

proponents of driver retraining at the time of license renewal. Other respondents suggested retraining on a 4- to 10-year cycle, or as needed. The Maine State Police believes that once training and certification are obtained for the operation of LCVs, repeat training is not necessary. The UPS requires each of its LCV drivers to be accompanied by a UPS driver-trainer for a "certification ride" which is conducted for a period of 8 to 10 hours every 3 months. The driver is notified of any deficiency or discrepancy noted by the driver-trainer and must take immediate corrective action.

With regard to instructor training, suggestions ranged from never to every 10 years. Among the reasons commenters gave for requiring retraining were: that the instructor had not taught for more than a specified time (often one year); that the curriculum requirements had changed; or that industry technology had changed, since the instructor became qualified.

Question 13: Do specialized vehicle combinations such as triples or those handling special cargo require different training standards?

Comments: Nine of the twelve commenters supported different training requirements for specialized vehicle combinations. It was generally agreed that the focus should be upon the handling characteristics of the vehicle except when special commodities (liquids in bulk, hanging meat, etc.) are being transported. The Specialized Carriers and Rigging Association believes " * * * Training should focus on vehicle handling characteristics and not on type of cargo being transported. Vehicle combinations that are overweight or overlength because of special cargo do not require different training standards. All LCV drivers should have training which focuses on vehicle handling characteristics (not on types of cargo being transported) and that the driver will have basic knowledge and operating skills necessary for awareness that vehicle handling characteristics change with variations in size, weight and nature of the load being transported."

Section Analysis

This section of the Supplementary Information discusses *only those sections* of the proposed rule for which the FMCSA believes additional information may be required to facilitate an understanding of this NPRM.

Rule Effective Date

Question 9 in the ANPRM asked whether a phase-in period would be

necessary. This question anticipated the need for States to adopt enabling legislation to implement the new requirements. Because this proposal includes no requirement applicable to States, the agency believes that a 2-month phase-in period is adequate and would provide sufficient time to develop the required training curriculum. The effective date of the rule would be 2 months after its publication in the **Federal Register**.

Subpart A—Longer Combination Vehicle (LCV) Driver-Training and Driver-Instructor Requirements—General

Section 380.105 Definitions

Six of 13 respondents to Question 1 recommended that the agency amend the definition of an LCV to include multiple-trailer combinations operating with a GVW less than 80,000 pounds. They believe that the number and size of the trailers are more important than weight and that LCVs should be easily identifiable for enforcement purposes. The ISTEA LCV definition would subject a relatively small segment of multiple-trailer combination vehicle drivers (approximately 35,000) to the LCV training requirements. The most commonly operated MTCVs are twin trailers, also known as "Western doubles," and they are usually not operated at a GVW greater than 80,000 pounds. Revising the definition of an LCV to embrace only the number and size of trailers would significantly increase the number of drivers who are subject to this rule. Because agency research has not indicated a significant safety problem in LCVs or multiple trailer combination vehicles, the FMCSA is not proposing here to require such training for a larger vehicle population. FMCSA believes it can ensure a minimum level of safety by fulfilling the statutory requirement to publish minimum standards for operators of LCVs with a GVW greater than 80,000 pounds and instructors of these drivers.

In 1996, the agency conducted a study to determine, among other things, the relative accident rates, in accidents per million vehicle miles traveled (VMT), of LCVs and non-LCVs. The study findings were published in a final report entitled, *Accident Rates for Longer Combination Vehicles*, Publication No. FHWA-MC-97-003. A copy of the report is in the public docket. Seventy-five commercial motor carriers participated in this study. All participants operated both LCVs and non-LCVs. Significant findings were as follows:

- For the 75 carriers examined in the study, LCVs were much less likely than non-LCVs to be involved in accidents. These findings pertain only to the carrier population from which the study sample was drawn.

- Among study participants, the mean accident rate was 0.88 accidents per million VMT for LCVs versus 1.79 accidents for non-LCVs; in other words, non-LCVs were more than twice as likely as LCVs to be involved in accidents. The difference in the mean accident rates was found to be statistically significant.

- LCVs and non-LCVs had nearly equal probabilities of involvement in fatal crashes. When fatal and injury crashes were examined in tandem, however, the LCV accident rate was 50 percent lower than the non-LCV rate.

- Non-LCVs were 1.1 times more likely than LCVs to be involved in collisions, and 1.8 times more likely to be involved in non-collisions²; these differences were statistically significant. Rocky Mountain Doubles were less likely than Turnpike Doubles and STAA Doubles/GVW Over 80,000 pounds to be involved in collisions.

- LCVs were almost twice as likely as non-LCVs to overturn, and LCV Doubles were more likely than tractors-semi-trailers to jackknife.

In September 1999, the agency published an Analysis Brief entitled "Longer Combination Vehicles Involved in Fatal Crashes, 1991–1996," FHWA-MCRT-99-018. Based on the data presented in the brief, no conclusions could be made on the relative safety of LCVs compared to other truck combinations. First, the data on mileage driven is based partly on weight. Second, since travel by LCVs is rare, it is difficult to calculate the precise number of miles driven. Similarly, LCV fatal crashes are so infrequent that the number varies greatly from year to year. For example, LCV crashes dropped from 46 in 1992 to 31 in 1993 (down 33 percent), then rose to 43 in 1994 (up 39 percent). Based on the existing data, LCVs do not appear to be considerably more or less safe than other combination trucks. A more definitive conclusion would require further collection of data and additional analysis.

FMCSA recognizes that there are different names for different multiple trailer combinations in different parts of the country. The research completed under contract to the FMCSA to develop the "Multiple-Trailer Combination

² A non-collision is a commercial vehicle accident in which the primary event does not involve hitting another object. Non-collision accidents include jackknives, overturns, fires, cargo shifts and spills, and running off the road.