

**STATEMENT OF**  
**THOMAS D. SIMPSON**  
**EXECUTIVE DIRECTOR - WASHINGTON**  
**RAILWAY SUPPLY INSTITUTE, INC.**

**BEFORE THE**  
**UNITED STATES HOUSE OF REPRESENTATIVES**  
**COMMITTEE ON TRANSPORTATION & INFRASTRUCTURE**  
**SUBCOMMITTEE ON RAILROADS**

**HEARING ON THE**  
**CURRENT ISSUES IN RAIL TRANSPORTATION**  
**OF HAZARDOUS MATERIALS**  
**JUNE 13, 2006**

Mr. Chairman, thank you for the opportunity to speak today on the important issue of improving the safety and security of the movement of hazardous materials by rail.

My name is Tom Simpson; I am Executive Director – Washington of the Railway Supply Institute (RSI). RSI is the international trade association of the rail and rail rapid transit supply industry. RSI was formed in 2002 when the Railway Progress Institute (RPI) and the Railway Supply Association consolidated. I am here on behalf of the RSI's Committee on Tank Cars (RSI-CTC) which, through RPI and now RSI, has represented this industry for more than fifty years. The RSI-CTC represents companies that manufacture virtually all the tank cars operating in North America and also, own, manage, and full service lease 180,000 tank cars or approximately 70% of the nation's tank car fleet. The RSI-CTC has a long history of proactively and cooperatively working with railroads, shippers, and the federal government to implement improvements in the safety, and security of hazardous materials transportation by rail.

In 1970, RPI joined with the Association of American Railroads (AAR) to create the Railroad Tank Car Safety Research and Test Project. The mission of the project is to collect and analyze data relative to the performance of tank cars in derailments and to use this data to support research to improve tank car safety. Since 1970, RSI and AAR have invested more than \$20 million in the Safety Project while investing more than \$700 million in safety improvements to the tank car fleet.

## **II. Safety Record**

These joint efforts have helped make rail the safest mode for transporting these vital raw materials. Industry statistics show it is 16 times safer to move hazmat by rail than by highway. Approximately 1.7 million carloads of hazardous materials are transported by rail throughout the United States each year, and 99.998% of these shipments reach their destination without a release caused by an accident. Since 1980, railroads have reduced the overall hazardous materials accident rate by 90%, and since 1990 it has been reduced by 49%.

## **III. Continuous Improvement of Tank Cars**

The reduction in accidental releases of hazardous materials has been driven in part by continuous improvements in tank car design and materials, and the RSI-CTC fully supports continued efforts to improve the tank car package. The RSI-CTC and its individual member companies have been active partners in the continuous improvement of tank car designs and materials. We have actively worked with the U.S. Department of Transportation, the Pipeline and Hazardous Materials Safety Administration (PHMSA), the Federal Railroad Administration (FRA), and AAR to install shelf couplers that help to prevent puncturing of tank cars in a derailment, head shields to protect against head punctures, and thermal protection that keeps the tank's lading cool enough to delay or prevent tank failures in fires. In addition, improved bottom fittings protection, stronger steels, and improvements to pressure relief devices have been implemented.

## IV. Improving Safety and Security of Rail Transportation of Hazardous Materials

RSI-CTC, along with representatives from railroads, shippers and railroad unions, recently participated in PHMSA and FRA's public hearing to review the design and operational factors that affect rail tank car safety. Our comments today are similar to those we offered at that meeting, with the addition of comments regarding rail security.

**1. First:** An important step toward improving rail safety, which we believe was started at the above referenced meeting, is for PHMSA and FRA to take a more active leadership-role in the effort to improve safety. PHMSA and FRA are uniquely positioned to insure an open, transparent, unbiased and comprehensive process is used to create any new safety standards.

**2. Second:** We believe rail safety improvement efforts should be based on a comprehensive analysis of rail hazmat risks that looks at all aspects of the rail system. Safety improvement efforts should explore railroad operating practices, shipper commodity handling practices, emergency response procedures, and tank car design improvements. FRA's Railroad Safety Action Plan, which focuses FRA's resources on areas that have been identified as the greatest safety concerns and accelerates research efforts that have the potential to mitigate the largest risks, is an example of the kind of comprehensive approach that should be used. RSI-CTC supports implementation of FRA's plan, and is prepared to assist in its implementation where appropriate.

**3. Third:** Any changes to car designs should be *driven by sound science and engineering*. The recently initiated AAR Tank Car Committee dockets, intended to reduce the probability of release of chlorine or anhydrous ammonia, are first steps toward improvement in the safety of shipping those commodities. RSI-CTC member companies are actively participating in those task forces. The work of those task forces must be coordinated with the critical research FRA has undertaken, at the direction of Congress, on derailment forces and steels, as passed in SAFETEA-LU. The results of these studies are critically important because they provide facts about the real world conditions in which the cars operate, and they should be completed prior to deliberation on any future car designs. While we agree that time is of the essence when dealing with matters of safety, we also want to make sure that the process provides the best possible solutions. We are concerned that design specifications developed as a result of the current accelerated AAR docket approach will not take this research into account, and may be superseded or contradicted once this additional FRA research data is evaluated.

**4. Fourth:** *Initiatives to improve security of shipping hazardous materials by rail should be coordinated between DOT and DHS to ensure prioritized action items can be effectively implemented. Also, funds for research and implementation of technologies to reduce tank car vulnerabilities should be granted.* RSI-CTC, in conjunction with the AAR and shippers, continue to participate in a project with the Departments of Homeland Security and

Transportation to identify materials that will protect tank cars carrying poison-by-inhalation commodities from a specified ballistics assault by terrorists. This group is working with the Naval Surface Warfare Center to develop a test plan to evaluate materials that will prevent the penetration of a tank car or, alternately, to seal a commodity leak if the tank is penetrated. The test plan has been completed and materials evaluations should begin shortly. A word of caution, if it is decided that such a material should be applied to tank cars, designs would need to be changed to incorporate the additional weight and thickness of the material.

In summary, RSI-CTC firmly believes that actions to improve hazardous material rail transportation safety should be coordinated through PHMSA and FRA, who are positioned to ensure an open, transparent and unbiased process is used. PHMSA/FRA led safety improvement initiatives should be comprehensive, so that all factors involved can be properly evaluated and priority can be given to reducing the highest risks. Proposed changes to railcars should be based on sound engineering and fully validated against specific, real world conditions in which cars operate, using research already underway at FRA. Finally, initiatives to improve security of rail transportation of hazardous materials should be coordinated between DOT and DHS.

The members of the RSI-CTC are prepared to immediately work with Congress, PHMSA, FRA, the AAR, and other key participants in this process to

quickly and appropriately improve the safety of our nation's rail transportation network. We appreciate the opportunity to provide our recommendations on the most effective means of achieving this important goal.