

**Testimony of Allan Rutter,
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Federal Railroad Administration,
U.S. Department of Transportation
before the
Subcommittee on Railroads,
Committee on Transportation and Infrastructure,
United States House of Representatives**

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Chairman Quinn and members of the Subcommittee, I am very pleased to be here today to testify about the efforts of the Federal Railroad Administration (FRA) to protect and promote the security of our Nation's passenger and freight railroad network. On behalf of the Secretary of Transportation, FRA's mission is to oversee the safety of the U.S. railroad industry. Security has always been, and will continue to be, an integral part of our safety mission.

Like most Americans, I can vividly recall where I was and what I was doing on that tragic morning of September 11, 2001. I was in Chicago in the headquarters of Metra, the commuter rail authority that serves tens of thousands of Chicago area commuters every day. Standing in front of a television monitor, I watched in horror as four commercial jets were turned into weapons of destruction, the World Trade Center Towers collapsed, and the Pentagon burned. I also had the unique opportunity to witness firsthand the response of our rail industry to the terrorist attacks. Soon after the attacks began, Metra shifted its operations from an inbound rush-hour schedule to an outbound rush-hour schedule that enabled thousands of commuters to evacuate the city's many skyscrapers and return home to their loved ones.

It was no small feat for a major commuter railroad to reverse rush-hour operations on the spur of the moment. The reason that it happened as smoothly as it did is that the railroad was

prepared and had an emergency response plan in place. It is worth noting that FRA issued a regulation three years earlier that required the passenger railroads to have emergency response plans to deal with unforeseen safety and security emergencies.

The March 11th bombings of four commuter trains in Madrid, the subsequent discoveries of bombs under railroad tracks in both Spain and France, and the intelligence reports that terrorists might try to bomb rail lines and buses in major U.S. cities this summer all underscore the importance of planning, preparation, and coordination between government and the rail industry in dealing with terrorism. Providing for the security of our vast and varied rail transportation network requires detailed knowledge of security and intelligence matters, as well as a broad understanding of railroad infrastructure, motive power and equipment, personnel, information technology, and operations. To successfully mitigate the terrorist threat to our Nation's railroads, many Federal agencies must work together, sharing knowledge, expertise, ideas, and resources. FRA and our colleagues within the U.S. Department of Transportation (DOT) work with the Federal Government's lead department for transportation security, the Department of Homeland Security (DHS) and its various components, including the Transportation Security Administration (TSA), as well as with other security and intelligence agencies and other Federal agencies to enhance and assure railroad security. These agencies play a primary role in addressing transportation security, and FRA offers and provides extensive rail expertise to aid analyses of the impact that potential security threats may pose for the rail industry and to assess the effects of proposed security measures on railroad operations. Finally,

we help to balance needs of security and safety, making certain that the two goals remain complementary, not contradictory.

STRATEGIES FOR SAFETY AND SECURITY

Railroad system safety and security are inextricably linked. This is logical insofar as basic transportation risk-reduction strategies that protect and promote safety are also effective in protecting and promoting security. In essence, FRA's safety strategies can be divided into three categories: (I) incident prevention through detection of hazards and deterrence of conduct that contributes to hazards; (II) casualty mitigation through design; and (III) casualty mitigation through emergency preparedness.

I. Incident Prevention through Threat Detection and Deterrence: Threat-Communication Networks. For FRA, incident prevention is predicated on detecting unsafe conditions and deterring safety violations before they can cause railroad accidents. While Federal regulations mandating the regular periodic inspection of railroad track, signals, and rolling stock have proven effective in reducing train accidents, even before 9/11 we recognized that inspection requirements and enforcement alone were not sufficient to detect the activities of terrorists who can strike without warning. Terrorist activities are best prevented by the sharing and dissemination of information among and between the intelligence and transportation communities.

The Railway Alert Network: Prior to 9/11, and under the direction of the DOT Office of Intelligence and Security, FRA worked with the Association of American Railroads (AAR) to

establish a railroad security communications network, known as the Railway Alert Network (RAN), to alert the railroad industry to potential security threats and to notify DOT immediately about security-related developments that occur on our Nation's railroads. Using this communications network, FRA received information from the DOT Office of Intelligence and Security regarding potential security threats and disseminated that information to the AAR, railroad police agencies, and other relevant railroad security offices. The railroads, in turn, notified FRA about security measures taken to deal with those threats. Railroads also utilized the network to inform FRA about security-related incidents that could impact railroad operations or infrastructure. A network of designated FRA personnel has been available 24 hours a day, seven days a week to receive this information and disseminate it to senior DOT/FRA leadership, railroad police, and national security agencies.

Other Threat-Communication Networks: The RAN has been strengthened significantly since 9/11 and has benefitted from increased investment by the AAR and DOT. The RAN is now linked to the AAR's Operations Center and to the Surface Transportation Information Sharing and Analysis Center (ST-ISAC), operated by DHS in partnership with the AAR and the American Public Transportation Association (APTA), which provides a robust capability to collect, analyze, and disseminate information about threats to critical physical and cyber infrastructure. In addition, DOT has established a Crisis Management Center, which is also staffed 24/7 and is linked to the RAN, to better disseminate security threat information throughout government and the transportation industry.

II. Casualty Mitigation through Design: Passenger Car and Tank Car Safety

Standards. The ability to withstand an incident is an important component of any strategy designed to enhance safety and security. Historically, FRA has pursued this strategy by promulgating crashworthiness standards for both passenger and freight railroad equipment. For example, in 1998 FRA issued the first-ever passenger equipment safety standards establishing comprehensive design, structural strength, and fire safety standards for railroad passenger cars. These standards are intended to protect the passengers in these vehicles from some of the tremendous forces that can be generated in train accidents. The regulations also establish requirements for emergency egress and emergency lighting to facilitate rapid evacuation in the event of an accident or emergency. There are additional elaborate and stringent Federal safety standards for railroad tank cars that carry hazardous materials. Tank car standards are promulgated by DOT's Research and Special Programs Administration (RSPA). FRA works closely with RSPA and with tank car manufacturers, shippers, and railroads, to provide expertise and input into the development of the tank car standards, and we are responsible for the administration and enforcement of these regulations.

Safety statistics bear out the effectiveness of these crashworthiness standards. In the year 2003, for example, nearly 500 million passengers traveled on our Nation's railroads, yet, despite the 161 passenger train accidents that occurred that year, none resulted in a single rail passenger fatality. Also, 2003 saw the lowest number of hazardous materials releases on record: with nearly two million tank car shipments of hazardous materials that year, only 24 train accidents resulted in a release of product, and in many cases the release was minimal, consisting

of only a few gallons. While these crashworthiness standards were intended to protect railroad passengers and to prevent the release of hazardous materials from the tremendous, destructive forces of a train accident, they also equally applicable to terrorist-induced incidents. We are constantly reassessing the adequacy of these measures and, under the leadership of our partners at DHS, are exploring additional options to enhance the security of rail vehicles and infrastructure.

III. Casualty Mitigation through Emergency Preparedness: Emergency Response

Regulations. FRA does not rely on prevention and crashworthy design alone as strategies for dealing with the terrorist threat to the rail network. Well before 9/11 we understood that it was imperative for railroads to develop and implement effective emergency response plans to respond to unanticipated security emergencies. On May 4, 1998, FRA published Passenger Train Emergency Preparedness regulations that require passenger and commuter railroads to have emergency response plans in place to deal with potential emergencies, including security-related emergencies. The regulations, which remain in effect today, also require these railroads to train their employees about their roles and responsibilities in carrying out emergency response procedures under the plan; to inform, and provide training materials to, the local emergency responders (police and firefighters) who respond to railroad emergencies on behalf of local communities; and to conduct periodic large-scale emergency response drills in conjunction with these emergency responders. We believe that the emergency response plans that commuter and passenger railroads had in place pursuant to this regulation played a significant role in helping these entities respond quickly and effectively to the events of 9/11.

Earlier, I described the actions of Chicago's Metra on 9/11, but an even more striking example of the use of effective emergency response procedures occurred at the Port Authority Trans-Hudson (PATH) commuter rail station located in the basement of World Trade Center. Within minutes after the planes struck the towers, alert PATH officials sprang into action, implementing emergency procedures that sent arriving trains through the station without stopping, removing the passengers from harm's way. Further distant approaching trains were

rerouted away from the station entirely, and passengers who were already in the station itself were quickly evacuated. Because of the quick action and flawless execution of a well-thought-out emergency response plan, 5,000 railroad passengers were evacuated from the basement of the World Trade Center in a matter of minutes, possibly preventing many more tragic deaths. The railroad had staged an emergency response drill with local emergency responders just weeks before 9/11.

PASSENGER RAIL SECURITY INITIATIVES

We recognize that while FRA's pre-9/11 security measures for incident prevention and casualty mitigation appeared adequate at the time, our understanding of the terrorist threat has changed dramatically since 9/11, and we, along with all other government agencies, are reexamining our basic assumptions about railroad security and working to enhance rail security measures. As I noted earlier, FRA works with many other Federal agencies to improve rail security. One of our closest partners is the Federal Transit Administration (FTA). During the past nearly three years, FTA has aggressively helped to assess the security risks on commuter railroads and other major transit agencies. FTA funded security risk assessments for the 50 largest transit agencies in the Nation, which included the ten largest commuter railroads under FRA's safety jurisdiction. FRA participated in all of the security risk assessments on those ten commuter railroads and contributed the funding for three of those risk assessments.

FTA also developed a tool kit of best practices that could be incorporated into commuter railroad security plans to prevent and respond to terrorist incidents. FRA also participated in this FTA initiative, contributing our knowledge of commuter rail operations, infrastructure, and

organization to ensure that the security enhancement measures contained in the plans were sound and feasible in a railroad environment.

Further, FTA provided funding for commuter railroads railroads to conduct security simulations or drills, based on terrorist scenarios. For example, the New York City Metropolitan Transportation Authority received an FTA grant to conduct such drills- for the Long Island Rail Road, the Metro-North Commuter Railroad, and Long Island-Bus. FRA staff worked closely with many of the railroads that received this funding, to plan and assist in the drills.

Finally, FTA sponsored a series of 17 workshops across the country (called “Connecting Communities”) to bring together transit agencies, emergency responders, and State and local government leaders so that they might better coordinate their security plans and emergency response efforts. FRA devoted staff with both railroad knowledge and facilitation skills to help with these workshops.

FRA has also utilized our enforcement resources to periodically monitor the implementation of the security plans on the commuter railroads. Shortly after the recent terrorist bombings of trains in Madrid, in cooperation with DHS, I ordered our regional offices to conduct multi-day team inspections of each of the 18 commuter railroads and of Amtrak to determine what additional security measures had been put into place to prevent a similar occurrence in the United States. Nearly 200 of FRA’s 415 inspectors participated in this effort.

What they found was that the most heavily traveled commuter systems, terminals, and stations had the most extensive security measures and had done the most to enhance security measures since the Madrid bombings. Among the measures that have been put into place to deal

with the elevated threat are the following: increased and better focused police surveillance; enhanced coordination between railroad police and other law enforcement agencies; better and more frequent security exercises; more frequent use of bomb-sniffing dogs to detect explosives; more frequent security sweeps of trains and terminals; measures to keep car bombs away from station buildings; and efforts to prevent unauthorized access to train platforms, rail yards, and passenger car maintenance and cleaning facilities. The commuter railroads are also providing more frequent notices and job briefings to their employees, instructing them about how to be more vigilant in identifying suspicious persons and packages. Many commuter railroads are also making frequent public service announcements or handing out printed material to warn passengers to be on the lookout for suspicious packages and people.

To be sure, our inspectors also found many locations where not all of the railroad security measures prescribed in the railroads' plans had been put into practice. Some of the most frequent concerns involved failure to notify railroad personnel about their roles and responsibilities in executing the railroad security plans. There were locations where passengers were not informed about how to be more vigilant. Another concern was the failure to control unauthorized access to rail cars and railroad car repair facilities. When our inspectors found security gaps, we brought those items to the attention of the senior railroad managers for resolution.

Our experience on the commuter railroads was mirrored on Amtrak, where we found that the most extensive security measures had been implemented in the busiest stations and terminals and on the most heavily used rail lines. We also brought to the attention of Amtrak management those locations where the company's security measures had not been fully implemented.

In cooperation with DHS, we are also working with Amtrak to help it enhance its security plan and improve its strategic security planning capacity. Over the past few years we have reviewed and commented on many of the individual security initiatives that Amtrak had proposed. Recently, we contracted with the Rand Corporation to conduct a systematic review and assessment of Amtrak's security posture and current programs, focusing on the adequacy of preparedness for combating terrorist threats. The objectives of the review include an assessment of the corporate security strategic planning processes and of products relating to security. Rand is evaluating Amtrak's risk management, response planning, and information dissemination actions that relate to system security and counterterrorism actions. The results and recommendations of the Rand review are intended to help Amtrak implement a nationwide, comprehensive, integrated system security plan and program.

We wish to point out to the Subcommittee that the enhanced security measures instituted by the passenger railroads are threat-based. That is, FRA and the railroads have diverted resources from normal activities to deal with the perceived increase in security threats brought about by the Madrid bombings. DHS is considering specific actions it might take to enhance passenger rail security, and FRA will work with DHS on reaching a specific agreement concerning how FRA may be able to assist DHS's initiatives.

FREIGHT RAIL SECURITY INITIATIVES

Security Initiatives regarding Rail Freight Generally

On September 20, 2001, I conducted an industry-wide teleconference with representatives from all major freight, passenger, and commuter railroads, all rail labor

organizations, and the FTA to discuss how the industry should proceed to reexamine railroad security options in the aftermath of the 9/11 attacks. Shortly after the teleconference, the AAR announced that it had contracted with EWA Information and Infrastructure Technologies, Inc., a firm with 1,000 employees specializing in security and intelligence, to conduct a comprehensive security risk assessment of the railroad industry. Furthermore, the rail industry announced the formation of six Critical Action Teams (CATs) to examine railroad security in the following areas:

- physical assets (bridges, tunnels, major yards, etc.);
- information technology systems (including dispatching systems);
- chemical and hazardous materials;
- Department of Defense shipments;
- train operations; and
- rail passenger systems and human factors.

The first five CATs concentrated on freight railroad security vulnerability issues. Each of these was led by a top railroad operating officer and was staffed by representatives from railroads, the AAR, and The American Short Line and Regional Railroad Association (ASLRRA).

The sixth CAT focused on passenger rail security issues and was led by the American Public Transportation Association (APTA) and was later included in the FTA efforts mentioned earlier.

Based on the rail industry's security risk assessment and the work of the CATs, the freight railroad industry developed a security plan that DHS will review and oversee. Much as we have done in the passenger security arena, FRA has periodically utilized its safety inspectors to

monitor implementation of security measures in response to heightened threats. As early as November 1, 2001, I directed our safety inspectors to spend several days monitoring the state of security at major freight railroad facilities, including bridges, tunnels, dispatching centers, major yards, and hazardous materials storage areas. Again, these security monitoring inspections are not our regular business; rather, they are narrowly targeted and threat-based.

Security Initiatives Regarding Railroad Shipments of Hazardous Materials

One area of freight railroad security where FRA has been very active is the security of rail shipments of hazardous materials. We have worked extensively with TSA before and after its transfer to DHS, with other components of DHS, with RSPA, and other entities to ensure that the nearly two million tank car shipments of hazardous substances that occur each year are transported with the optimum level of security.

Hazardous Materials Security Plans: One of our primary roles in protecting the security of hazardous materials shipments is our administration and enforcement of the RSPA regulation that requires hazardous materials shippers and carriers to develop, implement, and update written security plans. Companies that ship or transport specified amounts of certain placarded commodities must conduct a security risk assessment of their hazardous materials operations and develop appropriate measures to mitigate the security risks identified. For example, the security plans must describe the measures that are in place to guard against unauthorized access and to protect the security of these shipments while in transit and also while in storage. The regulation also directs hazardous materials shippers and transporters to provide training to their employees

who are responsible for implementing the security plan. Such employees must be trained to understand their specific roles and responsibilities in carrying out the security plans. The regulation required that these security plans be in place by September 25, 2003. FRA is in the process of training its hazardous materials safety inspectors to review, and monitor compliance with, the security plans. We are working with RSPA and DHS to develop a program for evaluating how effectively these plans are being carried out on the railroads.

Options to Enhance Hazardous Materials Security: RSPA is also exploring additional options to enhance hazardous materials security. RSPA recently completed a study of the most hazardous commodities that move in transportation, commodities that are classified as toxic by inhalation (TIH). FRA provided input into this study from a rail perspective. Based on the issues identified in the TIH study, DOT is working with DHS and the Homeland Security Council to identify prudent steps to enhance the security of TIH shipments. Over the past three months, I have participated in frequent meetings at DHS headquarters with representatives from DHS, RSPA, and DOT's Office of Intelligence and Security to provide input into these options and to help assess their impact on the security, safety, and efficiency of the freight railroad transportation system.

Our agency is also participating in joint efforts to conduct a review and security risk assessment of hazardous materials shipments through major metropolitan areas for the purpose of preventing potential terrorist attacks involving these commodities. Earlier this year, I joined DHS representatives in meeting with leaders from the City Council of Washington, DC, and

representatives from the Mayor's office, the police department, and the fire department to discuss plans to carry out a risk assessment of hazardous materials rail shipments in Washington, DC. That assessment is currently underway, and three FRA rail safety and security experts are participating on the risk assessment team. We hope that this effort will serve as a precursor and model for similar risk assessments in other metropolitan areas that have significant amounts of hazardous materials shipments.

Positive Train Control's Potential for Enhancing Hazardous Materials Security: Another technology that holds tremendous promise for enhancing rail security in general and hazardous materials security in particular is Positive Train Control, or PTC. PTC uses state-of-the-art microprocessors, global positioning satellite technology, data radio networks, and sophisticated train control and train dispatching computer software that allows for centralized monitoring and control of the movement and speed of trains across an entire railroad line or network. With PTC, a centralized dispatching center would know the exact location of every train on the system and could, with a few key strokes, identify each and every hazardous materials shipment on any train. While PTC was designed to improve the safety and efficiency of rail operations, it can easily be adapted to provide security benefits. For example, if a terrorist were to attempt to commandeer a train and initiate an unauthorized movement, the PTC system would detect it and automatically stop the train. FRA and the railroad industry are in the process of deploying a revenue service demonstration project of PTC technology between St. Louis and Chicago to demonstrate the many potential benefits that PTC can offer. FRA has several research and

development projects underway to develop security-related technologies that can be made to work in conjunction with PTC.

FRA RESEARCH AND DEVELOPMENT PROJECTS ON RAIL SECURITY

Security programs supported by FRA's Office of Research and Development (OR&D) have the following five goals: (1) to ensure that people and goods move safely and securely on the Nation's railroad infrastructure; (2) to evaluate and improve the integrity and behavior of tank cars and passenger cars for safety and security purposes; (3) to develop and demonstrate efficient and reliable communication systems to warn of security breaches; (4) to assist the TSA and commuter railroads with security issues and initiatives; and (5) to evaluate security technology for protecting railroad passengers, equipment, and infrastructure. Several such security projects are underway or completed. Five of them are described below:

1) *Tank Car Security Evaluation*. This joint project between FRA OR&D and DHS was designed for two general purposes: (a) to evaluate the ability of hydrophones inside tank cars to detect tank car breaches and to distinguish them from other background noise such as found in the normal tank car operating environment and (b) to develop emergency response techniques, tools, and procedures to plug punctures in pressure tank cars caused by small arms fire or other means. This project was conducted in October 2003 at the Transportation Technology Center, Inc., in Pueblo, Colorado. A confidential report will be complete by the end of 2004.

2) *Transportation Security Situation Display (TSSD)*. This developmental

activity began in 2003. Currently sponsored by FRA, the project involves a public-private partnership among the John A. Volpe National Transportation Systems Center (Volpe Center), the City of New York Office of Emergency Management, and Silicon Graphics Federal, Inc. The TSSD is intended to aid first responders in allocating their resources by providing on a computer monitor a visually displayed map of a localized area where there is a security situation, a natural disaster, or a weather-related disruption.

3) *Railcar Inspection Guide (RIG)*. The RIG is a booklet, developed jointly by FRA, TSA, and the Technical Support Working Group of the U.S. Department of Defense. It will be distributed on a need-to-know basis and used to assist military personnel, railroad police, local law enforcement, and first responders in inspecting locomotives, passenger cars, and freight cars for indicators of security problems. The booklet shows, for example, places on rail equipment where weapons of mass destruction could be hidden. FRA provided technical expertise, guidance, and project management in the development of the RIG. The RIG is currently in the final stages of publication.

4) *Real-Time Passenger Car Manifest*. This project, which addresses a National Transportation Safety Board recommendation, is aimed at providing first responders with accurate passenger counts. The Volpe Center is currently performing a study to define the options and feasibility of developing and implementing a real-time passenger manifest, including options involving the use

of computers.

5) *Explosive Detection Technologies*. In 2001, FRA OR&D worked with Amtrak, the Federal Aviation Administration, and the Office of the Secretary of Transportation in evaluating the use of trace explosive detection devices on a variety of passenger equipment. These devices are able to detect residue from explosives.

The FRA Office of Research and Development will continue to partner with DHS on current and planned security initiatives. Both before and after the Madrid bombings, FRA has been discussing research efforts to focus on the vulnerability of passenger cars to the use of explosives by terrorists; this research would model and measure the effects of the detonation of various quantities of energetic material on railroad passenger cars and evaluate the means needed to ensure that commerce resumes at the earliest possible moment after an attack.

NEED FOR RAIL SECURITY LEGISLATION

The Subcommittee has asked me to address “[a]ny deficiencies or obsolete features of current law that should be corrected to improve preparedness, enforcement and deterrence in the field of rail security.” While FRA and other Federal agencies will continue our efforts to safeguard our railroads and mass transportation systems, the enactment of clearer and stronger Federal laws is also necessary.

First, DOT seeks to clarify that the Secretary of Transportation’s broad authority over every area of railroad safety includes the authority to address threats to rail security. FRA believes that its current authority inherently includes security, and that such a clarifying

amendment could help FRA preempt and quickly rebuff any judicial challenges to FRA safety rules and orders that are issued to enhance rail security. FRA proposed such an amendment in the Administration's rail safety reauthorization bills transmitted to the Congress in July 2002 and July 2003. A comparable provision was passed by the Senate in November 2003 (section 205(b) of the Rail Safety Improvement Act (S. 1402)), and a similar provision was approved by the Senate Commerce Committee in July 2004 (section 8(b) of the Rail Security Act of 2004 (S. 2273)). (The latter bill also contains other rail security provisions, some of which DOT supports at least to some degree, as stated in DOT's views letter, which is attached.)

Second, it is necessary to strengthen and clarify Federal criminal laws to deter terrorist attacks and other violence against railroads and mass transportation systems and to ensure that any attacks that do occur are properly punished. Currently, the wrecking trains and mass transportation anti-terrorism statutes (18 U.S.C. 1992-1993, respectively) contain eight gaps or ambiguities that the Railroad Carriers and Mass Transportation Protection Act of 2004 (H.R. 4143 and S. 2289) would remedy. These bills would combine the existing statutes into a new and more comprehensive section 1992. For example, the legislation would extend to railroads the comprehensive protections that apply to mass transportation systems under the mass transportation statute. While the mass transportation statutory prohibitions clearly apply to attacks against commuter railroads, and arguably apply to Amtrak and tourist railroad operations as well, the massive freight railroad operations of this country are not covered. The vulnerabilities of freight shipments—whether spent nuclear fuel or other hazardous materials—need to be addressed to better protect the general public. FRA and the Federal Transit Administration

have worked very closely with the U.S. Department of Justice since 1997 in trying to secure the passage of similar legislation. DOT submitted anti-terrorism bills in 1997, 1999, and 2002, each of which contained many of the central provisions of H.R. 4143 and S. 2289. DOT's legislative proposals formed the basis for the mass transportation statute, which was first enacted as part of the USA PATRIOT Act in 2001. Details on these important improvements in existing Federal criminal law that would be achieved under H.R. 4143 and S. 2289 are found in FRA's April 8 testimony before the Senate Judiciary Committee, a copy of which is attached.

CONCLUSION

With the rest of the senior leadership team at DOT, I am driven in this effort to improve transportation security by the relentless pursuit of this goal by Secretary Norman Mineta. His actions on September 11 to protect the flying public, his stewardship of the creation of the TSA, his leadership in transitioning TSA and Coast Guard to the DHS, all are accomplishments which provide all of us at DOT a high standard by which to gauge our own efforts.

We welcome the attention of this subcommittee and your interest in making further progress. We are ready to work with you in bringing about an even safer and more secure rail transportation system. Thank you for the opportunity to appear before your subcommittee.

Attachments:

- DOT views letter on S. 2273
- Testimony by S. Mark Lindsey, Chief Counsel, FRA, before the

Senate Judiciary Committee on April 8, 2004

Testimony of S. Mark Lindsey
Chief Counsel, Federal Railroad Administration
U.S. Department of Transportation
before the Committee on the Judiciary
United States Senate
April 8, 2004

Mr. Chairman, members of the Committee, I am very pleased to be here today to testify on behalf of the Secretary of Transportation concerning the need for stronger Federal criminal laws, to deter terrorist attacks and other violence against railroad carriers and mass transportation systems. This hearing is especially timely in light of the March 11 attacks on four commuter trains in Madrid, the subsequent discoveries of bombs under railroad tracks in both Spain and France, and the intelligence reports that terrorists might try to bomb rail lines and buses in major U.S. cities this summer.

Passenger railroads and mass transportation systems pose attractive targets for terrorist attacks because of the large concentration of people, the difficulty of securing such open and extensive systems, and the fact that such attacks can be highly disruptive to the economy. While freight railroads carry only a small number of people as crew, they are likewise attractive targets for terrorists because they also operate over open and extensive systems and because they carry hazardous materials. The U.S. Department of Transportation (DOT), the U.S. Department of Homeland Security (DHS), and other Federal agencies have been working with the railroad and transit industries, sharing knowledge, expertise, ideas, and resources to mitigate the terrorist

threat to our Nation's railroads and mass transportation systems. The security efforts of the various Federal and private parties were detailed in testimony given to the Senate Committee on Commerce, Science, and Transportation on March 23, 2004.

While FRA and other Federal agencies will continue our efforts to safeguard our railroads and mass transportation systems, the enactment of stronger Federal criminal laws is also necessary. The enactment of legislation along the lines of S. 2289 (introduced by Senator Sessions) should help deter attacks against these systems and ensure that any acts that do occur are appropriately punished. DOT strongly supports S. 2289 and appreciates the Committee's commitment to help deter acts of violence against transportation systems.

S. 2289 would consolidate the existing "wrecking trains" statute at 18 U.S.C. 1992 and the mass transportation anti-terrorism statute at 18 U.S.C. 1993 into a new and more comprehensive section 1992. FRA and the Federal Transit Administration have worked very closely with the Department of Justice (DOJ) since 1997 in trying to secure the passage of similar legislation. DOT submitted anti-terrorism bills in 1997, 1999, and 2002, each of which contained many of the central provisions of S. 2289. DOT's legislative proposals formed the basis for the mass transportation statute, which was first enacted as part of the USA PATRIOT Act in 2001.

There are eight gaps or ambiguities in the wrecking trains and mass transportation statutes that S. 2289 would address.

First, the bill would update and slightly expand the wrecking trains statute's language regarding acts of violence against railroad carriers. The wrecking trains statute was enacted in 1940 and contains terminology that is not as expansive as that used in modern

Federal criminal statutes. The bill would update the language used in referring to acts targeted at railroads (e.g., replacing the term “explosive substance” with “biological agent or toxin, destructive substance, or destructive device”). And more types of railroad property and equipment would be explicitly protected (guideways, locomotive tenders, and on-track equipment). The definitions of the mass transportation statute would be slightly modified to reflect the addition of railroads, and terrorist acts involving hazardous materials including radioactive materials and spent nuclear fuel.

Second, the bill would extend to railroads the protections that apply to mass transportation systems under the mass transportation statute. The mass transportation statute contains a much more comprehensive listing of prohibited conduct than does the wrecking trains statute. The mass transportation prohibitions cover mass transportation by air, marine, and surface transportation. While these statutory prohibitions clearly apply to attacks against commuter railroads, and arguably apply to Amtrak and tourist railroad operations as well, the massive freight railroad operations of this country are not covered. The vulnerabilities of freight shipments--whether spent nuclear fuel or other hazardous materials—need to be addressed to better protect the general public.

In particular, the following six additional acts of terrorism from the mass transportation statute would be made applicable to railroads explicitly:

- (1) placing a biological agent or toxin on or near railroad equipment;
- (2) placing a biological agent or toxin on railroad infrastructure with intent to, or knowing or having reason to know such activity would likely derail, disable, or wreck railroad on-

track equipment [The bill would also cover placement of these substances “near” railroad and mass transportation property, a provision which is not currently in the mass transportation statute.];

(3) damaging a centralized dispatching facility;

(4) interfering with, disabling, or incapacitating any person engaged in dispatching, operating, or maintaining railroad on-track equipment;

(5) using a dangerous weapon, with the intent to cause death or serious bodily injury to an employee or passenger of a railroad carrier any other person while any of the foregoing is on the property of a railroad carrier “that is used for railroad purposes” [The highlighted qualifying language would also be made applicable to similar acts committed on the property of mass transportation systems; this qualifier is not currently in the mass transportation statute.]; and

(6) conveying or causing to be conveyed false information, knowing the information to be false, concerning an attempt or alleged attempt being made or to be made, to engage in any of the prohibited acts.

Third, the bill would lower the evidentiary threshold for Federal prosecution of acts against railroads to the same threshold as in the mass transportation statute. The wrecking trains statute prohibits specified acts against railroad equipment and property that is engaged in interstate or foreign commerce. The mass transportation statute is much broader in scope and applies not only to acts committed on, against, or affecting a mass transportation provider engaged in or affecting interstate or foreign commerce, but also to a person who travels,

communicates, or transports materials across a State line in aid of the commission of the offense.

With this expanded scope, attacks against railroad carriers will be easier to prosecute.

The bill also substitutes the word “knowingly” for the term “willfully,” which is the *mens rea* the defendant must have in committing the prohibited conduct under the wrecking trains statute and the anti-terrorism mass transportation statute. We believe that the use of “knowingly” merely clarifies existing law since the courts have equated the term “willfully” in the wrecking trains statute with the term “knowingly.” Courts construing the wrecking trains statute have held that it is not necessary to show that the defendant had a specific intent to wreck a train but merely that the defendant was aware of his acts and did not act because of ignorance, mistake, or accident, and that the defendant’s conduct could substantially interfere with the interstate railroad system.

Fourth, the bill would extend to mass transportation systems a provision in the existing wrecking trains statute that makes it a crime to undermine or make the use of the mass transportation infrastructure hazardous or unworkable. In addition, the bill would add “track” and “electromagnetic guideways” to the list of types of mass transportation infrastructure protected.

Fifth, the bill would make it a crime to cause the release of a hazardous material or a biological agent or toxin on or near the property of a railroad or mass transportation provider with the intent to endanger the safety of any person or with a reckless disregard for the safety of human life. This is a new prohibition that does not exist in current law.

Freight trains haul a tremendous amount of hazardous materials—nearly a million rail tank cars and

238,000 intermodal loads of hazardous materials annually, and lesser amounts are hauled by mass transportation providers. In calendar year 2002, trains provided over a billion ton-miles of hazardous materials transportation. Rail is the predominant method of transportation for certain classes of hazardous materials that pose an especially high risk, including explosives, radioactive materials, and flammable solids. It is essential that the Federal criminal statutes deter terrorists from using these hazardous materials and biological agents and toxins to harm the public.

Sixth, the bill would clarify that it is not a violation of the statute to transport on railroad or mass transportation equipment or property hazardous materials in commerce that are in accordance with Federal hazardous materials transportation law and DOT's implementing regulations, or, if in violation of these provisions, the violation is merely a civil violation and not a criminal violation.

Seventh, the bill would close a gap in the "mass transportation" statute noted in the "Shoe Bomber" case, where the district court observed that the literal language of the statute prohibited an attempted act of terrorism but did not explicitly penalize such an attempt. The district court correctly rejected as meritless Mr. Reid's argument that Congress had not made attempt crimes under the mass transportation statute punishable. The bill would also update the definition of "dangerous weapon" in the mass transportation statute to cover box cutters and other previously unrecognized weapons.

Eighth, the bill would toughen or clarify the penalties for certain violations. For violations not falling in the "aggravated offense" category, the penalty would be a fine or imprisonment of not more than 20 years, or both. The bill would make it an "aggravated offense"

to commit prohibited acts against a train or a mass transportation vehicle that carries a passenger or employee, radioactive waste, spent nuclear fuel, or designated hazardous materials. The general penalty for aggravated offenses would be a fine, or imprisonment for any term of years or life, or both. A term of not less than 30 years would apply to an offense involving high-level radioactive waste or spent nuclear fuel. A sentence of either life imprisonment or capital punishment would apply where the offense has resulted in the death of another person.

Currently, the maximum penalty under the mass transportation statute is life imprisonment. The death penalty is already available for a violation of the “wrecking trains” statute that results in a death. The bill would correct this anomaly by making available the death penalty for attacks against mass transportation systems that result in a death of a person. Recently, a Federal district court ruled that the wrecking trains statute does not impose a mandatory minimum sentence of life imprisonment or death against an individual who willfully derailed a freight train killing the conductor and seriously injuring the locomotive engineer. The bill would make clear that if a violation of the statute results in a death, that the court’s choice would be to impose a sentence either of life imprisonment or the death penalty.

Conclusion

Federal agencies, working in cooperation with the railroads and mass transportation systems, have been working hard to prevent terrorist attacks against our Nation’s railroads and mass transportation systems. With the rest of the senior leadership team at DOT, FRA is committed to this effort to improve transportation security by the relentless pursuit of this goal by Transportation Secretary Norman Mineta. His actions on September 11 to protect the flying

public, his stewardship of the creation of the Transportation Security Administration (TSA), his leadership in making the transition of the TSA and Coast Guard to the DHS, all are accomplishments which provide us all at DOT a high standard by which to gauge our own efforts.

The Department appreciates the Committee's continued efforts to deter terrorist activity and protect the Nation's railroads and mass transportation systems. We are ready to work with you on improving the Federal criminal statutes in order to bring about an even safer and more secure rail transportation system. Thank you for the opportunity to appear before your Committee, and I welcome the chance to respond to your questions.



**U.S. Department
of Transportation**

Office of the Secretary
of Transportation

Assistant Secretary

400 Seventh St., S.W.
Washington, D.C. 20590

April 7, 2004

The Honorable John McCain
Chairman, Committee on Commerce, Science,
and Transportation
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

The U.S. Department of Transportation (DOT) would like to provide you with its views on S. 2273, the Rail Security Act of 2004 (Act). DOT's views are limited to the sections, noted in this letter, in which the Secretary of Transportation would have significant responsibilities. We have also enclosed a separate list that recommends specific technical revisions.

Section 2 of the bill would require the Under Secretary of Homeland Security for Border and Transportation Security (Under Secretary), in consultation with the Secretary of Transportation, to assess security risks for both freight and passenger rail transportation. Section 2 would also require the Under Secretary to transmit to Congress a report containing an updated assessment and prioritized recommendations every two years. DOT has no objection to this proposal and is prepared to work closely with the Under Secretary to assess the security needs in this area.

Section 3 of the bill would clarify the enforcement authority of rail police officers, employed by a particular rail carrier, to include authority within any jurisdiction in which any rail carrier owns property. DOT has no objection to this provision. Section 3 would also require the Secretary of Transportation, in consultation with the Under Secretary, to review existing DOT rail regulations for the purpose of identifying areas that need to be revised for safety and security purposes within one year of the date of enactment of this Act. DOT is continually reviewing and revising its regulations for purposes of making the Nation's rail system safer and more secure; therefore, DOT has no objection to this provision in principle. However, the one-year deadline for the Secretary of Transportation's review of rail regulations coincides with the deadline for the Comptroller General's study of foreign rail security systems specified in section 4 of the bill. We suggest, therefore, that the Secretary of Transportation be given 18 months in lieu of one year in order for the Secretary to have time to take into account the results of the Comptroller General's study.

Section 5 of the bill would require the Under Secretary, in cooperation with the Secretary of Transportation, to study the cost and feasibility of requiring security screening for passengers, baggage, and mail carried on passenger trains and to report the results of the study and the Under

Secretary's recommendations, if any, to Congress. Section 5 would also call for a pilot program of random security screening of passengers and baggage at a total of five passenger rail stations served by Amtrak that would be selected by the Under Secretary. The section would authorize appropriations of \$5 million for fiscal year 2005 to the Under Secretary to carry out the section. DOT has no objection to the cooperative role envisioned by this section, but otherwise defers to the Department of Homeland Security (DHS). Additionally, section 5 requires matching of a "government issued" identification to passenger tickets "prior to boarding trains." This could negatively affect Amtrak's efficiency and overhead costs.

Section 7 of the bill would authorize a total of \$670 million for Fiscal Years 2005 through 2009 to be appropriated to the Secretary of Transportation to make grants to Amtrak for design and construction of fire and life-safety improvements to tunnels in New York, New York, Baltimore, Maryland, and Washington, DC. Funds appropriated pursuant to this section would remain available until expended. Amtrak would be required to submit for the Secretary's approval an engineering and financial plan for projects and a project management plan for each project. The Secretary would not be authorized to disburse funds to Amtrak unless the Secretary had approved such plans. DOT recognizes the benefits of fire and life-safety improvements to these critical elements of the Nation's rail infrastructure. In recognition of the importance of these tunnels, not just for intercity but also for commuter rail service, we believe that any funds made available for this purpose should flow through a Federal-State partnership such as that proposed in the Administration's legislative proposal to restructure intercity rail passenger service—the Passenger Rail Investment Reform Act. It should also be noted that the President's 2005 Budget proposes \$1.4 billion for Amtrak beginning in 2006, assuming fundamental reforms are instituted. This amount could help fund life-safety and security projects identified in an Amtrak security plan.

Section 8 of the bill would require the Under Secretary and the Secretary of Transportation to enter into a memorandum of agreement regarding their respective roles and responsibilities in dealing with railroad security matters within 60 days of the enactment of the Act. While DOT fully supports the need for an MOA with DHS on this and other subjects, such internal agreements are a matter of Executive Branch organization that are inappropriate for legislation. Section 8 would also clarify that, in the context of the Secretary of Transportation's regulatory authority at 49 U.S.C. 20103, the statutory term "safety" includes security. DOT supports this provision and notes that a comparable provision appears in section 102 of DOT's current rail safety reauthorization proposal and in section 205(b) of S. 1402, as passed by the Senate.

Section 9 of the bill would require Amtrak to submit to the Chairman of the National Transportation Safety Board (NTSB) a plan for addressing the needs of families of passengers involved in a fatal Amtrak accident. In particular, the section would require that the plan include a procedure by which Amtrak would use reasonable efforts to determine the number and names of passengers aboard an unreserved train and those not holding reservations on other trains. It is worth noting that Amtrak does not currently keep passenger logs for its unreserved cars. The

section also prohibits NTSB and Amtrak from sharing passenger lists with “any person” but allows information about a passenger to be shared with the family of a passenger. DOT suggests including clarifying language to preserve the Secretary of Transportation’s existing authority to obtain this information directly from Amtrak. FRA needs passenger identity information in order to conduct thorough investigations including, for example, matching injuries with rail car interior features. Nevertheless, FRA has no reason to include personal identifying information in accident reports, and does not do so. Finally, the section would authorize to the Secretary of Transportation, for Amtrak’s administration of this section, \$500,000 for fiscal year 2005. Other than the concerns noted, DOT does not object to this section.

Section 10 of the bill would authorize the Under Secretary to make grants through the Secretary of Transportation to Amtrak for system-wide Amtrak security upgrades. To receive funds from the Secretary for a particular security upgrade project, Amtrak would have to have a system-wide security plan approved by the Under Secretary, in consultation with the Secretary of Transportation. In addition, as in section 7(e) of the bill, Amtrak would be required to submit for the Secretary’s approval an engineering and financial plan for projects and a project management plan for each project. The Secretary would not be authorized to disburse funds to Amtrak unless the Secretary had approved such plans. This section would authorize \$62.5 million for fiscal year 2005 to the Under Secretary to carry out the section, with funds appropriated remaining available until expended.

Section 11 of the bill would authorize the Under Secretary to make security improvement grants to freight railroads, the Alaska Railroad, hazardous materials shippers, and owners of tank cars used to ship hazardous materials, and, through the Secretary of Transportation, to Amtrak. Amtrak’s eligibility for funds would be subject to the same conditions as described in section 10. The section would authorize to be appropriated to the Under Secretary \$250 million for fiscal year 2005, with amounts appropriated under this section remaining available until expended. DOT notes that the Government currently does not provide grants to the rail industry other than Amtrak and the Alaska Railroad. Further, the Administration is concerned that providing direct assistance to the rail industry generally could open the Government to the demands of other industries seeking similar funding.

Section 12 of the bill would authorize the Secretary of Transportation to use up to 0.5 percent of amounts available to Amtrak for capital projects under the Act to enter into contracts for the review of proposed capital projects and related program management plans and to oversee construction of such projects. DOT supports this provision.

Section 13 of the bill would require the Under Secretary, in conjunction with the Secretary of Transportation, to execute a research and development program to improve freight and intercity passenger rail security and, to carry out the program, would authorize appropriations to the Under Secretary of \$50 million per year for fiscal years 2005 and 2006. Funds appropriated pursuant to the section would remain available until expended. DOT believes that such a research and development program should be tailored to respond to the findings of risk

assessments and should be developed in such a way as to avoid overlap with existing research and development conducted by FRA for safety purposes.

Section 14 of the bill would mandate that FRA undertake certain actions to improve the safety of railroad track and railroad tank cars. DOT notes that the provision is unnecessary and duplicative because the Secretary of Transportation and the Secretary's delegate for rail safety matters, the Administrator of FRA, may perform the required actions already under existing statutory authority. In any event, any such a mandate should be directed to the Secretary of Transportation and not to FRA or the Administrator of FRA. DOT also notes that the Administrator of the Research and Special Programs Administration is, in most matters, the Secretary's delegate with respect to railroad tank car safety.

The track-related provisions in section 14 of the bill would obligate FRA to take certain actions regarding continuous welded rail (CWR) track within 90 days of enactment. One such provision would obligate FRA to require each railroad with CWR track to have procedures that better identify cracks in the joint bars that connect strings of CWR. FRA is allowed to impose such a requirement only by issuing an order or regulation. Although DOT believes that a direct final rule would be allowable pursuant to the provision, FRA rules are normally issued pursuant to notice and comment under 49 U.S.C. 20103(e), and the 90 day mandate would not permit such a proceeding. Allowing time for a normal proceeding, perhaps through FRA's Railroad Safety Advisory Committee, would enable rail labor, rail management, and other interests to provide their insights on how a rule should be crafted. DOT suggests, therefore, changing the beginning of section 14(a)(1) to read: "(1) initiate a rulemaking to require . . .".

Section 14 would also require FRA to coordinate with the NTSB in conducting an analysis to determine the impact resistance of the steels in the shells of pressure tank cars built before 1989 and to report to Congress on recommendations for measures to eliminate or mitigate the risk of catastrophic failure. FRA has been working with the Association of American Railroads Tank Car Committee, of which the NTSB is a member, and the joint government-industry Stub Sill Working Group to determine the impact loads to which a tank car is subjected both in normal transport and under accident conditions. Over-the-road tests will be conducted this year. FRA has also been researching the fatigue life of tank car steels and developing probability-of-detection curves for the materials. This work is also in conjunction with the Stub Sill Working Group. We would prefer to continue working through these existing groups rather than start a new effort with the NTSB. Otherwise, DOT has no objection to section 14.

DOT appreciates the Committee's commitment to rail security and looks forward to continue working with the Committee and other agencies with rail security oversight responsibilities to help provide the safest and most secure rail system possible.

The Office of Management and Budget has advised that there is no objection, from the standpoint of the Administration's program, to the submission of this letter to Congress. We appreciate the opportunity to comment on this legislation.

Sincerely yours,

A handwritten signature in black ink, appearing to read "E. Frankel". The signature is stylized and cursive, with a long vertical line extending downwards from the end of the signature.

Emil H. Frankel
Assistant Secretary for Transportation Policy

Enclosure

Enclosure: DOT's Technical Comments on S. 2273

Section 2.

Section 2 of the bill refers to "freight and passenger rail transportation (encompassing rail carriers, as that term is defined in section 20102(1) of title 49, United States Code)." We note that the cited section, 49 U.S.C. 20102(1), does not define the term "rail carrier" but rather the term "railroad." "Rail carrier" is not defined in 49 U.S.C. 20102 at all; that section defines the term "railroad carrier," and in subsection (2), not subsection (1). Therefore, we suggest that "railroad carrier" be substituted for "rail carrier" and that "section 20102(2)" be substituted for "section 20102(1)".

Section 7.

DOT suggests the following edits:

- (1) for clarity and consistency, replace "LIFE SAFETY" with "LIFE-SAFETY" in the section heading and in the catchline for subsection (a);
- (2) in subsection (a) if the "tunnels on the Northeast Corridor" are Amtrak tunnels, then "Amtrak" should be inserted before "tunnels";
- (3) replace the semi-colon at the end of subsection (e) with a period; and
- (4) replace "life safety" with "life-safety" in subsection (f).

(DOT questions whether the description of two tunnels in subsection (b)(2) is adequate. The current description reads: "the Baltimore & Potomac tunnel and the Union tunnel".)

Section 13.

Subsection (c), "Accountability," states that the Under Secretary would be required to ensure that the program would be coordinated with other research and development initiatives at the Department of Homeland Security and at DOT. DOT suggests (1) moving the entire text of subsection (c) (which addresses coordination issues) to the end of section 13(b), which deals with those issues, and (2) correcting a typographical error in the text by replacing "the would be useful" with "that would be useful". In addition, DOT suggests that, after the heading of section 13(c), "ACCOUNTABILITY.--", the text of section 11(b), "Accountability," should be copied and inserted. (The text of section 11(b) is as follows: "The Under Secretary shall adopt necessary procedures, including audits, to ensure that grants made under this section are expended in accordance with the purposes of this Act and the priorities and other criteria developed by the Under Secretary.")

Section 14.

Subsection (b) would require FRA to “validate the predictive model it is developing to quantify the maximum dynamic forces acting on railroad tank cars under accident conditions” and to commence a rulemaking to establish proper design standards for pressurized tank cars. DOT suggests striking “maximum” and inserting “relevant” because “maximum” is undefined for these purposes and “relevant” describes the type of dynamic forces that should be studied.