did on-board personnel make audible, appropriate announcements to passengers? How many minutes elapsed after the simulation or emergency began before the first announcement was made?
- Did on-board personnel properly operate the fire extinguishers?
- Did on-board personnel request deenergization of the third rail or catenary power?
- Did on-board personnel request the halting of train movements?
- How long did it take for the first emergency response unit to arrive at the emergency scene?
- How long did it take to completely evacuate the train or right-of-way structure or wayside facility or extinguish a fire (real or simulated), or both?

Of course, during the course of FRA's review of the implementation and effectiveness of the debriefing and critique requirement in the final rule, FRA will analyze whether this requirement, as written, achieves the desired improvements in emergency preparedness. This review will determine whether the experiences of railroad employees, railroad passengers, and members of the emergency response community indicate that FRA should require railroads to consider any or all of the above questions during their debriefing and critique sessions. Based on FRA's evaluation, the agency may initiate further rulemaking activity or other appropriate action to ensure that this element of emergency preparedness planning is sufficiently addressed.

In order to achieve the goals of this section, and to comply with the debriefing and critique recordkeeping requirement of paragraph (d), evaluators should be provided with critique sheets, to be collected and used in the debriefing and critique sessions conducted by the railroads. At a minimum, whatever documentation the railroad selects to comply with paragraph (d) shall contain the date(s) and location(s) of the simulation and the debriefing and critique session, and should include the names of all participants at each session. Under the final rule, the critique sheets, or equivalent records, must be maintained by the railroad at its system and applicable division headquarters for two calendar years after the end of the calendar year to which they apply, and be made available for FRA and State inspection and copying during normal business hours. Although the requirements of paragraph (d) were set forth in the NPRM as paragraph (c), the requirements remain essentially unchanged under its new designation. One notable distinction is that while the NPRM was silent as to how long the debriefing and critique records needed to be retained, the final rule imposes a retention period of two years. A second distinction is that while the NPRM was silent on what specific information the records of the debriefing and critique sessions needed to include, the final rule states that each record must include the: date and location of the passenger train emergency situation or full-scale simulation; date and location of the debriefing and critique session; and names of all participants in the debriefing and critique session.

15. Emergency Exits: Section 239.107

In the course of normal passenger train operations, persons enter and exit passenger cars at a station platform through doors on the side of the train. However, when a disabled train cannot be moved to the nearest station, alternative evacuation methods must be employed. Emergency access to and egress from a passenger car may be achieved through outside doors, end doors, and windows. In some emergencies, such as when a fire is confined to a single passenger car, persons may be moved through the end door(s) to an adjacent car. In other emergencies, transfer of all the passengers from the disabled train may be required.

Not all passenger cars have vestibule side doors on both ends, and in some equipment, operation of these doors has required considerable effort, including hand tools. If a power loss occurs, crewmembers may be unable to open either or both of the car vestibule side doors from the normal key control station in the car. If side-door emergency controls permit opening of only one sliding door, it could prove difficult to move certain individuals through it. Also, if the vestibule side doors cannot be opened immediately from either the inside or the outside, persons may panic and could be injured as others attempt to leave the car.

As FRA noted in the NPRM stage of this proceeding, commuter railroads have agreed to FRA's request that arrangements requiring hand tools (coins and pencils) be retrofitted. The issue of relocation of manual releases is being addressed in the rulemaking on Passenger Equipment Safety Standards (FRA Docket No. PCSS–1), and the Passenger Equipment Safety Standards Working Group will be evaluating other improvements in door design and operation. Section 239.107(a) requires that all doors intended by a railroad to be used during an emergency situation be properly marked inside and outside, and that the railroad post clear and understandable instructions for their use at the designated locations. However, in contrast to the broad definition of ''passenger car'' contained in part 223 of this chapter, the text of the final rule has been revised to reflect the fact that the marking requirements for emergency door exits on passenger cars do not apply to self-propelled passenger cars designed to carry baggage, mail, or express.

Section 239.107(a)(1) requires that the emergency egress exits be conspicuously and legibly marked on the inside of the car with luminescent material or be properly lighted. FRA realizes that during an emergency the main power supply to the passenger cars may become inoperative and that crewmembers with portable flashlights may be unavailable. Since lack of clear identification or lighting could make it difficult for passengers to find the emergency door exits, the final rule requires luminescent material on all emergency egress door exits (or secondary auxiliary lighting near these exits) to assist and speed passenger egress from the train during an emergency. The marking of the emergency door exits must be conspicuous enough so that a reasonable person, even while enduring the stress and potential panic of an emergency evacuation, can determine where the closest and most accessible emergency route out of the car is

located. In addition, while this section does not prescribe a particular brand, type, or color of luminescent paint or material that a railroad must use to identify an exit, FRA intends each railroad to select a material durable enough to withstand the daily effects of passenger traffic, such as the contact that occurs as passengers enter and leave the cars.

Section 239.107(a)(2) requires that the emergency door exits intended for emergency access by emergency responders for extrication of passengers be marked with retroreflective material, so that the emergency responders can easily distinguish them from the nonaccessible doors simply by shining their flashlights or other portable lighting on the marking or symbol selected by the railroad. Again, while this section does not prescribe that a railroad use a particular brand, type, or color of retroreflective material to identify an access location, FRA intends each railroad to select a material durable enough to withstand the daily effects of weather and passenger contact, and capable of resisting, to the extent possible, the effects of heat and fire. If all doors are equally operable from the exterior, no designation would be useful, nor would any be required. In the separate rulemaking on passenger equipment safety standards, FRA is addressing appropriate requirements for periodic maintenance and replacement of the emergency door exit markings.

The final rule requires railroads to post clear and understandable instructions at designated locations describing how to operate the emergency door exits. This section does not mandate that railroads use specific words or phrases to guide the passengers and emergency responders. Instead, each railroad should evaluate the operational characteristics of its emergency door exits, and select key words or diagrams that adequately inform the individuals who must use them. While railroads are encouraged to post comprehensive instructions, FRA also realizes that during an emergency situation every additional moment devoted to reading and understanding access or egress information places lives at risk. In addition, FRA would already expect passengers and emergency responders to be familiar with the location and operation of the railroad's emergency door exits as a result of emergency responder liaison activities and passenger awareness programs conducted in accordance with proposed § 239.101(a)(5) and (a)(7).

In deciding to require that railroads must mark all door exits intended for emergency access and post access instructions, FRA carefully considered concerns expressed by members of the Working Group that this requirement would enable vandals to gain easy or casual entry into passenger cars left overnight in rail yards, particularly adolescents who might otherwise not know how to operate specialized door mechanisms. In addition to FRA's desire to avoid unnecessary expenses to railroads for repairing vandalized or damaged rail equipment, FRA does not wish to see on-board emergency equipment disappear from unattended trains due to the acts of individuals who learned how to gain illegal access to the equipment courtesy of a Federal regulation. FRA also recognizes that under § 239.101(a)(5), railroads are required to develop training programs available to all on-line emergency responders who could reasonably be expected to respond to an emergency situation, with an emphasis upon access to railroad equipment, location of railroad facilities, and communications interface, and that such comprehensive training information may lessen the need for railroads to place markings on every emergency door or post detailed access instructions. However, FRA realizes that not every potential emergency responder will choose to participate in the training program, and that not everyone who participated will recall all of the imparted information on access to the equipment while in the midst of responding to a major railroad accident or incident. FRA is confident that railroads will find ways of protecting their unattended equipment through appropriate security measures, and the agency will not risk loss of human life from delays in emergency responder rescue efforts merely because of the possibility that financial losses from vandalism will increase. Accordingly, the comprehensive marking and operating instruction requirements proposed in the NPRM remain unchanged.

Paragraph (b) requires each railroad operating passenger train service to properly consider the nature and characteristics of its operations and passenger equipment to plan for routine and scheduled inspection, maintenance, and repair of all windows and door exits intended for either emergency egress or rescue access by emergency responders. In the case of emergency window exits, the inspection, maintenance, and repair activities must be performed consistent with the requirements of part 223 of this chapter. While the final rule does not require railroads to perform these tasks in accordance with a specific timetable or methodology, except with respect to the periodic sampling requirement for emergency window exits discussed below, FRA expects each railroad to develop and implement procedures for achieving the goals of this paragraph. Visual inspections must be performed periodically to verify that no emergency exit has a broken release mechanism or other overt sign that would render it unable to function in an emergency. Maintenance, including lubrication or scheduled replacement of depreciated parts or mechanisms, must be performed in accordance with standard industry practice and/or manufacturer recommendations. All emergency exits that are found during the course of an inspection or maintenance cycle to be broken, disabled, or otherwise incapable of performing their intended safety function must be repaired before the railroad may return the car to passenger service.

For purposes of enforcement by FRA of § 239.107, the phrase ''in service'' means a passenger car that is in passenger service, i.e., the passenger car is carrying, or available to carry, fare-paying passengers. A passenger car is not in service if it is: being hauled for repairs and is not carrying passengers; in a repair shop or on a repair track; on a storage track and is not carrying passengers; or has been delivered in interchange but has not been accepted by the receiving railroad. FRA will impose a civil penalty for passenger equipment that is missing an emergency-exit marking or has an inoperable emergency exit only if the railroad had actual knowledge of the facts giving rise to the violation, or a reasonable person acting in the circumstances and exercising reasonable care would have had that knowledge. Accordingly, since FRA is not employing a strict liability standard in enforcing § 239.107, FRA would ordinarily not impose a civil penalty on the railroad for the actions of a vandal. However, once the railroad personally discovers or is otherwise notified that a marking is missing or an emergency exit is inoperative, FRA expects the railroad to replace the missing marking or repair the inoperative exit before the passenger car (or train, as appropriate) is again placed in service on a subsequent calendar day. In this regard, FRA will expect each railroad to ensure its compliance with § 239.107(b) by performing whatever daily exterior and interior mechanical inspection requirements that eventually result from the rulemaking on passenger equipment safety standards. See proposed §§ 238.303 and 238.305 of this chapter.

Carrying forward requirements currently contained in FRA's Emergency

Order No. 20, the final rule also requires each railroad to periodically test a representative sample of emergency window exits on its passenger cars to verify their proper operation. The sampling of these emergency window exits must be conducted in conformity with either of two commonly recognized alternate methods, which will provide a degree of uniformity industry wide. Both methods require sampling meeting a 95-percent confidence level that all emergency window exits operate properly (i.e., the methods do not accept a defect rate of 5 percent). Rather than require railroads to test all window exits on a specific type or series of car if one car has a defective window exit, the final rule permits the railroads to use commonly accepted sampling techniques to determine how many additional windows to test. In general, these principles require that the greater the percentage of window exits that a railroad finds defective, the greater the percentage of windows that the railroad will have to test. Specifically, sampling must be conducted to meet a 95-percent confidence level that no defective units remain in the universe and be in accord with either Military Standard MIL–STD–105(D) Sampling for Attributes or American National Standards Institute ANSI–ASQC Z1.4–1993 Sampling Procedures for Inspections by Attributes. Defective units must be repaired before the passenger car is returned to service.

The final specifies that a railroad must test a representative sample of emergency window exits on its cars at least once during every 180 days to verify their proper operation. Although commenters were encouraged to address this issue by indicating whether the sampling should occur on an annual basis, or on a less frequent basis, no comments were received. Accordingly, the level of frequency remains unchanged from the NPRM stage of this proceeding.

The inspection, maintenance, and repair records concerning emergency window and door exits must be retained at the system headquarters for the railroad and at the division headquarters for each division where the inspections, maintenance, or repairs are performed (i.e., the records availability must be division specific). The records must be retained for two calendar years after the end of the year to which they relate. The records can consist of multiple documents, and may contain separate sections covering inspection, maintenance, and repair or separate sections covering different types of passenger equipment. Additionally, railroads must make these inspection, maintenance, and repair records available to duly authorized representatives of FRA and States participating under part 212 of this chapter for inspection and copying (e.g., photocopying or handwritten notetaking) during normal business hours.

METROLINK commented that in order to avoid the unnecessary burden of maintaining duplicate records, the rule should require railroads to store all of the maintenance records for the emergency window and door exits at the site of the inspections. In METROLINK's case, that site would be the applicable division headquarters, which is no more than 15 miles from its system headquarters. METROLINK also noted that paragraph 239.107(c) does not indicate for how long the inspection records must be retained, and recommended that since the current rule calls for major service inspections to be retained for 180 days (or until the next inspection is performed) the final rule should establish a similar timeframe.

In response to METROLINK's comment concerning the lack of a timeframe for the retention of inspection records, FRA has revised the final rule to require a two-year retention period for each railroad's records of inspection, maintenance, and repair of its emergency window and door exits. Despite METROLINK's preference for a shorter timeframe, FRA concludes that two years is necessary to allow FRA an adequate opportunity to perform meaning compliance audits and determine if a railroad's overall pattern of compliance with this section is sufficient. In addition, while FRA recognizes the additional expense of retaining copies of inspection records at both the system and divisional levels, this dual approach enables FRA's regional inspection forces to perform division-specific inspections, while also permitting FRA to study the compliance of a railroad's entire system. However, as METROLINK illustrates by describing its own operational characteristics, at least one member of the railroad population has only one central maintenance facility which solely performs all of the inspection, maintenance, and repair of its entire fleet of passenger cars. Under this limited scenario, FRA agrees that it would be redundant to require a railroad to maintain duplicate sets of records at both its system and divisional offices. Accordingly, the single central maintenance facility would be an acceptable repository for all of the inspection, maintenance, and repair records for such a railroad.

FRA has added paragraph (d) to the final rule to authorize railroads to retain their records of inspection, maintenance, and repair of emergency window and door exits by electronic recordkeeping, subject to the conditions set forth in this provision. This provision provides an alternative for railroads retaining certain information, as required in paragraph (c). FRA realizes that requiring railroads to retain the information in paper form would impose additional administrative and storage costs, and that computer storage of these documents would also enable railroads to immediately update any amendments to their operational testing programs.

Each participating railroad must have the essential components of a computer system, i.e., a desktop computer and either a facsimile machine or a printer connected to retrieve and produce records for immediate review. The material retrieved in hard copy form must contain relevant information organized in usable format to render the data completely understandable. The documents must be made available for FRA or participating State inspectors during normal business hours, which FRA interprets as the times and days of the week when railroads conduct their regular business transactions. Nevertheless, FRA reserves the right to review and examine the documents prepared in accordance with the Passenger Train Emergency Preparedness regulations at any reasonable time if situations warrant.

Additionally, each railroad must provide adequate security measures to limit employee access to its electronic data processing system and must prescribe who can create, modify, or delete data from the database. Although FRA does not identify the management job position capable of instituting changes in the database, each railroad must indicate the source authorized to make such changes. Each railroad must also designate who will be authorized to authenticate the hard copies produced from the electronic format. In short, each railroad electing to retain its records electronically must ensure the integrity of the information and prevent possible tampering with data, enabling FRA to fully execute its enforcement responsibilities.

16. Emergency Preparedness Plan; Filing and Approval: Section 239.201

Section 239.201 specifies the process for review and approval by FRA of each passenger railroad's jointly-adopted emergency preparedness plan. The intent of the review and approval is to be constructive, rather than restrictive.

It is anticipated that the passenger railroads, in conjunction with the railroads hosting these operations (when applicable), will develop and implement varied plans based upon the special circumstances involving their individual operations. Under the final rule, FRA requires that each affected railroad summarize its internal discussions and deliberative processes to explain how the railroad's unique and individual operating characteristics determined how each issue for the passenger train operation was finally addressed in the emergency preparedness plan. Specifically, FRA expects each railroad to participate, as appropriate, in preparing a review of the analysis that led to each element of the emergency preparedness plan that the passenger operation submits to FRA for approval, including a consideration of the expected monetary costs and anticipated safety benefits associated with each section of the plan.

In its comments, METROLINK stated that the term ''analysis'' in the phrase ''shall include a summary of the railroad's analysis supporting each plan element and describing how each condition on the railroad's property is addressed in the plan'' is vague and lacking in direction. METROLINK then asked whether FRA expects to receive a cost benefit analysis, systems approach, or safety value analysis. In addition, METROLINK questioned whether the term ''condition on the railroad's property'' concerns elements of the plan such as earthquakes, wind, and power outages.

In response to METROLINK's comments, FRA notes that the word ''analysis'' means that FRA expects each railroad to identify all vulnerabilities that exist on its property in terms of potential risks to rail safety and emergency preparedness planning. In the context of identifying the known risks, each railroad should undertake a systems approach in order to explain how it will mitigate the level of each risk to an acceptable level. FRA does not consider earthquakes, wind, or power outages, in and of themselves, to be ''conditions on the railroad's property.'' However, if a railroad requires electrical power to operate, and its operations run across a trestle without walkways, then the emergency preparedness plan must address how the railroad will mitigate the risk connected with one of its trains becoming stranded on a trestle during a power outage.

FRA will conduct a review of each plan so that there can be an open discussion of the plan's provisions from which all concerned parties can benefit. However, in order to ensure compliance with minimum plan requirements FRA will first conduct a preliminary review of each plan in accordance with revised paragraph (b)(1), and then conduct a comprehensive and detailed review of each plan in accordance with revised paragraph (b)(2) prior to final approval and implementation. A detailed discussion of the issue of preliminary and final review of emergency preparedness plans is included in the preceding ''Discussion of Comments and Conclusions'' portion of this document under item number 4.

FRA expects to involve members of the Passenger Train Emergency Preparedness Working Group in developing benchmark criteria for plan approvals to simplify plan development and approval. It is anticipated that this criteria will address program elements that include the following:

- Specific course content for training programs of on-board personnel, control center personnel, and other key employees;
- Minimum requirements for full-scale emergency exercises, including frequency and content of drills with emergency responders and simulations to determine rapidity of emergency evacuations under varying scenarios;
- Specific means for providing emergency safety information to passengers, similar to on-board briefings provided in commercial aviation;
- Detailed requirements for tunnel safety, including lighting and equipment; and
- Additional attention to emergency equipment, by recommending types and numbers of various kinds of equipment that may be useful under varying operating scenarios.

FRA will also review all plan amendments prior to their going into effect. FRA had requested comments on whether there are any categories of plan amendments that should be permitted to go into effect immediately, prior to review and approval, because they constitute improvements for which implementation delay should be avoided. Since FRA did not receive any comments on this issue, the final rule requires that all proposed plan amendments be submitted for review before the railroad may revise its emergency preparedness plan. Within 45 days of receipt of a railroad's proposed amendment to its plan, FRA will review the proposal and notify the railroad's primary contact person of the results of the review and identify any deficiencies found. If FRA discovers a deficiency, the railroad must correct it before the amendment may go into effect.

All persons, such as contractors, who perform any action on behalf of a railroad are required to conform to the emergency preparedness plans in effect on the railroads upon which they are working. Persons whose employees are working under a railroad's approved emergency preparedness plan need not submit a separate plan to FRA for review and approval. For example, if a passenger railroad hires an outside independent contractor to conduct an emergency simulation pursuant to § 239.103, the contractor must perform this task in accordance with the passenger operation's plan. However, if a freight railroad train crew operates a passenger train for a commuter rail authority, the freight railroad must coordinate the applicable portions of the emergency preparedness plan with the commuter rail authority. While an assignment of responsibility for compliance made under § 239.101(a)(3) must be clearly stated in the plan, the assignor shall not be relieved of responsibility for compliance with this part.

Although the final rule has been revised to state that the final review process will include ongoing dialogues with rail management and labor representatives, the rule does not specifically require the direct involvement of railroad employees or their representatives in the process of designing the emergency preparedness plan. In this regard, FRA notes that the responsibility for having a plan that conforms with this rule lies with the employer. However, it should be noted that the success of an emergency preparedness plan requires the willing cooperation of all persons whose duties or personal safety are affected by the plan.

17. Retention of Emergency Preparedness Plan: Section 239.203

Although FRA did not receive any comments, this section has been modified to reflect the new requirement in § 239.201 that each passenger railroad jointly adopt a single emergency preparedness plan with all railroads hosting its passenger service (if applicable). The single emergency preparedness plan prepared by the passenger railroad and all of its applicable host railroads, as well as all subsequent amendments to the single plan, must be retained at the system headquarters for each railroad and at the division headquarters for each division on each affected railroad where the plan is in effect (i.e., the records availability must be division specific). The emergency preparedness plan may consist of multiple documents or

booklets and may contain separate sections covering the varying job functions and plan responsibilities of on-board and control center personnel. Additionally, railroads must make the emergency preparedness plan records available to duly authorized FRA representatives for inspection and copying (e.g., photocopying or handwritten notetaking) during normal business hours.

18. Operational (Efficiency) Tests: Section 239.301

Section 239.301 contains the requirement that railroads monitor the routine performance of employees who have individual responsibilities under the emergency preparedness plan to verify that the employee can perform the duties required under the plan in a safe and effective manner. It permits the railroad to test proficiency by requiring the employee to complete a written or oral examination, an interactive training program using a computer, a practical demonstration of understanding and ability, or an appropriate combination of these in accordance with this section. This testing may also involve check rides and control center visits, along with unannounced, covert observation of the employees.

This section requires a railroad to keep a record of the date, time, place, and result of each operational (efficiency) test that was performed in accordance with its emergency preparedness plan. Each record must identify the railroad officer administering the test of each employee. Accordingly, by identifying the specific data points that each record must provide, this section will promote the examination of relevant information from captured data sources, enabling FRA to better determine the effectiveness of a railroad's emergency preparedness plan. A written or electronic records of each operational (efficiency) test must be kept for one calendar year after the end of the year in which the test was conducted, and must be made available for inspection and copying by FRA and participating States during normal business hours.

FRA received only one comment concerning the requirements of this section. APTA expressed a general concern that a commuter railroad operating over a host railroad may not be able to convince the freight railroad's dispatcher to provide track time for efficiency tests, especially on busy freight corridors. APTA offered to work with FRA to help in the implementation of this section.

FRA recognizes both the operational complexities and logistical realities of commuter railroads sharing trackage rights with freight railroads on the general railroad system of transportation. While FRA remains confident that dispatchers on host railroads will fully cooperate with commuter operations and provide them with safe and adequate opportunities to perform on-the-job verifications to evaluate individual employee performance under the emergency preparedness plan, the rule does permit a railroad to utilize formal examinations, interactive computer programs, and practical demonstrations to measure the success of its training program. Nevertheless, FRA will intervene as appropriate to ensure the successful and effective implementation of each railroad's emergency preparedness plan.

19. Electronic Recordkeeping: Section 239.303

FRA did not receive any comments on this section, which is adopted as proposed. Section 239.303 authorizes railroads to retain their operational (efficiency) test records by electronic recordkeeping, subject to the conditions set forth in this provision. This provision provides an alternative for railroads retaining certain information, as required in § 239.301. FRA realizes that requiring railroads to retain the information in paper form would impose additional administrative and storage costs, and that computer storage of these documents would also enable railroads to immediately update any amendments to their operational testing programs.

Each participating railroad must have the essential components of a computer system, i.e., a desktop computer and either a facsimile machine or a printer connected to retrieve and produce records for immediate review. The material retrieved in hard copy form must contain relevant information organized in usable format to render the data completely understandable. The documents must be made available for FRA or participating State inspectors during normal business hours, which FRA interprets as the times and days of the week when railroads conduct their regular business transactions. Nevertheless, FRA reserves the right to review and examine the documents prepared in accordance with the Passenger Train Emergency Preparedness regulations at any reasonable time if situations warrant.

Additionally, each railroad must provide adequate security measures to limit employee access to its electronic data processing system and must prescribe who can create, modify, or delete data from the database. Although FRA does not identify the management job position capable of instituting changes in the database, each railroad must indicate the source authorized to make such changes. Each railroad must also designate who will be authorized to authenticate the hard copies produced from the electronic format. In short, each railroad electing to retain its records electronically must ensure the integrity of the information and prevent possible tampering with data, enabling FRA to fully execute its enforcement responsibilities.

Regulatory Impact

Executive Order 12866 and DOT Regulatory Policies and Procedures

This final rule has been evaluated in accordance with existing policies and procedures. Due to considerable public interest in the subject matter of the rule, the rule is considered to be significant under both Executive Order 12866 and DOT policies and procedures (44 FR 11034; February 26, 1979). FRA has prepared and placed in the docket a regulatory analysis addressing the economic impact of the rule. It may be inspected and photocopied at the Office of Chief Counsel, FRA, Seventh Floor, 1120 Vermont Avenue, N.W., in Washington, D.C. Photocopies may also be obtained by submitting a written request to the FRA Docket Clerk at Office of Chief Counsel, Federal Railroad Administration, Mail Stop 10, 400 Seventh Street, S.W., Washington, D.C. 20590.

As part of the benefit-cost analysis, FRA has assessed quantitative measurements of costs and benefits expected from the adoption of the rule. The Net Present Value (NPV) of the total 20-year costs which the industry is expected to incur is $6.3 million. Following is a breakdown of the costs by requirement.

Section	Requirement	Cost
239.101,201,203	Emergency Prep. Plan	$199,085
	Control Center Notification	969–1,569
	Training:	

Section	Requirement	Cost
	—Onboard Personnel Training	1,400,684
	—Control Center Personnel Training	134,014
	—Initial Program Development	51,822
	Joint Operations	22,954
	Parallel Operations	1,526–1,865
	Emergency Responder Liaison:	
	—Training Program	423,096
	—Provide EPP—Commuter	11,646
	—Provide EPP—Amtrak	403,365
	Onboard Emergency Equipment:	
	—One Fire Extinguisher/Car	147,801
	—One Pry Bar/Car	66,571
	—Instruction on Pry Bar Use	279,576
	Passenger Safety Awareness:	
	—Permanent Onboard Posting	64,597
239.103, 105	Pass Train Emergency Simulations	231,172
239.107	Emergency Exits:	
	—Marking—Interior	447,571
	—Marking—Exterior	1,336,679
	—Inspection/Record keep.	397,091
239.301	Operational Efficiency Tests	683,909
Total		6,304,128–6,305,067

The history of passenger train accidents shows that the potential for injury and loss of life arising from a single incident can be significant. In the last 11 years there have been seven passenger train accidents which resulted in a significant loss of life. FRA believes that the value (as a result of these requirements) of averting three or more fatalities, or an economic-equivalent number of permanently disabling injuries among rail passengers over the next twenty years will exceed the cost to rail carriers of implementing these rules.

While FRA cannot determine whether the monetary value of the benefits to railroads affected by this rule will exceed the estimated costs of implementing the rule, the agency believes it is reasonable to expect that the economic benefit from saving at least three lives as a result of implementing these standards will exceed the costs of implementing this rule.

Regulatory Flexibility Act

The Regulatory Flexibility Act of 1980 (5 U.S.C. 601 *et seq.*) requires an assessment of the impacts of proposed rules on small entities. FRA has conducted a regulatory flexibility assessment of this final rule's impact on small entities, and the assessment has been placed in the public docket for this rulemaking; FRA certifies that the final rule will not have a substantial impact on a significant number of small entities. This final rule affects intercity and commuter passenger railroads, as well as rapid transit operations that operate over the general railroad system of transportation. Commuter railroads and rapid transit systems are part of larger transit organizations that receive Federal funds. The American Public Transit Association (APTA) represents the interests of commuter railroads and rapid transit systems in regulatory matters. Further, the final standards were developed by FRA in consultation with a Working Group that included representatives from Amtrak, individual commuter railroads, and APTA.

Entities impacted by the final rule are governmental jurisdictions or transit authorities, none of which are small for purposes of the United States Small Business Administration (i.e., no entity operates in a locality with a population of under 50,000 people). No small commuter railroads or rapid transit systems will be affected disproportionately. The level of costs incurred by each organization should vary in proportion to the organization's size. For instance, railroads with fewer employees and fewer passenger cars will have lower costs associated with both employee efficiency testing and emergency exit inspections.

Small passenger rail operations such as tourist, scenic, excursion, and historic railroads are excepted from the final rule. The final rule does not affect small entities.

A joint FRA/industry working group formed by the RSAC is currently developing recommendations regarding the applicability of FRA regulations, including this one, to tourist, scenic, historic, and excursion railroads. After appropriate consultation with the excursion railroad associations takes place, emergency preparedness requirements for these operations may be proposed by FRA that are different from those affecting other types of passenger train operations. These requirements may be more or less onerous, or simply different in detail, depending in part on the information gathered during FRA's consultation process.

Paperwork Reduction Act

The rule contains information collection requirements. FRA has submitted these information collection requirements to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d) *et seq.*). FRA has endeavored to keep the burden associated with the final rule as simple and minimal as possible. FRA is not authorized to impose a penalty on persons for violating information collection requirements which do not display a current OMB control number. The sections that contain the new and/or revised 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	Total annual burden cost
223.9d/239.107:					
A. Emergency egress.	18 RRs	1,950 new decals	4 minutes	664 hours	$19,920
		4,575 replace decals	7 minutes.		
		1,300 new decals	4 minutes.		
B. Emergency access.	18 RRs	6,320 replace decals	7 minutes	824 hours	24,720
239.107(b)	18 RRs	3,600 tests	20 minutes (18 minutes to perform test and 2 minutes for recordkeeping).	1,200 hours	36,000
239.101/239.201	18 RRs	18 plans	158 hours	2,844 hours	115,416
	18 RRs	18 amendments	1.6 hours	29 hours	986
239.101(1)(I)	18 RRs	N/A	Usual and customary procedure—No new paperwork.	N/A	N/A
239.101(1)(ii)	18 RRs	N/A	Usual and customary procedure—No new paperwork.	N/A	N/A
239.101(1)(ii)	5 RRs	5 updates of records	1 hour	5 hours	140
239.101(a)(3)	29 RR Pairs	29 negotiations	16 hours	464 hours	22,040
239.101(a)(7)(ii)	5 RRs	1,300 passenger cars	5 minutes per bulkhead card	108 hours	3,240
		5 safety messages	1 hour per RR to develop safety message.	5 hours	170
239.105	18 RRs	5 sessions	27 hours per session	33 hours	924
239.301/239.303	18 RRs	11,075 tests	8 minutes per test	135 hours	6,255
239.101(a)(5)	17 RRs	18 responses to distribute info to emergency responders.	6 hours per mailing	102 hours	9,588
	1 RR		100 hours per mailing	180 hours	
	1 RR (Amtrak)	1 response to distribute info to emergency responders.	100 hours	100 hours	2,800
	16 RRs	16 updates of emergency responder records.	30 minutes per updated	8 hours	224
	1 RR (Amtrak)	1 update of emergency responder records.	5 hours hours per mailing	5 hours	140

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 information collection request submitted to OMB, please contact Ms. Brenda Moscoso at 202–632–3335. The final rule responds to public comments on the information collection requirements contained in the NPRM. The requirements in this final rule have been approved by OMB under OMB control number 2130–0545.

Environmental Impact

FRA has evaluated this final rule in accordance with its procedures for ensuring full consideration of the environmental impact of FRA actions, as required by the National Environmental Policy Act (42 U.S.C. 4321 *et seq.*), other environmental statutes, Executive Orders, and DOT Order 5610.1c. This final rule meets the criteria that establish this as a non-major action for environmental purposes.

Federalism Implications

This final rule has been analyzed in accordance with the principles and criteria contained in Executive Order 12612, and it has been determined that the final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment. The fundamental policy decision providing that Federal regulations should govern aspects of service provided by municipal and public benefit corporations (or agencies) of State governments is embodied in the statute quoted above. FRA has made every effort to provide reasonable flexibility to State-level decision making and has included commuter authorities as full partners in development of this proposed rule.

Compliance With the Unfunded Mandates Reform Act of 1995

Pursuant to the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4) 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).'' Sec. 201. Section 202 of the Act further requires that ''before promulgating any general notice of proposed rulemaking that is likely to result in 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 $ 100,000,000 or more (adjusted annually for inflation) 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. The final rules issued today will not result in the expenditure, in the aggregate, of $100,000,000 or more in any one year, and thus preparation of a statement was not required.

List of Subjects in 49 CFR Part 223

Glass and glass products, Penalties, Railroad safety, Reporting and recordkeeping requirements.

List of Subjects in 49 CFR Part 239

Passenger train emergency preparedness, Penalties, Railroad safety, Reporting and recordkeeping requirements.

The Final Rule

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

1. The authority citation for part 223 is revised to read as follows:

Authority: 49 U.S.C. 20102–20103, 20105–20114, 20133, 20701, 21301–21302, and 21304; Sec. 215, Pub. L. No. 103–440, 108 Stat. 4623–4624 (49 U.S.C. 20133); and 49 CFR 1.49(c), (g), (m).

2. By revising § 223.5 to read as follows:

§ 223.5 Definitions.

As used in this part—

Administrator means the Administrator of the Federal Railroad Administration or the Administrator's delegate.

Caboose means a car in a freight train intended to provide transportation for crewmembers.

Certified glazing means a glazing material that has been certified by the manufacturer as having met the testing requirements set forth in Appendix A of this part and that has been installed in such a manner that it will perform its intended function.

Designated service means exclusive operation of a locomotive under the following conditions:

(1) The locomotive is not used as an independent unit or the controlling unit is a consist of locomotives except when moving for the purpose of servicing or repair within a single yard area;

(2) The locomotive is not occupied by operating or deadhead crews outside a single yard area; and

(3) The locomotive is stenciled ''Designated Service—DO NOT OCCUPY''.

Emergency responder means a member of a police or fire department, or other organization involved with public safety charged with providing or coordinating emergency services, who responds to a passenger train emergency.

Emergency window means that segment of a side facing glazing location which has been designed to permit rapid and easy removal during a crisis situation.

End facing glazing location means any location where a line perpendicular to the plane of the glazing material makes a horizontal angle of 50 degrees or less with the centerline of the locomotive, caboose or passenger car. Any location which, due to curvature of the glazing material, can meet the criteria for either a front facing location or a side facing location shall be considered a front facing location.

FRA means the Federal Railroad Administration.

Locomotive means a self-propelled unit of equipment designed primarily for moving other equipment. It does not include self-propelled passenger cars.

Locomotive cab means that portion of the superstructure designed to be occupied by the crew while operating the locomotive.

Passenger car means a unit of rail rolling equipment intended to provide transportation for members of the general public and includes self-propelled cars designed to carry baggage, mail, express or passengers. This term includes a passenger coach, cab car, and an MU locomotive. This term does not include a private car.

Passenger train service means the transportation of persons (other than employees, contractors, or persons riding equipment to observe or monitor railroad operations) in intercity passenger service or commuter or other short-haul passenger service in a metropolitan or suburban area.

Person means:

(1) Any form of non-highway ground transportation that runs on rails or electromagnetic guideways, including—

(i) Commuter or other short-haul rail passenger service in a metropolitan or suburban area and commuter railroad service that was operated by the Consolidated Rail Corporation on January 1, 1979, and

(ii) High speed ground transportation systems that connect metropolitan areas, without regard to whether those systems use new technologies not associated with traditional railroads, but does not include rapid transit operations in an urban area that are not connected to the general railroad system of transportation and

(2)A person that provides railroad transportation, whether directly or by contracting out operation of the railroad to another person.

Railroad means:

(1) Any form of non-highway ground transportation that runs on rails or electromagnetic guideways, including

(i) Commuter or other short-haul rail passenger service in a metropolitan or suburban area and commuter railroad service that was operated by the Consolidated Rail Corporation on January 1, 1979, and

(ii) High speed ground transportation systems that connect metropolitan areas, without regard to whether those systems use new technologies not associated with traditional railroads, but does not include rapid transit operations in an urban area that are not connected to the general railroad system of transportation and

(2) A person that provides railroad transportation, whether directly or by contracting out operation of the railroad to another person.

Rebuilt locomotive, caboose or passenger car means a locomotive, caboose or passenger car that has undergone overhaul which has been identified by the railroad as a capital expense under Surface Transportation Board accounting standards.

Side facing glazing location means any location where a line perpendicular to the plane of the glazing material makes an angle of more than 50 degrees with the centerline of the locomotive, caboose or passenger car.

Windshield means the combination of individual units of glazing material of the locomotive, passenger car, or caboose that are positioned in an end facing glazing location.

Yard is a system of auxiliary tracks used exclusively for the classification of passenger or freight cars according to commodity or destination; assembling of cars for train movement; storage of cars; or repair of equipment.

Yard caboose means a caboose that is used exclusively in a single yard area.

Yard locomotive means a locomotive that is operated only to perform switching functions within a single yard area.

3. In § 223.9, paragraph (d) is added to read as follows:

§ 223.9 Requirements for new or rebuilt equipment.

* * * * *

(d) *Marking.* Each railroad providing passenger train service shall ensure that for each passenger car, except for self-propelled cars designed to carry baggage, mail, or express:

(1) Each emergency window is conspicuously and legibly marked with luminescent material on the inside of each car to facilitate passenger egress. Each such railroad shall post clear and legible operating instructions at or near each such exit.

(2) Each window intended for emergency access by emergency responders for extrication of passengers is marked with a retroreflective, unique, and easily recognizable symbol or other clear marking. Each such railroad shall post clear and understandable window-access instructions either at each such window or at each end of the car.

4. By revising appendix B to part 223 to read as follows:

Appendix B to Part 223—Schedule of Civil Penalties [1]

Section	Violation	Willful violation
223.9 New or rebuilt Equipment:		
(a) Locomotives	$2,500	$5,000
(b) Cabooses	2,500	5,000
(c) Passenger cars	2,500	5,000
(d) (1), (d)(2):.		
(i) Window not marked or instructions not posted	2,500	5,000
(ii) Window improperly marked or instructions improperly posted	1,000	2,000
223.11(c) Existing locomotives	2,500	5,000
(d) Repair of window	1,000	2,000
223.13(c) Existing cabooses	2,500	5,000
(d) Repair of window	1,000	2,000
223.15(c) Existing passenger cars	2,500	5,000
(d) Repair of window	1,000	2,000
223.17 Identification of units	1,000	1,500

5. Part 239 is added to read as follows:

Part 239—PASSENGER TRAIN EMERGENCY PREPAREDNESS

Subpart A—General

Sec.
239.1 Purpose and scope.
239.3 Application.
239.5 Preemptive effect.
239.7 Definitions.
239.9 Responsibility for compliance.
239.11 Penalties.
239.13 Waivers.
239.15 Information collection.

Subpart B—Specific Requirements

239.101 Emergency preparedness plan.
239.103 Passenger train emergency simulations.
239.105 Debriefing and critique.
239.107 Emergency exits.

Subpart C—Review, Approval, and Retention of Emergency Preparedness Plans

239.201 Emergency preparedness plan; filing and approval.
239.203 Retention of emergency preparedness plan.

Subpart D—Operational (Efficiency) Tests; Inspection of Records and Recordkeeping

239.301 Operational (efficiency) tests.
239.303 Electronic recordkeeping.

Appendix A to Part 239—Schedule of Civil Penalties

Authority: 49 U.S.C. 20102–20103, 20105–20114, 20133, 21301, 21304, and 21311; 49 U.S.C. 20133; 28 U.S.C. 2461 note; and 49 CFR 1.49(c), (g), (m).

Subpart A—General

§ 239.1 Purpose and scope.

(a) The purpose of this part is to reduce the magnitude and severity of casualties in railroad operations by ensuring that railroads involved in passenger train operations can effectively and efficiently manage passenger train emergencies.

(b) This part prescribes minimum Federal safety standards for the preparation, adoption, and implementation of emergency preparedness plans by railroads connected with the operation of passenger trains, and requires each affected railroad to instruct its employees on the provisions of its plan. This part does not restrict railroads from adopting and enforcing additional or more stringent requirements not inconsistent with this part.

§ 239.3 Application.

(a) Except as provided in paragraph (b) of this section, this part applies to all:

(1) Railroads that operate intercity or commuter passenger train service on standard gage track which is part of the general railroad system of transportation;

(2) Railroads that provide commuter or other short-haul rail passenger train service in a metropolitan or suburban area (as described by 49 U.S.C. 20102(1)), including public authorities operating passenger train service; and

(3) Passenger or freight railroads hosting the operation of passenger train service described in paragraph (a)(1) or (a)(2) of this section.

(b) This part does *not* apply to:

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

(2) Operation of private cars, including business/office cars and circus trains; or

(3) Tourist, scenic, historic, or excursion operations, whether on or off the general railroad system.

§ 239.5 Preemptive effect.

Under 49 U.S.C. 20106 (formerly section 205 of the Federal Railroad Safety Act of 1970 (45 U.S.C. 434)), issuance of this part preempts any State law, rule, regulation, order, or standard covering the same subject matter, except a provision necessary to eliminate or reduce an essentially local safety hazard, that is not incompatible with Federal law or regulation and does not unreasonably burden interstate commerce.

§ 239.7 Definitions.

As used in this part—

Adjacent rail modes of transportation means other railroads, trolleys, light rail, heavy transit, and other vehicles operating on rails or electromagnetic guideways which are expressly identified in a railroad's emergency preparedness plan.

Administrator means the Administrator of the Federal Railroad Administration or the Administrator's delegate.

Control center means a central location on a railroad with responsibility for directing the safe movement of trains.

Crewmember means a person, other than a passenger, who is assigned to perform either:

(1) On-board functions connected with the movement of the train (i.e., an employee of a railroad, or of a contractor to a railroad, who is assigned to perform service subject to the Federal hours of service laws during a tour of duty) or

(2) On-board functions in a sleeping car or coach assigned to intercity service, other than food, beverage, or security service.

Division headquarters means the location designated by the railroad where a high-level operating manager (e.g., a superintendent, division manager, or equivalent), who has jurisdiction over a portion of the railroad, has an office.

Emergency or emergency situation means an unexpected event related to the operation of passenger train service

[1] A penalty may be assessed against an individual only for a willful violation. The Administrator reserves the right to assess a penalty of up to $22,000 for any violation where circumstances warrant. See 49 U.S.C. 21301, 21304, and 49 CFR part 209, appendix A. Further designations, not found in the CFR citation for certain provisions are FRA Office of Chief Counsel computer codes added as a suffix to the CFR citation and used to expedite imposition of civil penalties for violations. FRA reserves the right, should litigation become necessary, to substitute in its complaint the CFR citation in place of the combined designation cited in the penalty demand letter.

involving a significant threat to the safety or health of one or more persons requiring immediate action, including:

(1) A derailment;

(2) A fatality at a grade crossing;

(3) A passenger or employee fatality, or a serious illness or injury to one or more passengers or crewmembers requiring admission to a hospital;

(4) An evacuation of a passenger train; and

(5) A security situation (e.g., a bomb threat).

Emergency preparedness plan means one or more documents focusing on preparedness and response in dealing with a passenger train emergency.

Emergency responder means a member of a police or fire department, or other organization involved with public safety charged with providing or coordinating emergency services, who responds to a passenger train emergency.

Emergency window means that segment of a side facing glazing location which has been designed to permit rapid and easy removal in an emergency situation.

FRA means the Federal Railroad Administration.

Joint operations means rail operations conducted by more than one railroad on the same track, except as necessary for the purpose of interchange, regardless of whether such operations are the result of:

(1) Contractual arrangements between the railroads;

(2) Order of a governmental agency or a court of law; or

(3) Any other legally binding directive.

Passenger train service means the transportation of persons (other than employees, contractors, or persons riding equipment to observe or monitor railroad operations) by railroad in intercity passenger service or commuter or other short-haul passenger service in a metropolitan or suburban area.

Person includes all categories of entities covered under 1 U.S.C. 1, including, but not limited to, a railroad; any manager, supervisor, official, or other employee or agent of a railroad; any owner, manufacturer, lessor, or lessee of railroad equipment, track, or facilities; any passenger; any trespasser or nontrespasser; any independent contractor providing goods or services to a railroad; any volunteer providing goods or services to a railroad; and any employee of such owner, manufacturer, lessor, lessee, or independent contractor.

Private car means a rail passenger car used to transport non-revenue passengers on an occasional contractual basis, and includes business or office cars and circus trains.

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

Railroad means:

(1) Any form of non-highway ground transportation that runs on rails or electromagnetic guideways, including—

(i) Commuter or other short-haul rail passenger service in a metropolitan or suburban area and commuter railroad service that was operated by the Consolidated Rail Corporation on January 1, 1979, and

(ii) High speed ground transportation systems that connect metropolitan areas, without regard to whether those systems use new technologies not associated with traditional railroads, but does not include rapid transit operations in an urban area that are not connected to the general railroad system of transportation and

(2) A person that provides railroad transportation, whether directly or by contracting out operation of the railroad to another person.

Railroad officer means any supervisory employee of a railroad.

System headquarters means the location designated by the railroad as the general office for the railroad system.

§ 239.9 Responsibility for compliance.

Although the requirements of this part are stated in terms of the duty of a railroad, when any person, including a contractor to a railroad, performs any function required by this part, that person (whether or not a railroad) shall perform that function in accordance with this part.

§ 239.11 Penalties.

Any person who violates any requirement of this part or causes the violation of any such requirement is subject to a civil penalty of at least $500 and not more than $11,000 per violation, except that: Penalties may be assessed against individuals only for willful violations, and, where a grossly negligent violation or a pattern of repeated violations has created an imminent hazard of death or injury to persons, or has caused death or injury, a penalty not to exceed $22,000 per violation may be assessed. Each day a violation continues shall constitute a separate offense. Any person who knowingly and willfully falsifies a record or report required by this part may be subject to criminal penalties under 49 U.S.C. 21311 (formerly codified in 45 U.S.C. 438(e)). Appendix A contains a schedule of civil penalty amounts used in connection with this part.

§ 239.13 Waivers.

(a) Any person subject to a requirement of this part may petition the Administrator for a waiver of compliance with such requirement. The filing of such a petition does not affect that person's responsibility for compliance with that requirement while the petition is being considered.

(b) Each petition for waiver must be filed in the manner and contain the information required by part 211 of this chapter.

(c) If the Administrator finds that a waiver of compliance is in the public interest and is consistent with railroad safety, the Administrator may grant the waiver subject to any conditions the Administrator deems necessary.

§ 239.15 Information collection.

(a) The information collection requirements of this part have been reviewed by the Office of Management and Budget pursuant to the Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d) *et seq.*), and have been assigned OMB control number 2130–0545.

(b) The information collection requirements are found in the following sections: §§ 239.101, 239.103, 239.105, 239.107, 239.201, 239.203, 239.301, and 239.303.

Subpart B—Specific Requirements

§ 239.101 Emergency preparedness plan.

(a) Each railroad to which this part applies shall adopt and comply with a written emergency preparedness plan approved by FRA under the procedures of § 239.201. The plan shall include the following elements and procedures for implementing each plan element.

(1) *Communication.* (i) *Initial and on-board notification.* An on-board crewmember shall quickly and accurately assess the passenger train emergency situation and then notify the control center as soon as practicable by the quickest available means. As appropriate, an on-board crewmember shall inform the passengers about the nature of the emergency and indicate what corrective countermeasures are in progress.

(ii) *Notifications by control center.* The control center shall promptly notify outside emergency responders, adjacent rail modes of transportation, and appropriate railroad officials that a passenger train emergency has occurred.

Each railroad shall designate an employee responsible for maintaining current emergency telephone numbers for use in making such notifications.

(2) *Employee training and qualification.* (i) *On-board personnel.* The railroad's emergency preparedness plan shall address individual employee responsibilities and provide for initial training, as well as periodic training at least once every two calendar years thereafter, on the applicable plan provisions. As a minimum, the initial and periodic training shall include:

(A) Rail equipment familiarization;

(B) Situational awareness;

(C) Passenger evacuation;

(D) Coordination of functions; and

(E) ''Hands-on'' instruction concerning the location, function, and operation of on-board emergency equipment.

(ii) *Control center personnel.* The railroad's emergency preparedness plan shall require initial training of responsible control center personnel, as well as periodic training at least once every two calendar years thereafter, on appropriate courses of action for each potential emergency situation. As a minimum, the initial and periodic training shall include:

(A) Dispatch territory familiarization; and

(B) Protocols governing internal communications between appropriate control center personnel whenever an imminent potential emergency situation exists.

(iii) *Initial training schedule for current employees.* The railroad's emergency preparedness plan shall provide for the completion of initial training of all on-board and control center employees who are employed by the railroad on the date that the plan is conditionally approved under § 239.201(b)(1), in accordance with the following schedule:

(A) For each railroad that provides commuter or other short-haul passenger train service and whose operations include less than 150 route miles and less than 200 million passenger miles annually, not more than one year after January 29, 1999, or not more than 90 days after commencing passenger operations, whichever is later.

(B) For each railroad that provides commuter or other short-haul passenger train service and whose operations include at least 150 route miles or at least 200 million passenger miles annually, not more than two years after January 29, 1999, or not more than 180 days after commencing passenger operations, whichever is later.

(C) For each railroad that provides intercity passenger train service, regardless of the number of route miles or passenger miles, not more than two years after January 29, 1999, or not more than 180 days after commencing passenger operations, whichever is later.

(D) For each freight railroad that hosts passenger train service, regardless of the number of route miles or passenger miles of that service, not more than one year after January 29, 1999, or not more than 90 days after the hosting begins, whichever is later.

(iv) *Initial training schedule for new employees.* The railroad's emergency preparedness plan shall provide for the completion of initial training of all on-board and control center employees who are hired by the railroad after the date on which the plan is conditionally approved under § 239.201(b)(1). Each employee shall receive initial training within 90 days after the employee's initial date of service.

(v) *Testing of on-board and control center personnel.* A railroad shall have procedures for testing a person being evaluated for qualification under the emergency preparedness plan. The types of testing selected by the railroad shall be:

(A) Designed to accurately measure an individual employee's knowledge of his or her responsibilities under the plan;

(B) Objective in nature;

(C) Administered in written form; and

(D) Conducted without reference by the person being tested to open reference books or other materials, except to the degree the person is being tested on his or her ability to use such reference books or materials.

(vi) *On-board staffing.* (A) Except as provided in paragraph (a)(2)(vi)(B), all crewmembers on board a passenger train shall be qualified to perform the functions for which they are responsible under the provisions of the applicable emergency preparedness plan.

(B) A freight train crew relieving an expired passenger train crew en route is not required to be qualified under the emergency preparedness plan, provided that at least one member of the expired passenger train crew remains on board and is available to perform excess service under the Federal hours of service laws in the event of an emergency.

(3) *Joint operations.* (i) Each railroad hosting passenger train service shall address its specific responsibilities consistent with this part.

(ii) In order to achieve an optimum level of emergency preparedness, each railroad hosting passenger train service shall communicate with each railroad that provides or operates such service and coordinate applicable portions of the emergency preparedness plan. All of the railroads involved in hosting, providing, and operating a passenger train service operation shall jointly adopt one emergency preparedness plan that addresses each entity's specific responsibilities consistent with this part. Nothing in this paragraph shall restrict the ability of the railroads to provide for an appropriate assignment of responsibility for compliance with this part among those railroads through a joint operating agreement or other binding contract. However, the assignor shall not be relieved of responsibility for compliance with this part.

(4) *Special circumstances.* (i) *Tunnels.* When applicable, the railroad's emergency preparedness plan shall reflect readiness procedures designed to ensure passenger safety in an emergency situation occurring in a tunnel of 1,000 feet or more in length. The railroad's emergency preparedness plan shall address, as a minimum, availability of emergency lighting, access to emergency evacuation exits, benchwall readiness, ladders for detraining, effective radio or other communication between on-board crewmembers and the control center, and options for assistance from other trains.

(ii) *Other operating considerations.* When applicable, the railroad's emergency preparedness plan shall address passenger train emergency procedures involving operations on elevated structures, including drawbridges, and in electrified territory.

(iii) *Parallel operations.* When applicable, the railroad's emergency preparedness plan shall require reasonable and prudent action to coordinate emergency efforts where adjacent rail modes of transportation run parallel to either the passenger railroad or the railroad hosting passenger operations.

(5) *Liaison with emergency responders.* Each railroad to which this part applies shall establish and maintain a working relationship with the on-line emergency responders by, as a minimum:

(i) Developing and making available a training program for all on-line emergency responders who could reasonably be expected to respond during an emergency situation. The training program shall include an emphasis on access to railroad equipment, location of railroad facilities, and communications interface, and provide information to emergency responders who may not have the opportunity to participate in an emergency simulation. Each affected railroad shall either offer the training directly or provide the program information and materials to state

training institutes, firefighter organizations, or police academies;

(ii) Inviting emergency responders to participate in emergency simulations; and

(iii) Distributing applicable portions of its current emergency preparedness plan at least once every three years, or whenever the railroad materially changes its plan in a manner that could reasonably be expected to affect the railroad's interface with the on-line emergency responders, whichever occurs earlier, including documentation concerning the railroad's equipment and the physical characteristics of its line, necessary maps, and the position titles and telephone numbers of relevant railroad officers to contact.

(6) *On-board emergency equipment.* (i) *General.* Each railroad's emergency preparedness plan shall state the types of emergency equipment to be kept on board and indicate their location(s) on each passenger car that is in service. Effective May 4, 1999, or not more than 120 days after commencing passenger operations, whichever is later, this equipment shall include, at a minimum:

(A) One fire extinguisher per passenger car;

(B) One pry bar per passenger car; and

(C) One flashlight per on-board crewmember.

(ii) Effective May 4, 1999, or not more than 120 days after commencing passenger operations, whichever is later, each railroad that provides intercity passenger train service shall also equip each passenger train that is in service with at least one first-aid kit accessible to crewmembers that contains, at a minimum:

(A) Two small gauze pads (at least 4x4 inches);

(B) Two large gauze pads (at least 8x10 inches);

(C) Two adhesive bandages;

(D) Two triangular bandages;

(E) One package of gauge roller bandage that is at least two inches wide;

(F) Wound cleaning agent, such as sealed moistened towelettes;

(G) One pair of scissors;

(H) One set of tweezers;

(I) One roll of adhesive tape;

(J) Two pairs of latex gloves; and

(K) One resuscitation mask.

(iii) *On-board emergency lighting.* Consistent with the requirements of part 238 of this chapter, auxiliary portable lighting (e.g., a handheld flashlight) must be accessible and provide, at a minimum:

(A) Brilliant illumination during the first 15 minutes after the onset of an emergency situation; and

(B) Continuous or intermittent illumination during the next 60 minutes after the onset of an emergency situation.

(iv) *Maintenance.* Each railroad's emergency preparedness plan shall provide for scheduled maintenance and replacement of first-aid kits, on-board emergency equipment, and on-board emergency lighting.

(7) *Passenger safety information.* (i) *General.* Each railroad's emergency preparedness plan shall provide for passenger awareness of emergency procedures, to enable passengers to respond properly during an emergency.

(ii) *Passenger awareness program activities.* Each railroad shall conspicuously and legibly post emergency instructions inside all passenger cars (e.g., on car bulkhead signs, seatback decals, or seat cards) and shall utilize one or more additional methods to provide safety awareness information including, but not limited to, one of the following:

(A) On-board announcements;

(B) Laminated wallet cards;

(C) Ticket envelopes;

(D) Timetables;

(E) Station signs or video monitors;

(F) Public service announcements; or

(G) Seat drops.

(b) [Reserved]

§ 239.103 Passenger train emergency simulations.

(a) *General.* Each railroad operating passenger train service shall conduct full-scale emergency simulations, in order to determine its capability to execute the emergency preparedness plan under the variety of scenarios that could reasonably be expected to occur on its operation, and ensure coordination with all emergency responders who voluntarily agree to participate in the emergency simulations.

(b) *Frequency of the emergency simulations.* Except as provided in paragraph (c) of this section:

(1) Each railroad that provides commuter or other short-haul passenger train service and whose operations include less than 150 route miles and less than 200 million passenger miles annually, shall conduct a minimum of one full-scale emergency simulation during every two calendar years.

(2) Each railroad that provides commuter or other short-haul passenger train service and whose operations include at least 150 route miles or at least 200 million passenger miles annually, shall conduct a minimum of one full-scale emergency simulation during each calendar year.

(3) Each railroad that provides intercity passenger train service, shall conduct a minimum of one full-scale emergency simulation during each calendar year, regardless of the number of route miles or passenger miles.

(c) *Actual emergency situations.* Neither a tabletop exercise nor the activation of its emergency preparedness plan during an actual emergency situation may be credited toward the minimum number of full-scale emergency simulations required under paragraph (b) of this section. However, a railroad that has activated its emergency preparedness plan in response to a major emergency may elect to postpone a scheduled full-scale simulation for up to 180 calendar days beyond the applicable calendar year completion date in order to evaluate the effectiveness of its plan during that major emergency and, as appropriate, modify the rescheduled simulation.

(d) *Definition.* As used in this section, *major emergency* means an unexpected event related to the operation of passenger train service that results in serious injury or death to one or more persons and property damage greater than the current reporting threshold of part 225 of this chapter to railroad on-track equipment, signals, tracks, track structures, or roadbeds, including labor costs and the costs for acquiring new equipment and material.

§ 239.105 Debriefing and critique.

(a) *General.* Except as provided in paragraph (b) of this section, each railroad operating passenger train service shall conduct a debriefing and critique session after each passenger train emergency situation or full-scale simulation to determine the effectiveness of its emergency preparedness plan, and shall improve or amend its plan, or both, as appropriate, in accordance with the information developed. The debriefing and critique session shall be conducted within 60 days of the date of the passenger train emergency situation or full-scale simulation.

(b) *Exceptions.* (1) No debriefing and critique session shall be required in the case of an emergency situation involving only a collision between passenger railroad rolling stock and: a pedestrian; a trespasser; or a motor vehicle or other highway conveyance at a highway-rail grade crossing, provided that the collision does not result in: a passenger or employee fatality, or an injury to one or more crewmembers or passengers requiring admission to a hospital; or the evacuation of a passenger train. (2) For purposes of this section, *highway-rail grade crossing* means a location where a public highway, road, street, or private roadway, including associated

sidewalks and pathways, crosses one or more railroad tracks at grade, and *trespasser* means a person who is on that part of railroad property used in railroad operation and whose presence is prohibited, forbidden, or unlawful.

(c) *Purpose of debriefing and critique.* The debriefing and critique session shall be designed to determine, at a minimum:

(1) Whether the on-board communications equipment functioned properly;

(2) How much time elapsed between the occurrence of the emergency situation or full-scale simulation and notification to the emergency responders involved;

(3) Whether the control center promptly initiated the required notifications;

(4) How quickly and effectively the emergency responders responded after notification; and

(5) How efficiently the passengers exited from the car through the emergency exits.

(d) *Records.* (1) Each railroad shall maintain records of its debriefing and critique sessions at its system headquarters and applicable division headquarters for two calendar years after the end of the calendar year to which they relate, including the following information:

(i) Date and location of the passenger train emergency situation or full-scale simulation;

(ii) Date and location of the debriefing and critique session; and

(iii) Names of all participants in the debriefing and critique session.

(2) These records shall be made available to representatives of FRA and States participating under part 212 of this chapter for inspection and copying during normal business hours.

§ 239.107 Emergency exits.

For additional requirements related to emergency window exits, see part 223 of this chapter.

(a) *Marking.* Each railroad operating passenger train service shall determine for each passenger car that is in service, except for self-propelled cars designed to carry baggage, mail, or express:

(1) That all door exits intended for emergency egress are either lighted or conspicuously and legibly marked with luminescent material on the inside of the car and that clear and understandable instructions are posted at or near such exits.

(2) That all door exits intended for emergency access by emergency responders for extrication of passengers are marked with retroreflective material and that clear and understandable instructions are posted at each such door.

(b) *Inspection, maintenance, and repair.* Consistent with the requirements of part 223 of this chapter, each railroad operating passenger train service shall:

(1) Provide for scheduled inspection, maintenance, and repair of emergency window and door exits;

(2) Test a representative sample of emergency window exits on its cars at least once every 180 days to verify that they are operating properly; and

(3) Repair each inoperative emergency window and door exit on a car before returning the car to service.

(c) *Records.* Each railroad operating passenger service shall maintain records of its inspection, maintenance, and repair of emergency window and door exits at its system headquarters and applicable division headquarters for two calendar years after the end of the calendar year to which they relate. These records shall be made available to representatives of FRA and States participating under part 212 of this chapter for inspection and copying during normal business hours.

(d) *Electronic recordkeeping.* Each railroad to which this part applies is authorized to retain by electronic recordkeeping the information prescribed in paragraph (b) of this section, provided that all of the following conditions are met:

(1) The railroad adequately limits and controls accessibility to such information retained in its database system and identifies those individuals who have such access;

(2) The railroad has a terminal at the system headquarters and at each division headquarters;

(3) Each such terminal has a desk-top computer (*i.e.*, monitor, central processing unit, and keyboard) and either a facsimile machine or a printer connected to the computer to retrieve and produce information in a usable format for immediate review by representatives of FRA and States participating under part 212 of this chapter;

(4) The railroad has a designated representative who is authorized to authenticate retrieved information from the electronic system as true and accurate copies of the electronically kept records; and

(5) The railroad provides representatives of FRA and States participating under part 212 of this chapter with immediate access to these records for inspection and copying during normal business hours and provides printouts of such records upon request.

Subpart C—Review, Approval, and Retention of Emergency Preparedness Plans

§ 239.201 Emergency preparedness plan; filing and approval.

(a) *Filing.* Each passenger railroad to which this part applies and all railroads hosting its passenger train service (if applicable) shall jointly adopt a single emergency preparedness plan for that service and the passenger railroad shall file one copy of that plan with the Associate Administrator for Safety, Federal Railroad Administration, Mail Stop 25, 400 Seventh Street, S.W., Washington, D.C. 20590, not more than 180 days after May 4, 1998, or not less than 45 days prior to commencing passenger operations, whichever is later. The emergency preparedness plan shall include the name, title, address, and telephone number of the primary person on each affected railroad to be contacted with regard to review of the plan, and shall include a summary of each railroad's analysis supporting each plan element and describing how every condition on the railroad's property that is likely to affect emergency response is addressed in the plan. Each subsequent amendment to a railroad's emergency preparedness plan shall be filed with FRA by the passenger railroad not less than 60 days prior to the proposed effective date.

(b) *Approval.* (1) *Preliminary review.* (i) Within 90 days of receipt of each proposed emergency preparedness plan, and within 45 days of receipt of each plan for passenger operations to be commenced after the initial deadline for plan submissions, FRA will conduct a preliminary review of the proposed plan to determine if the elements prescribed in § 239.101 are sufficiently addressed and discussed in the railroad's plan submission. FRA will then notify the primary contact person of each affected railroad in writing of the results of the review, whether the proposed plan has been conditionally approved by FRA, and if not conditionally approved, the specific points in which the plan is deficient.

(ii) If a proposed emergency preparedness plan is not conditionally approved by FRA, the affected railroad or railroads shall amend the proposed plan to correct all deficiencies identified by FRA (and provide FRA with a corrected copy) not later than 30 days following receipt of FRA's written notice that the proposed plan was not conditionally approved.

(2) *Final review.* (i) Within 18 months of receipt of each proposed plan, and within 180 days of receipt of each proposed plan for passenger operations

to be commenced after the initial deadline for plan submissions, FRA will conduct a comprehensive review of the conditionally approved plan to evaluate implementation of the elements included. This review will include ongoing dialogues with rail management and labor representatives, and field analysis and verification. FRA will then notify the primary contact person of each affected railroad in writing of the results of the review, whether the conditionally approved plan has been finally approved by FRA, and if not approved, the specific points in which the plan is deficient.

(ii) If an emergency preparedness plan of a railroad or railroads is not finally approved by FRA, the affected railroad or railroads shall amend the plan to correct all deficiencies (and provide FRA with a corrected copy) not later than 30 days following receipt of FRA's written notice that the plan was not finally approved.

(3) *Review of amendments*. (i) FRA will review each proposed plan amendment within 45 days of receipt. FRA will then notify the primary contact person of each affected railroad of the results of the review, whether the proposed amendment has been approved by FRA, and if not approved, the specific points in which the proposed amendment is deficient.

(ii) If the amendment is not approved, the railroad shall correct any deficiencies identified by FRA and file the corrected amendment prior to implementing the amendment.

(4) *Reopened review*. Following initial approval of a plan, or amendment, FRA may reopen consideration of the plan, or amendment, for cause stated.

§ 239.203 Retention of emergency preparedness plan.

Each passenger railroad to which this part applies, and all railroads hosting its passenger train service (if applicable), shall each retain one copy of the emergency preparedness plan required by § 239.201 and one copy of each subsequent amendment to that plan at the system and division headquarters of each, and shall make such records available to representatives of FRA and States participating under part 212 of this chapter for inspection and copying during normal business hours.

Subpart D—Operational (Efficiency) Tests; Inspection of Records and Recordkeeping

§ 239.301 Operational (efficiency) tests.

(a) Each railroad to which this part applies shall periodically conduct operational (efficiency) tests of its on-board and control center employees to determine the extent of compliance with its emergency preparedness plan.

(b) Each railroad to which this part applies shall maintain a written record of the date, time, place, and result of each operational (efficiency) test that was performed in accordance with paragraph (a) of this section. Each record shall also specify the name of the railroad officer who administered the test, the name of each employee tested, and sufficient information to identify the relevant facts relied on for evaluation purposes.

(c) Each record required by paragraph (a) of this section shall be retained at the system headquarters of the railroad and at the division headquarters for the division where the test was conducted for one calendar year after the end of the calendar year to which the test relates. Each such record shall be made available to representatives of FRA and States participating under part 212 of this chapter for inspection and copying during normal business hours.

§ 239.303 Electronic recordkeeping.

Each railroad to which this part applies is authorized to retain by electronic recordkeeping the information prescribed in § 239.301, provided that all of the following conditions are met:

(a) The railroad adequately limits and controls accessibility to such information retained in its database system and identifies those individuals who have such access;

(b) The railroad has a terminal at the system headquarters and at each division headquarters;

(c) Each such terminal has a desk-top computer (*i.e.*, monitor, central processing unit, and keyboard) and either a facsimile machine or a printer connected to the computer to retrieve and produce information in a usable format for immediate review by representatives of FRA and States participating under part 212 of this chapter;

(d) The railroad has a designated representative who is authorized to authenticate retrieved information from the electronic system as true and accurate copies of the electronically kept records; and

(e) The railroad provides representatives of FRA and States participating under part 212 of this chapter with immediate access to these records for inspection and copying during normal business hours and provides printouts of such records upon request.

Appendix A to Part 239—Schedule of Civil Penalties [1]

Section	Violation	Willful violation
Subpart B—Specific Requirements:		
239.101(a) Failure of a railroad to adopt a written emergency preparedness plan	$7,500	$11,000
(a)(1) Failure of the plan to provide for:		
(i) Initial or on-board notifications by an on-board crewmember	2,500	5,000
(ii) Notification of outside emergency responders by control center	2,500	5,000
(a)(2) Failure of the plan to provide for:		
(i) Initial or periodic training of on-board personnel	2,500	5,000
(ii) Initial or periodic training of control center personnel	2,500	5,000
(iii) Completion of initial training of all on-board and control center personnel by the specified date	2,500	5,000
(iv) Completion of initial training of all newly hired on-board and control center personnel by the specified date	2,500	5,000
(v) Adequate procedures to evaluate and test on-board and control center personnel for qualification under the emergency preparedness plan	2,500	5,000
(vi) Adequate on-board staffing	2,500	5,000

[1] A penalty may be assessed against an individual only for a willful violation. The Administrator reserves the right to assess a penalty of up to $22,000 for any violation where circumstances warrant. See 49 U.S.C. 21301, 21304, and 49 CFR part 209, appendix A. Further designations, not found in the CFR citation for certain provisions, are FRA Office of Chief Counsel computer codes added as a suffix to the CFR citation and used to expedite imposition of civil penalties for violations. FRA reserves the right, should litigation become necessary, to substitute in its complaint the CFR citation in place of the combined designation cited in the penalty demand letter.

Section	Violation	Willful violation
(a)(3) Failure of a host railroad involved in joint operations to coordinate applicable portions of the emergency preparedness plan with the railroad or railroads providing or operating a passenger train service operation	3,000	6,000
(a)(4) Failure of the plan to address:		
(i) Readiness procedures for emergencies in tunnels	2,500	5,000
(ii) Readiness procedures for emergencies on an elevated structure or in electrified territory	2,500	5,000
(iii) Coordination efforts involving adjacent rail modes of transportation	2,500	5,000
(a)(5) Failure of the plan to address relationships with on-line emergency responders by providing for:		
(i) The development and availability of training programs	3,000	6,000
(ii) Invitations to emergency responders to participate in emergency simulations	3,000	6,000
(iii) Distribution of applicable portions of the current emergency preparedness plan	3,000	6,000
(a)(6) Failure of the plan to provide for, or the railroad to include on board each train and maintain and replace:		
(i) Emergency equipment	2,500	5,000
(ii) First-aid kits	2,500	5,000
(iii) Emergency lighting	2,500	5,000
(a)(7) Failure of the plan to provide for emergency instructions inside each passenger car or to include additional safety awareness information	3,500	7,000
239.103 Failure to conduct a required full-scale simulation in accordance with the frequency schedule	5,000	7,500
239.105 Debriefing and critique		
(a) Failure to conduct a debriefing and critique session after an emergency or full-scale simulation	4,000	7,500
(d)(1) Failure to maintain a record	2,500	5,000
(i) Failure to include date or location of the emergency or simulation	1,000	2,000
(ii) Failure to include date or location of the debriefing and critique session	1,000	2,000
(iii) Failure to include names of participants in the debriefing and critique session	1,000	2,000
(d)(2) Failure to make record available	1,000	2,000
239.107 Emergency exits		
(a)(1), (a)(2):		
(i) Door not marked or instructions not posted	2,500	5,000
(ii) Door improperly marked or instructions 1,000-2,000-improperly posted	2,500	5,000
(b)(1) Failure to provide for scheduled inspection, maintenance, and repair of emergency windows and doors	5,000	7,500
(b)(2):		
(i) Failure to test a representative sample of emergency windows	3,000	6,000
(ii) Emergency windows tested too infrequently	1,500	3,000
(b)(3) Failure to repair an inoperative emergency window or door exit	3,500	7,000
(c):		
(i) Failure to maintain a record	2,500	5,000
(ii) Failure to make record available	1,000	2,000
(d)(1) Insufficient limits or controls on accessibility to records	2,500	5,000
(d)(2) Missing terminal	1,000	2,000
(d)(3) Inability of railroad to produce information in a usable format for immediate review	1,000	2,000
(d)(4) Failure by railroad to designate an authorized representative	1,000	2,000
(d)(5) Failure to make record available	1,000	2,000
Subpart C—Review, Approval, and Retention of Emergency Preparedness Plans:		
239.201 Filing and approval		
(a):		
(i) Failure of a railroad to file a written emergency preparedness plan	5,000	7,500
(ii) Failure to designate a primary person to contact for plan review	1,000	2,000
(iii) Failure of a railroad to file an amendment to its plan	2,500	5,000
(b)(1), (b)(2):		
(i) Failure of a railroad to correct a plan deficiency	2,500	5,000
(ii) Failure to provide FRA with a corrected copy of the plan	1,000	2,000
(b)(3):		
(i) Failure of a railroad to correct an amendment deficiency	2,500	5,000
(ii) Failure to file a corrected plan amendment with FRA	1,000	1,000
239.203 Retention of emergency preparedness plan		
(1) Failure to retain a copy of the plan or an amendment to the plan	2,500	5,000
(2) Failure to make record available	1,000	2,000
Subpart D—Operational (efficiency) tests; Inspection of Records and Recordkeeping:		
239.301 Operational (efficiency) tests		
(a) Testing Program	5,000	7,500
(b)(1) Failure to maintain a record	2,500	5,000
(b)(2) Record improperly completed	1,000	1,000
(c)(1) Failure to retain a copy of the record	2,500	5,000
(c)(2) Failure to make record available	1,000	2,000
239.303 Electronic recordkeeping		
(a) Insufficient limits or controls on accessibility to records	2,500	5,000
(b) Missing terminal	1,000	2,000
(c) Inability of railroad to produce information in a usable format for immediate review	1,000	2,000
(d) Failure by railroad to designate an authorized representative	1,000	2,000
(e) Failure to make record available	1,000	2,000

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Jolene M. Molitoris,

Federal Railroad Administrator.

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