

READY TO ROLL?

The Federal Motor Carrier Safety Administration issued cargo securement regulations for crushed autos without seeking advance input from industry associations.

John Adams once wrote, "Facts are stubborn things; and whatever may be our wishes, our inclinations or the dictates of our passions, they cannot alter the state of the facts and evidence."

However, when looking at the process to arrive at the new cargo securement ruling the Federal Motor Carrier Safety Administration (FMCSA) recently published, such evidence and facts appear to be lacking.

IN THE RULEBOOK. On June 22, 2006, FMCSA published its final rule regarding cargo securement. This final rule concerns the issues addressed in the agency's Notice of Proposed Rulemaking (NPRM), which was published a year earlier. For flattened and crushed cars, the NPRM proposed allowing the use of a synthetic webbing securement device, provided that the webbing did not come in contact with the cargo. At issue was whether to allow the use of metal tie-downs that have short segments of synthetic webbing at the point of attachment to the transport vehicle. Such devices are designed to be easily tightened to further secure the load.

In its final ruling, FMCSA also stated: "Iowa DOT (Department of Transportation) noted that several

carriers have removed the floor from flatbed vehicles, leaving the floor cross bracing intact, creating a skeletal vehicle, which allows the debris and fluids to escape from the bottom of the vehicle while in transit."

Although the issue was not part of the rulemaking, the agency deemed it important enough to modify the regulation to address this concern. FMCSA modified Sec. 393.132(c)(5)(i) of the ruling to read: "Vehicles used to transport flattened or crushed vehicles must be equipped with a means to prevent liquids from leaking from the bottom of the vehicle and loose parts from falling from the bottom and all four sides of the vehicle extending to the full height of the cargo."

This development will surely come as a shock to those who haul flattened and crushed cars. Yet it should not come as a surprise. Throughout the development of the new cargo securement standard, the regulatory and enforcement communities in the United States and Canada have regarded loads of flattened and crushed cars as a supreme danger wreaking death and destruction on our roads. Therefore, these loads have been subjected to the most stringent securement and containment standards possible, greater than for any other commodity. Surely there must be a



ton of facts to support this. Yet, there are none.

How did stringent regulations develop without a basis in fact? The short answer can be found in an anonymous quote: "It is easier to believe a lie that one has heard a thousand times than to believe a fact that no one has heard before." The long answer follows.

BACK TO THE BEGINNING. When the transportation agencies of the United States and Canada commenced their respective rulemaking procedures for new cargo securement regulations, they had the benefit of a comprehensive guide. The 1999 edition of the "North American Cargo Securement Model Regulation" had been developed by a committee with representatives of governments and industry in both countries. This entity, the North American Cargo Securement Standards Harmonization Committee, developed the model regulation based on new research, accident data, published

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recommended standards and industry best practices and consultation with numerous industry experts.

The model regulation provided uniform regulatory requirements for securement of all cargo on highway transportation vehicles. Also, the model regulation provided specific securement requirements for 11 commodities that present special hazards during transport. Five of these commodities, dressed lumber, metal coils, intermodal containers, heavy vehicles and machinery and large boulders, had been the focus of research conducted by the Canadian Council of Motor Transport Administrators (CCMTA). The requirements for roll-off containers were based on ANSI (American National

Standards Institute) standards then in development.

From its first meeting in April 1996 until its approval of the final draft in May 1999, the Harmonization Committee worked with more than 20 trade associations and more than 30 corporations to jointly draft commodity-specific model regulations that were acceptable to all involved parties. All except for flattened and crushed cars.

Specific securement requirements for "crushed vehicles" were first discussed at the committee's Sept. 15, 1996, meeting. Three meetings later, on Sept. 27, 1997, the committee reviewed a draft of the securement requirements for crushed vehicles prepared by the committee's drafting

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group. The drafting group included representatives from the U.S. Department of Transportation, Transport Canada and the Ministries of Transportation of Québec and Ontario. As of this meeting, the committee had identified and requested input and participation from more than a dozen trade associations representing the other specific commodities. Yet, the minutes of this meeting noted that "...it was not known whether this (crushed cars) sector was represented by an association."

Then, as now, there are three North American trade associations whose members are directly involved with crushed vehicles: the Institute of Scrap Recycling Industries Inc. (ISRI), the Canadian Association of Recycling Industries (CARI) and the Automotive Recyclers Association (ARA). Several associations also represent steel producers that melt the metal produced from shredding crushed cars. A simple inquiry by the committee on the

origin or destination of these vehicles should have easily revealed the existence of these associations.

Three meetings later, on October 1 and 2, 1998, the committee reviewed the drafting group's revised proposal for crushed vehicles. The proposal outlined three specific methods to prevent stacks of crushed cars from falling from transport vehicle. Each method was based on the number of structural walls on the vehicle. Each stack of crushed cars loaded onto a trailer with no walls, such as a flatbed, should be secured by four tie-downs. Loads carried on a trailer with two structural walls that extended to the height of the load should be secured with three tie-downs per stack. Each tie-down must have a working load limit (WLL) of 5,000 pounds and cannot be made of synthetic material. Crushed cars loaded onto a four-sided trailer would require no tie-downs as long as each side extended to the height of the load.

The proposal also required that ve-

hicles used to transport crushed cars must use a containment system to prevent loose parts from falling off of the load during transport. A containment barrier that extended to the full height of the load must be provided where ever there was no structural wall.

The minutes indicate that the drafting group favored the use of only four-sided vehicles. Obviously limiting the transport of crushed cars to four-sided vehicles would easily resolve the drafting group's concern for the need of additional securement and containment methods while transporting crushed cars. However, were these concerns that led to a proposal for such stringent requirements justified?

SAFELY SECURED. The securement requirements for crushed cars contradicted the general requirements in the model regulation. The general requirements specified that the aggregate WLL of all tie-downs must no be less than half the weight of the cargo being



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secured. The general requirements also specified two tie-downs if the cargo is longer than 10 feet, with one additional tie-down for every additional length of 10 feet or less. A stack of crushed cars weighs between 10,000 to 12,000 pounds. Each stack will average 12 to 16 feet in length with no stack longer than 20 feet. According to the general requirements, a stack of crushed cars loaded on a flatbed should require no more than three tie-downs with an aggregate WLL of at least 6,000 pounds. Yet the model regulation's requirements for crushed cars called for each stack of the same load to have four tie-downs with an aggregate WLL of at least 20,000 pounds. Where was the justification for such a requirement?

Many flatbeds have partial walls or bulkheads at the front of the trailer. The model regulation provided that loads blocked from forward movement by a bulkhead or other adequately secured loads would require only one tie-down for every 10 feet or frac-

tion of length. Under these requirements, the stack of cars loaded against the bulkhead would only require two tie-downs with the proper aggregate WLL. Because this stack would be considered adequately secured, all remaining stacks would require similar tie-downs. No documented justification has been presented to explain why these general securement requirements should not apply to crushed cars.

QUITE CONTAINED. Crushed cars are the only commodity that have a specific requirement for containment of loose material. The model regulation required a "containment system which prevents loose parts from falling from all four sides of the vehicle and which extends to the full height of the load." It is reasonable to assume that such a commodity-specific requirement would be based on evidence that parts falling from loads of crushed cars present a significant concern.

In 2004 the AAA Foundation for

Traffic Safety published a report titled "The Safety Impact of Vehicle-Related Road Debris." The study examined data from three major sources: the National Automotive Sampling System Crashworthiness Data Set (NASS-CDS) and the U.S. Fatality Analysis Reporting System (FARS), which are administered by the National Highway Traffic Safety Administration (NHTSA), and the Canadian Traffic Accident Information Database (TRAID), which is administered by Transport Canada.

For the period 1997-2001 NASS-CDS data showed 66 crashes related to vehicle-related road debris (VRRD). The number of crashes related to specifically defined VRRD were furniture (three); tires, tire tread, tire and rim or wheel (21); trailer or trailer hitch (five); metal pipe or plate (four); vehicle mud flap, brake drum or drive shaft (three); other material, such as blanket, concrete, garbage can or wood (12); and unknown objects (18). No information

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was provided on the VRDD origin.

FARS data for 1999-2001 identified 1,164 crashes that might have been caused by VRRD. Because the FARS data do not include crash reports, each state with a related accident was asked to provide additional information concerning the VRRD involved. Thirty states responded providing information on 496 of the 1,164 accidents. Thirty-eight percent of the VRRD was described as lost cargo, and 38 percent was described as dislodged vehicle parts (including trailers that had separated from towing units). Twenty-two percent was unknown debris, and 20 percent was wheels, tires or tire treads. No information was provided on the origin of the VRRD.

While TRRID collects national crash data for Canada, the database does not include information to identify VRRD crashes. Each of the 13 Canadian provinces or territories was then contacted for specific data on VRRD crashes for 1999-2001. The five that responded identified 30 VRRD-related fatal crashes for the period. Yet a specific description of the VRRD involved was unavailable for all of the incidents.

The AAA study also requested data from road maintenance departments throughout the United States and Canada concerning the type and amount of road debris collected. The study identified the top five types of VRRD most frequently collected by road maintenance staff as tires/treads at 84 percent; garbage from waste haulers at 50 percent; lumber and

construction materials at 39 percent; transported gravel, soil and tree limbs at 32 percent and mufflers and exhaust parts at 26 percent.

While mufflers and exhaust parts could be considered loose auto parts, these should not be automatically attributed to loads of crushed cars. The respondents could not identify the origin of the material. Also, most loads of crushed cars are transported to scrap recycling facilities without mufflers and exhaust system parts. These parts may contain high concentrations of lead oxides and other heavy metals. If shredded, these parts could contaminate the shredder residue, making it difficult to dispose of or reuse. Since many shredder operators will reject these parts, most loads of crushed cars do not include them.

At the October 1998 meeting, a Quebec auto shredding company "sought information on the other organizations which had been contacted by the drafting group in preparing (the crushed car) section." However, no response to this inquiry was noted. The meeting minutes also indicate that "a number of other recycling organizations had only recently become aware of the standards harmonization initiative."

The drafting group was "directed to meet with various industry stakeholders in an effort to reach an acceptable solution for this section." The co-chairs requested that the drafting group resolve this issue with industry stakeholders by December.

TOO LITTLE, TOO LATE. The



crushed car requirements had been in development for more than two years without the involvement of any of the organizations that represented the affected industries. These requirements had become the most stringent of any of the proposed commodity-specific regulations without the existence of a single shred of validating data. Now, the trade associations representing the U.S. and Canadian recycling industries would be allowed only two months to research, develop and present their rebuttal.

ISRI and CARI, in consultation with ARA, met with the drafting group several times during the next two months. Video presentations showed how vehicles were either flattened or crushed and the common practices to remove or secure loose parts prior to loading the vehicles.

The drafting group would only agree to add the word "flattened" to the title of the requirements. The drafting group was adamant that, based on

the information it had reviewed, only a total containment system for loads of crushed cars would be acceptable. Unfortunately this information was not available for the recycling industry to review. The reason, it appears, is that it did not exist.

The renamed flattened and crushed car standard was included in the final rule and eventually adopted as U.S. and Canadian regulations.

After the U.S. Federal Motor Carrier Safety Administration adopted the new rule in 2002, ISRI obtained several clarifications from the agency. One was that cars compressed into logs or bales, in which the vehicle's metal is condensed into a solid article, would not require a containment system. The other clarification was that a containment barrier with holes, such as mesh or netting, would be acceptable provided that there are no holes or openings large enough to allow loose parts to fall from the vehicle.

These clarifications would provide

significant help towards compliance with the new cargo securement standard. Unfortunately, FMCSA never distributed its letter to state or local law enforcement departments that are responsible for enforcing the new regulation. Neither were these clarifications included in the agency's recent NPRM. Yet, the agency did include the clarification it had previously provided to a private transport company allowing a metal tie-down used for crushed cars to have a synthetic component.

We may never know all of the U.S. and Canadian transportation officials or their reasons for creating onerous regulations that have no basis in fact. Yet, we can marvel at their degree of coordination and cooperation that lead to such regulations. **✚**

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