Comments of the Canadian Council of Motor Transport Administrators
In response to

Notice of Proposed Rulemaking
Docket No. FMCSA-2005-21259
Parts and Accessories Necessary for Safe Operation:
Protection Against Shifting and Falling Cargo

Introduction

These comments are submitted on behalf of the Canadian Council of Motor Transport Administrators (CCMTA) in response to the Notice of Proposed Rulemaking published by the Federal Motor Carrier Safety Administration, Docket No. FMCSA - 2005-21259.

The CCMTA is a non-profit association of senior officials from Federal, Provincial and Territorial Departments and Agencies responsible for the administration, regulation and control of motor vehicle transportation and highway safety as mandated by the Council of Ministers Responsible for Transportation and Highway Safety. CCMTA has long been committed to the goals of improving highway safety and harmonizing motor vehicle, driver and carrier laws and their application within Canada and North America.

CCMTA is pleased to have been a partner with FMCSA in the development of a North American Cargo Securement Standard. This landmark, international collaborative effort between public and private sectors provided an excellent example of a productive process in support of the goals of improving highway safety and reducing unnecessary regulatory barriers to trade and transportation.

General Comments

CCMTA remains very supportive of the goal of achieving harmonized regulatory requirements respecting cargo securement based on the application of appropriate highway safety performance criteria.

In 2005 Canadian jurisdictions implemented new cargo securement regulations which largely mirror those introduced by FMCSA on January 1, 2004. Special care was taken in drafting the regulations to ensure that carriers would face the same requirements in Canada as in the United States.

However, it is evident that there are substantial challenges to be overcome if harmonized regulatory requirements are to be maintained between Canada and the United States. While cargo securement regulations intuitively offer one of the best possible test cases, the infrastructure to support close coordination appears to be lacking, and the rulemaking processes in each country serve to impair the opportunity for discussion and consensus building before regulations are changed.

In this context, CCMTA was disappointed with FMCSA's enforcement policy memorandum issued on December 31, 2003. In our view, some of the directions taken in this memo ran counter to critical and fundamental points of consensus which had been built over the previous ten years through the research and standard development phases. With regulatory and enforcement uniformity at stake, decisions of this kind with no opportunity for discussion prior to coming into effect, seriously jeopardize the prospect of maintaining regulatory uniformity.

The Notice of Proposed Rulemaking issued on June 8, 2005 proposes to formally adopt many of the provisions of the enforcement policy memo in regulation, and proposes a number of additional regulatory changes.

CCMTA appreciates the opportunity to comment on these proposals from a technical standpoint, but also from the perspective of partners in a common standard who hold responsibility for developing and managing highway safety regulations for the 1.8 million kilometers of public highways in Canada. Comments on each of the proposed changes can be found in the attachment.

In this regard CCMTA would like to reiterate its continued interest in establishing a more open partnership and productive dialogue in pursuit of harmonized cargo securement regulations in Canada and the United States. We are confident that the opportunity for greater discussion of proposed changes will yield the consensus necessary to achieve and maintain this goal.

While closer coordination may require additional time and patience to resolve issues, we believe the investment is necessary and worthwhile to reap the substantial benefits associated with improved highway safety and removal of unnecessary administrative barriers to efficient international transportation.

Sincerely

John B. MacDonald,
President
Canadian Council of Motor Transport Administrators

Comments on Specific Elements of the Proposed Rulemaking

Proposed Change 1 – Authority Citation

No comments

Proposed Change 2:
Definitions (Section 393.5)

Crib-type log trailer:
CCMTA is not prepared to support addition of the proposed definition in the Canadian standard at this time. There are concerns with the prospect of logs being transported in trailers that are not restrained by any tiedowns.

Metal Coil:
CCMTA does not support the proposed changes to the definition of metal coils. We believe further assessment of the implications of including coils of wire and other metal products in this definition is needed. To our knowledge the research and testing which led to the development of the requirements for metal coils did not consider or test coils of wire.

At minimum, we would propose that metal wire which is not packaged on a spool not be included in this definition, thereby allowing such products to be secured in accordance with the general requirements, rather than the commodity specific section for metal coils.

Proposed Change 3:
Updated Reference to National Association of Chain Manufacturers Standards April 2003 (Section 393.7 (b)(3))

CCMTA supports the proposed change.

Proposed Change 4:
Minimum Performance Criteria (Section 393.102 (c))

Section 393.102(c)
In our view, one of the most significant achievements arising from the research program and the subsequent deliberations was the establishment of a clear statement of the public policy interest in cargo securement. This provided the foundation for regulation and the basis for a sound, objective test of the adequacy of cargo securement systems.

We believe there was consensus among all parties who participated in the development of the North American Cargo Securement Standard on the following statement:

Cargo being transported on the highway must remain secured on or within the transporting vehicle under all conditions expected to occur in normal driving situations and when a driver is responding to emergency situations, short of a crash.

In drafting the North American Cargo Securement Standard, there was considerable discussion among experts regarding the nature and magnitude of forces that could be expected to occur on modern highway transport vehicles under "*normal driving situations and when a driver is responding to emergency situations, short of a crash*". CCMTA believes these debates concluded successfully with consensus among representatives from governments and industry on performance criteria of 0.8 g deceleration in the forward direction and 0.5 g in the lateral and rearwards directions. These criteria are similar to, and in

some cases not quite as high as, those which have been adopted in Great Britain, Europe, Australia and New Zealand.

CCMTA believes very strongly that these performance criteria are valid and reflective of the forces that can be and are experienced by cargo securement systems used on vehicles operating on public highways in North America. While it is acknowledged that heavy braking applications which generate 0.8 g deceleration are relatively rare occurrences, there appears to be little dispute that this performance is within the capability of most vehicles. It is our view that ensuring the cargo securement system is robust enough to match the capabilities of the transport vehicle is not only critical to highway safety, but is entirely consistent with the fundamental statement of public policy interest outlined previously.

In the preamble to the NPRM, FMCSA suggests that there should be a distinction between "*normal driving conditions*" and "*emergency situations, short of a crash*", from the perspective of the strength requirements of cargo securement systems. CCMTA does not support that view, and firmly believes that the Working Load Limit (WLL) of cargo securement systems should never be exceeded when subjected to forces resulting from both "*normal driving situations"* and *"when a driver is responding to emergency situations, short of a crash"*.

It is our understanding that most manufacturers of cargo securement equipment advise users that the Working Load Limit of their equipment should never be exceeded. It bears noting that document proposed by FMCSA for adoption under Proposed Change 3, the National Association of Chain Manufacturers April 26, 2003 edition of "Welded Steel Chain Specifications" includes the warning (Section 10):

"Manufacturers do not accept any liability for injury or damage which may result from dynamic or static loads in excess of the working load limit or used in a manner contrary to the manufacturer's instructions or recommendations."

The approach proposed by FMCSA acknowledges that the WLL of securement equipment would likely be exceeded whenever a driver encounters *"emergency situations short of a crash"*. Under these conditions, FMCSA indicates that it is prepared to assume that the additional capacity required to restrain the cargo in emergency situations can be found in safety factors, and consequently the breaking strength of the equipment would not likely be exceeded. From a highway safety perspective, we cannot support this approach and believe it would be irresponsible to knowingly allow the WLL of equipment to be exceeded.

There are many and growing reasons to assume that the safety factors present for new equipment are eroded over time due to minor damage through normal usage, exposure to the environment and aging.

In addition, it is reasonable to assume that a driver who has experienced an emergency manoeuver, but has avoided a crash, would continue his trip using the same securement equipment devices. In our view this would result in undesirable situations where cargo securement equipment and devices remain in continued usage after having been exposed (potentially several times) to forces beyond their Working Load Limits.

CCMTA was pleased to see that FMCSA embraced the performance criteria and the prohibition against exceeding Working Load Limits in its September 2003 final rulemaking:

§ 393.102 What are the minimum performance criteria for cargo securement devices and systems?

(a) *Performance criteria.* Cargo securement devices and systems must be capable of withstanding the following three forces, applied separately:
(1) 0.8 g deceleration in the forward direction;
(2) 0.5 g acceleration in the rearward direction; and
(3) 0.5 g acceleration in a lateral direction.

(c) *Prohibition on exceeding working load limits.*
Cargo securement devices and systems must be designed, installed, and maintained to ensure that the maximum forces acting on the devices or systems do not exceed the working load limit for the devices under the conditions listed in paragraphs (a) and (b) of this section.

CCMTA would strongly urge the Federal Motor Carrier Safety Administration to retain the approach and wording contained in its current regulation. As CCMTA is not prepared to adopt the proposed change in Canada's National Safety Code, introduction of this change would mark a fundamental point of diversion in our respective regulations.

Proposed Change 5:
Standards for cargo securement systems and devices (Section 393.104)

Section 393.104 (f)(4) – Rub rails
CCMTA acknowledges the compliance and enforcement difficulties which have arisen with inclusion of the term "whenever practicable" with respect to placement of tiedowns inboard of rub rails. However, rub rails are designed and installed on vehicles primarily to protect tiedowns from damage, and CCMTA continues to believe that tiedowns should routed behind rub rails whenever possible. Rather than remove this requirement from regulation, CCMTA would propose that it be phased in over a longer period to allow industry to make adjustments in both training programs and equipment.

Section 393.104 (b) and (c) – Damaged or weakened components
CCMTA acknowledges that modifications proposed attempt to clarify the intent to ensure that damaged or defective equipment is not used for cargo securement. However it is very difficult for carriers or inspectors to render consistent judgements on whether visible damage "will adversely affect their performance for cargo securement purposes". We believe the CVSA Out of Service criteria provide more practical guidance in this regard.

Proposed Change 6:
Determination of Aggregate Working Load Limit (Section 393.106)

CCMTA is opposed to the proposed change. As written, the proposal will reduce the contribution of direct tiedowns to determination of aggregate Working Load Limit by 50%. This represents a fundamental change from the approach proposed in the Model Regulation completed in May 1999, and will establish a serious conflict with the provisions of Canada's National Safety Code, which contains the following language:

"the "aggregate working load limit" is the sum of one-half of the working load limit for each end section of a tiedown that is attached to an anchor point"

In the National Safety Code anchor points can be on either the vehicle or cargo, and are defined as "part of the structure, fitting or attachment on a vehicle or cargo to which a tiedown is attached".

CCMTA also believes that FMCSA's proposed change would create a strong disincentive for carriers to use tiedowns that attach to the cargo. In our view this could prove detrimental to highway safety, as the research program carried out in support of this standard clearly demonstrated that direct tiedowns provide a much more reliable and predictable level of securement than indirect tiedowns.

Proposed Change 7:
Addition of "friction mat" to title (Section 393.108)

CCMTA supports the proposed change.

Proposed Change 8:
Determination of the minimum number of tiedowns (Section 393.110)

CCMTA supports the proposed change.

Proposed Change 9:
Front End Structures (Section 393.114)

No comments.

Proposed Change 10:
Logs (Section 393.116)

Section 393.116 (b)(3)(i) – crib-type log trailers
CCMTA does not support this change, and will continue to require tiedowns to be used on such trailers in Canada.

Section 393.116 (b)(4) – minimum aggregate WLL of tiedowns
CCMTA supports this change in part – this provision has already been implemented in Canada for logs loaded lengthwise. However we believe that further discussion is required with industry on the practicality of applying this provision to logs loaded crosswise.

Section 393.116 (e)(2)(ii) – tiedowns as wrappers
While CCMTA supports the clarification that tiedowns used as wrappers do not need to be attached to the vehicle, we believe this provision should only apply to logs transported on pole trailers.

Proposed Change 11:
Dressed Lumber (Section 393.118)

CCMTA is supportive of the proposed change, provided the requirement for a minimum of two tiedowns over bundles longer than 1.52 m on the top tier has not been removed (393.118 (d)(3)(iv)(A)).

Proposed Change 12:
Paper Rolls (Section 393.122)

Section 393.122 (b)(4) – paper rolls with eyes vertical
CCMTA is supportive of this proposed change, but would suggest that the opportunity be taken to provide further clarification regarding securement of single rolls of paper, in addition to paper rolls transported in groups. In this regard the following alternative wording is suggested:

(*4)(i) If a paper roll is not prevented from tipping or falling sideways or rearwards by vehicle structure or other cargo, and its width is more than 2 times its diameter, it must be prevented from tipping or falling by banding it to other rolls, bracing, or tiedowns.*
(ii) If a single paper roll or the forwardmost roll in a group of paper rolls has a width greater than 1.25 times its diameter, and it is not prevented from tipping or falling forwards by vehicle structure or other cargo, and it is not restrained against forward movement by friction mat(s), then it must be prevented from tipping or falling by banding it to other rolls, bracing or tiedowns.
(iii) If a single roll or the forwardmost roll(s) in a group of paper rolls has a width greater than 1.75 times its diameter and it is not prevented from tipping or falling forwards by vehicle structure or other cargo, then, it must be prevented from tipping or falling forwards by banding it to other rolls, bracing, or tiedowns

Section 393.122 (d)(4) – stacked loads of paper rolls
CCMTA does not support this change – the original proposed Model Regulation and National Safety Code Standard 10 prohibit raising rolls in the last row on dunnage.

Proposed Change 13:
Intermodal Containers (Section 393.126)

CCMTA supports this proposed change

Proposed Change 13:
Flattened or Crushed Vehicles (Section 393.132)

CCMTA supports the intent of the proposed change, but is concerned that some form of protection should be required to protect the synthetic webbing portion of tiedowns from being cut or damaged by the cargo.