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before the
Committee on Commerce, Science, and Transportation,
U.S. Senate

October 20, 2005

Chairman Stevens, Ranking Member Inouye, and other members of the Committee, I am very pleased to be here today to testify, on behalf of the Secretary of Transportation, about the security of our Nation's passenger and freight railroad network. Since June 1 of this year, it has been my privilege to serve as the Administrator of the Federal Railroad Administration (FRA). By delegation from the Secretary, FRA's primary mission is to promote the safety of the U.S. railroad industry and to reduce the number and severity of accidents and incidents arising from railroad operations. Our railroad safety mission necessarily includes our involvement in railroad security issues. The U.S. Department of Homeland Security (DHS) has the primary responsibility for transportation security. FRA plays a supporting role, providing technical assistance and assisting DHS when possible with implementation of its security policies, as allowed by statutory authority and available resources

My testimony today will provide some background on FRA's railroad safety program and briefly describe the role that FRA plays in railroad security.

FRA's Railroad Safety Program

FRA administers the Federal railroad safety laws, which provide FRA with authority over "every area of railroad safety." 49 U.S.C. 20103(a). The agency has issued a wide range of safety regulations covering such topics as track, passenger equipment, locomotives, freight cars, power brakes, locomotive event recorders, signal and train control systems, maintenance of active warning devices at highway-rail grade crossings, accident reporting, alcohol and drug testing, protection of roadway workers, operating rules and practices, locomotive engineer certification, positive train control, and use of train horns at grade crossings. We currently have active rulemaking projects on a number of important safety topics, including locomotive crashworthiness, noise exposure of railroad employees, and continuous welded rail. In addition, FRA enforces hazardous materials regulations issued by another DOT agency, the Pipeline and Hazardous Materials Safety Administration (PHMSA). Those regulations include requirements that railroads and other hazardous materials transporters, as well as shippers, have and adhere to security plans.

FRA has an authorized inspection staff of about 400 persons nationwide, distributed across its eight regions. (In addition, about 160 inspectors employed by the 30 States that participate in FRA's State participation program inspect for compliance with FRA's standards.) The inspectors are experts in specific disciplines, including track, signal and train control, motive power and equipment, operating practices, and hazardous materials. In addition, we have 16 grade crossing experts in the field. Our inspectors conduct thousands of inspections every year, investigate more than 100 train accidents, investigate hundreds of complaints, develop recommendations for hundreds of enforcement actions, and engage in a range of educational activities on railroad safety issues. Although some inspectors have had basic familiarization training on security issues, they are not security experts.

The railroad industry's overall safety record has improved over the last decade, and most safety trends are moving in the right direction. However, significant train accidents continue to occur, and the train accident rate has not shown substantial improvement in recent years. Moreover, recent train accidents have highlighted specific issues that need prompt government and industry attention, and the strong growth of rail and highway traffic continues to drive up exposure at highway-rail grade crossings. FRA developed its Railroad Safety Action Plan to address these critical issues, and Secretary Mineta announced the plan in May 2005.

This Action Plan will:

- Target the most frequent, highest risk causes of accidents;
- Focus FRA's oversight and inspection resources; and
- Accelerate research efforts that have the potential to mitigate the largest risks.

FRA's plan includes initiatives in several areas: reducing human factor-caused train accidents; acting to address the serious problem of fatigue among railroad operating employees; improving track safety; enhancing hazardous materials safety and emergency preparedness; improving highway-rail grade crossing safety; and better focusing FRA's resources (inspections and enforcement) on areas of greatest safety concern. One of the primary elements of the Action Plan is FRA's implementation of its National Inspection Plan, which uses sophisticated trend analysis to ensure that FRA is properly allocating its inspectors within the regions so that they are directing their efforts toward the railroads that pose the highest risks. In addition, FRA has developed guidance for its inspectors in each discipline to help them use all available data to focus not only on the railroads with the highest risks but also on the particular kinds of noncompliance that involve the most significant hazards.

FRA has begun to move forward on all of the elements of its Action Plan, and has implemented its National Inspection Plan in the three areas that account for more than 75 percent of all train accidents: human factors; track; and equipment.

FRA's Role in Railroad Security

Since the terrorist attacks on September 11, 2001, FRA has been actively engaged in the railroad industry's response to the threat of terrorism. The railroads have developed their own security plans, and FRA has worked with the railroads, rail labor, and law enforcement personnel to develop the Railway Alert Network for the distribution of information and intelligence on security issues. Working with the Federal Transit Administration, another DOT agency, we have participated in security risk assessments on commuter railroads. FRA's security director works on a daily basis to facilitate communications on security issues between government agencies and the railroad industry.

In 2003, PHMSA (then the Research and Special Programs Administration) issued a rule requiring transporters and shippers of certain hazardous materials to develop and adhere to security plans. PHMSA issued its rule under its authority, delegated from the Secretary, to "prescribe regulations for the safe transportation, including security, of hazardous materials," 49 U.S.C. 5103(b)(1). Under the rule, security plans must include an assessment of security risks and appropriate measures to address those risks. The plans must, at a minimum, address three specific areas--personnel security, unauthorized access, and en route security. To assist railroads that transport hazardous materials and shippers that offer those materials for transport by rail, particularly small and medium-sized companies, to comply with this new requirement, FRA field personnel have spent a considerable amount of time in outreach efforts. To date, FRA personnel have reviewed more than 3,600 security plans and more than 29,000 employee security training records.

Since April 2004, FRA and PHMSA have also worked with DHS on a coordinated plan to improve the security of the rail transport of hazardous materials classified as toxic inhalation hazards (TIH). These include materials such as chlorine, which is used in water filtration plants, and anhydrous ammonia, which is used extensively in agriculture. DHS's Transportation Security Administration (TSA) has the lead on this project. TSA has led vulnerability assessments of a number of rail corridors where TIH materials are transported. DOT and TSA published a notice and request for comments in the Federal Register asking for input on aspects of TIH rail shipments, the DOT security program requirement, and the need for additional regulation. 69 Fed. Reg. 50988 (Aug. 16, 2004). More than 100 comments were received, addressing the following issues:

- security plan improvements;
- shipment identification and hazard communication;
- temporary storage;
- tank car integrity; and
- communication and tracking.

DOT is considering possible amendments to the PHMSA security plan rule that would enhance the security of the transportation of TIH materials.

In the area of passenger security, FRA inspectors have conducted basic security reviews of Amtrak and commuter railroad security both after the 2004 train bombings in Madrid and after the July 2005 transit bombings in London. In both cases, FRA inspectors were deployed immediately after the bombings to assess the security readiness of passenger railroad facilities based on a checklist of major security criteria. In the aftermath of the London bombings, FRA worked closely on these security reviews with TSA's new rail security inspectors. TSA focused primarily on urban rapid transit lines, while FRA inspectors concentrated on commuter and intercity passenger operations. In some situations, inspectors from the two agencies worked jointly.

FRA also supports research, development, and demonstration projects related to rail security through its Office of Research and Development (OR&D), often in cooperation with DHS. One completed project to evaluate tank car security and two current, follow-up projects provide examples. The tank car security evaluation project was conducted jointly by FRA OR&D and DHS in October 2003 at FRA's Transportation Technology Center, Inc., in Pueblo, Colorado. Its first purpose was to evaluate the ability of hydrophones inside tank cars to detect breaches and to distinguish noise coming from a breach of the tank car from other background noises such as those present in the normal tank car operating environment. Its second purpose was to develop emergency response techniques, tools, and procedures to plug punctures in pressurized tank cars caused by small arms fire or other means. A confidential report has been completed. The acoustic signatures of the small arms fire and other projectiles were recorded from both the hydrophones and accelerometers. The results of this test proved the feasibility of developing algorithms to monitor tank cars while under load. As a follow-on to this test, DHS and FRA funded an effort to look at the effects of small arms fire on tank cars and the use of hydrophones to sense a "hit." Development of the algorithm for detecting a hazardous material release event continues.

As a result of these tests, the Association of American Railroads (AAR) and contractors have examined various methods to "harden" tank cars. All of the options to "armor" tank cars available with today's technology are either too heavy or so expensive as to be economically impractical. FRA has learned about a new material, Dragon Shield, which is currently being used for armor coating military vehicles in Iraq. The Railway Supply Institute, the American Chemistry Council, the Chlorine Institute, and the AAR have worked with DHS and FRA in putting together a test plan to determine the feasibility of using this liquid armor (Dragon Shield) technology to reduce tank car vulnerability based upon the threat previously identified. Testing of the material will start in FY 2006. FRA's Office of Research and Development will continue to partner with DHS on these and other security initiatives.

In September 2004, DOT and DHS entered into a memorandum of understanding (MOU) concerning their respective roles on security issues. The MOU notes that DHS has the primary responsibility for security in all modes of transportation and that DOT

plays a supporting role, but notes that both agencies have regulatory responsibilities in the area of transportation security. The MOU requires early coordination between the parties on the development of regulations affecting security. The MOU also contemplates the development of separate annexes on specific task and areas of responsibility. DOT and DHS have executed an annex concerning their joint project on the security of the transportation of TIH materials. FRA has also prepared a draft annex concerning rail security issues in general and has recently shared that draft with TSA. We hope to complete that annex soon.

FRA's Cooperation with TSA's New Inspection Force

The FY 2005 DHS Appropriations Bill Conference Report No. 108-774 earmarked $10 million for TSA to deploy up to 100 Federal rail security compliance inspectors. The first class of these inspectors completed training in early June 2005, and since then FRA has worked closely with the managers of TSA's new inspection program. Through regular meetings and frequent contacts, we are developing working relationships at the headquarters and field levels of both agencies. We are trying to ensure that the two agencies' roles are clearly distinguished and do not result in duplicative inspections of the rail industry. As mentioned previously, inspectors from the two agencies have already engaged in a successful joint security review of passenger operations.

As TSA's full complement of inspectors becomes fully functional, FRA anticipates that there will be less need for FRA inspectors to participate in activities related purely to security. FRA's safety mission is critical and requires the constant attention of its inspection force. Of course, if FRA's inspectors are needed to support TSA's efforts for a limited duration in a time of an elevated security threat, FRA will make every effort to provide that support. Moreover, in those areas such as hazardous materials transportation where safety and security are significantly interrelated, FRA inspectors will continue to play an active role (e.g., in enforcing PHMSA's security plan regulations).

Conclusion

FRA's primary mission is helping to ensure the safety of railroad transportation. In some areas, such as hazardous materials transportation, safety and security are inextricably intertwined, which means that FRA's safety activities will no doubt continue to have an effect on security. In general, however, FRA's role is to support DHS and TSA in carrying out their security responsibilities, to the extent FRA can do so within its present authority and with its current resources.