

Trucking Litigation How to Get and Stay on the Road

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Trucking Litigation

How to Get and Stay on the Road

I. INTRODUCTION

Trucking is a heavily regulated industry and is governed by federal law through the Federal Motor Carrier Safety Administration and individual States. The Federal regulations are found at 49 CFR, parts 200 to 399 ("FMCSA"). In October of 1989, the Texas Department of Public Safety ("DPS") began enforcing the federal FMCSA. The DPS adopted Parts 390-393, 395-395 of the FMCSA, but with some Texas revisions and amendments. These regulations apply to commercial vehicles and operators of commercial vehicles, and all vehicles transporting hazardous materials requiring placarding as a commercial motor vehicle.

II. WHAT IS A MOTOR CARRIER?

A. Definition of Motor Carrier and Commercial Vehicle Under the Regulations.

The Federal and Texas regulations differ on how a commercial vehicle is defined. The FMCSA defines a motor carrier as a for hire motor carrier that operates in public service or in private service. The FMCSA defines a commercial motor vehicle as any vehicle used in interstate commerce to transport passengers or property that has a gross weight or gross combination weight rating of 10,001 pounds or more, or has the capacity to transport more than 8 passengers (including the driver) for compensation, or is designed or used to transport more than 15 passengers (including the driver) and is not used to transport passengers for compensation. §390.5.

Texas regulations apply to vehicles operating in interstate and intrastate commerce, with a gross weight in excess of 26,000 pounds, and in excess of 48,000 pounds or more for farm vehicles, vehicles transporting 15 or more passengers, and vehicles transporting hazardous material requiring a placard. § 390.5.

A commercial driver's license ("CDL") is required for all regulated vehicles.

B. Exceptions Under the Regulations – §390.3(f)

1. Farm vehicles under 48,000 pounds.
2. Oil and water well-servicing or drilling vehicles, which are permanently constructed as a machine, consisting of a mast, engine for power, a dry works, and a chassis.
3. School buses.
4. Fire and rescue trucks.
5. Federal or state transportation vehicles.
6. Vehicles carrying corpses or sick and injured persons.

III. DUTIES OF MOTOR CARRIERS

A. Driver Qualifications - § 391.11

Not everyone is allowed to drive a commercial motor vehicle. To qualify, you must

1. must be at least 21 under FMCSA, and at least 18, under the Texas regulations. § 391.11(b)(1).
2. not required to be able to read and speak English in Texas. § 391.11(b)(2).
3. must not be otherwise disqualified to drive a commercial vehicle under FMCSA § 391.15. § 391.11(b)(7).
4. carrier must obtain the driver's background information: name, current address, date of birth, social security number, driver's license number, list of accidents and moving violations for the preceding 3 years, residences for the preceding 3 years, and employers for the preceding 3 years, under §391.21.

5. carrier must contact and maintain information on contacts with the driver's past employers where the driver operated a commercial vehicle for the preceding 10 years, and with all state department of motor vehicles where the driver held a license during the preceding 3 years, under §391.23.

6. must have a current CDL from 1 State. §391.11(b)(5).

7. must complete a road test and be issued a certificate under § 391.31, or in lieu of a road test, present a CDL issued within the preceding 3 years, under §391.33. §391.11(b)(8).

8. must be medically certified as physically qualified to drive, under §391.41-49 and §391.11(b)(4).

B. Physical Qualifications – §391.41

Generally, a driver cannot suffer physical impairment, which interferes with his ability to safely operate a commercial vehicle.

Specifically, a driver is absolutely disqualified for having:

1. a history of clinical diagnosis of epilepsy
2. insulin-dependent diabetes
3. less than 20/40 vision
4. hearing loss.

Also, based upon the judgment of a medical examiner, a driver can be disqualified for having:

1. loss of limb
2. impairment of extremities to interfere with driving of commercial motor vehicle
3. a history or clinical diagnosis of:
 - a. respiratory dysfunction
 - b. cardiovascular disease connected to syncope or failure

c. high blood pressure

d. neurological, orthopedic, or muscular disease that interferes with driving a commercial vehicle

e. mental disorder that interferes with driving a commercial vehicle

f. alcoholism

g. use of Schedule 1 drugs.

C. Driver Disqualifications - §391.15

Driver disqualification can occur during the hiring process or during the time of employment, whenever the employer discovers a disqualifying offense. The disqualifying offenses are:

1. failure of a driver to notify his employer by the next day after receiving a notice. §391.15(b)(2).

2. revocation, suspension, withdrawal, or denial of an operator's license, permit, or privilege. §§391.15(a) and (b)(1)

3. conviction of a disqualifying offense under the regulations, and the offense was committed on duty time and the driver is employed by a motor carrier or otherwise engaged in activities in furtherance of commercial enterprise, interstate, intrastate, or foreign commerce. §391.15(c)(1)

4. conviction for driving under the influence of alcohol while driving a commercial vehicle, 0.04 or more, while on-duty, or DUI as prescribed by state law. §391.15(c)(2)(ii).

5. refusing to undergo testing required by the state or enforcing jurisdiction enforcing driving under the influence. §391.15(c)(2)(ii).

6. driving a commercial vehicle under the influence of, or transporting of, a controlled substance such as an amphetamine, narcotic, or their derivative, while on duty. §391.15(C)(2)(ii) and (iii).

7. leaving the scene of the accident while operating the commercial vehicle, under §391.15(c)(2)(iv).

8. violation of out of service orders which result in, if there is a conviction, a disqualification of 90 days to 5 years, depending on whether it is a first, second, third, or more frequent violation. §391.15(d).

9. commission of a felony involving the use of a commercial vehicle. §391.15(c)(2)(v).

Duration of disqualification:

1. 1 year after the conviction or forfeiture of bond if, during the 3 years before that date, he was not convicted of a disqualifying offense under these regulations. §391.15(c)(3)(i).

2. 3 years after the conviction or forfeiture of bond if during the 3 years prior to that date, he was convicted of a disqualifying offense under these rules. §391.15(c)(3)(ii).

D. Employment Application - §391.21(b)

Each application must be on a form furnished by the motor carrier and contain the following information:

1. name and address of the motor carrier;
2. signature of the applicant;
3. applicant's name and address, date of birth, social security number, and application date;
4. applicant's prior addresses for the last three years;
5. a copy of the applicant's commercial motor vehicle license or permit, including the issuing state, number and expiration date;
6. applicant's experience and type of equipment operated;
7. list of all motor vehicle accidents in which the applicant was involved during the 3 years preceding the date the application is

submitted, specifying the date and nature of each accident and any fatalities or personal injuries it caused;

8. list of all violations of motor vehicle laws or ordinances (other than violations involving only parking) of which the applicant was convicted or forfeited bond, during the preceding three years;

9. a statement detailing the circumstances of any denial, revocation or suspension of a license, or a statement that no such denial revocation or suspension has occurred; and

10. listing of the applicant's previous employers for the preceding three years, the dates employed, the reason for leaving, and whether the applicant was subject to the FMCSA's at that employment, or whether the job was designated as a safety sensitive mode subject to alcohol and control substance testing requirements.

E. Annual Review of Driving Record - §391.25

At least every 12 months, the motor carrier must prepare an annual review of the driver's record, for the preceding 12 months, to determine whether the driver is minimally qualified for driving a commercial vehicle, or under §391.15, is disqualified. §391.25(b). In the review, the carrier must:

1. consider any FMCSA violations
2. consider the driver's accident record, and any violation of laws governing operation of motor vehicles, emphasizing violations such as speeding, reckless driving, and driving under the influence of alcohol and drugs, that indicate a disregard for the safety of the public.
3. maintain the response from a state agency in the driver qualification file with a note indicating the person performing the review and the date of review. §391.25(c).

F. File Maintenance

1. Driver Qualification File - §391.51

Each motor carrier shall maintain a driver qualification file, which may be combined

with his/her personnel file, for each driver it employs. Each driver's qualification file shall be retained for as long as a driver is employed by that motor carrier and for three years thereafter. The qualification file for a driver must include:

- a. The driver's application for employment completed in accordance with § 391.21.
- b. A copy of the response by each State agency concerning a driver's driving record. Sec. 391.23(a)(1).
- c. The certificate of driver's road test issued to the driver pursuant to §391.31(e), or a copy of the license or certificate which the motor carrier accepted as equivalent to the driver's road test pursuant to §391.33;
- d. The response of each State agency to the annual driver record inquiry required by § 391.25(a).
- e. A note relating to the annual review of the driver's driving record as required by §391.25(c)(2).
- f. A list or certificate relating to violations of motor vehicle laws and ordinances required by §391.27.
- g. The medical examiner's certificate of his/her physical qualification to drive a commercial motor vehicle as required by §391.43(f) or a legible photographic copy of the certificate.
- h. A letter from the Regional Director of Motor Carriers granting a waiver of a physical disqualification, if a waiver was issued under §391.49.

2. Driver Investigation History Files – §391.23

Since October, 2004, each carrier must maintain records relating to the investigation into the safety performance history of a new or prospective driver pursuant to paragraphs (d) and (e) of §391.23. The carrier must maintain this file in a secure location with controlled access, and must ensure that access to this data is limited to those involved in the hiring decision or who

controls access to the data. However, its carrier may have access to the data, except for the alcohol and controlled substances data.

The file must include:

- a. A copy of the driver's written authorization to seek information about a driver's alcohol and controlled substances history as required under § 391.23(d).
- b. A copy of the responses received for investigations required by §391.23 from each previous employer, or documentation of good faith efforts to contact them. This record must include the previous employer's name and address, the date the previous employer was contacted, and the information received about the driver from the previous employer. Failures to contact a previous employer, or of them to provide the required safety performance history information, must be documented.
- c. The safety performance histories received from previous employers for a hired driver, must be retained for as long as the driver is employed by that motor carrier, plus 3 years thereafter.

All records and information in this file must be made available to an authorized representative or special agent of the FMCSA, an authorized State or local enforcement agency representative, or an authorized third party, upon request, or as part of any inquiry within the time period specified by the requesting representative.

IV. MAINTAINING RECORDS AND HOURS OF SERVICE - §395

A. Maintenance of Driver Log - §395.1

Truck drivers maintain their own hours of service and duty status for any 24-hour period.

1. Under the FMCSA, log entries are required for drivers operating in interstate commerce. However, if the driver is operating inside of a 100 air mile radius of the work reporting location, then no log need be maintained.

2. Under Texas Regulations, log entries are not required for drivers operating within a 150 air mile radius of the work reporting location.

3. Carriers must retain duty status records and all supporting documents for each driver it employs, for six months from receipt.

B. Hours of Service – § 395.3

1. Under the FMCSA

a. limit of 11 hours driving following 10 hours consecutive off-duty time under §395.3(a)(1).

b. any period of 7 or 8 consecutive days may end with the beginning of any off-duty period of 34 or more consecutive hours under §395.3(c)(1) and (2).

c. no driving after being on duty for 60 hours in 7 consecutive days (if carrier doesn't operate commercial vehicles every day), or 70 hours in 8 consecutive days (if the carrier does operate commercial vehicles every day). §395.3(b).

2. Under Texas Regulations

a. limit of 12 hours driving time following 8 consecutive hours off-duty

b. no driving after being on duty for 15 hours, following 8 consecutive hours of off-duty

c. no driving after working and or driving for 70 hours in any consecutive 7-day period.

d. a driver may restart a consecutive day period after taking 34 or more hours off-duty.

V. FORMS FOR COMPLIANCE

Various forms used for compliance can be found with the state trade association involved, which in Texas that is the Texas Motor Transportation Association, Inc., 700 East 11th Street, Austin, Texas 78701, (512) 478-2541, www.tmta.com.

VI. THE ACCIDENT . . . HANDLING THE CLAIM

A. At the Scene – What Now?

The investigating officer will fill out a Form SR-3, which is the standard Texas Peace Officer's Accident report. If a commercial motor vehicle is involved, the Officer must also a Form ST-3C, the Commercial Motor Vehicle Supplement, which gives more information about the driver and the carrier, including the carrier number.

After some accidents, a DOT roadside inspection may be done. In Houston, the HPD Truck Enforcement Unit does these inspections. In rural counties, the DPS officer may bring in a Weights and Measures Officer to do the inspection. The officer checks whether or not the driver's logs are up to date, and whether the truck had roadworthy tires, lights, and other equipment. In some instances, the officer will put the truck or the driver "out of service". The officer may find that the driver exceeded his hours of service or has a controlled substance in his blood, or is otherwise disqualified from driving. The rig may be disqualified due to damage incurred in the accident, or it may be disqualified for violations of the FMCSA. The truck air brakes may be out of adjustment, the load may not be fastened down sufficiently, or any other reason stated in the regulations. Depending on the severity of the violation, the driver may be ticketed by the inspector. In other words, it is possible for the investigating officer to find a driver's conduct to not be a contributing fact to the accident, but the driver is ticketed as a result of the post-accident roadside inspection.

If a commercial motor vehicle is placed out of service due to damage incurred in a collision, §396.9(d)(3) requires the rig be repaired, the repairs be noted on the Roadside Inspection Form issued to the driver, and the form returned to the police agency that did the inspection. If you get into a truck accident case late, the rig may already be repaired. It obviously is not spoliation if the motor carrier obeys the

regulations and destroys valuable reconstruction data while doing the repair.

Must the driver undergo a post-accident blood or urine test after the collision? Maybe. Section 382.303 controls post accident testing with the following qualifications:

	Citation Issued?	Test Required?
Fatality accident?	YES NO	YES NO YES
Bodily injury with treatment away from scene?	YES NO	YES NO
Property damage and vehicle disabled and towed from scene?	YES NO	YES NO

Ideally, the post-accident test has to be taken "as soon as practicable." No exact time is required, but if alcohol is suspected and the test is not administered in 2 hours after the collision, the carrier must prepare and maintain a statement of reasons why the test was not given in that time. If controlled substances are suspected, the employer has up to 32 hours.

B. Electronic On-board Data Systems/ the "Black Box"

Commercial motor vehicles usually carry an event data recorder as a part of the engine electronic control module. The major makes of engine are Detroit Diesel, Mercedes, Caterpillar, Mack and Cummins. All have different electronic data recording capabilities. For the Detroit Diesel engines, downloading is fairly easy; for the Mack, you must have the factory do the download; for the others, customer options control whether the data was even recorded. Thus,

to successfully get data from an event data recorder, you must know the make, model and year of the engine in your truck. However, because truck engines are easily replaced, you should consider that the engine in any given truck may not be the same engine it had when it left the factory.

Downloading event data information is not a simple matter. Event data recording can be easily overwritten and reset unintentionally. Make sure any person who you retain to download that information saves the information and does not reset nor change the operating parameters. A sloppy download can destroy data, easily creating a problem with spoliation.

What information can you get from event data recorders? These are just some of the data one case get:

1. Control of engine operating parameters, including the top vehicle speed setting and the engine governor.
2. Monitoring of driver habits including his braking style and details regarding his last stop.
3. Engine fault code recording.
4. Maintenance information such as last oil changes, etc.
5. Engine fault code recording along with maintenance reset.
6. Vehicle speed, braking, engine RPM and air system pressure before the crash and after.

The most detailed readout comes from the Detroit Diesel "DDEC IV" unit. Available data gives a second-by-second readout of speed, engine RPM, brake and clutch usage, hard brake usage, fuel usage. You should keep in mind that event data recordings were invented for fleet management, not as a means to support trucking litigation. The kind of data kept, or not kept, is a function of fleet management practices.

Because event data recordings can be easily lost or spoiled, time is of the essence and

speed necessary to this data in a manner that makes it legally admissible over challenges. Consider seeking an immediate temporary restraining order to preserve the tractor and prohibit the tractor's engine from being turned on after the collision. On some black boxes, just turning on the engine may destroy the data.

Engine event data recordings are the property of the vehicle owner. You must have written permission from the owner to download the data recording. Do not download the event data without permission or a court order.

On some collisions, it may be necessary to remove the black box from the crashed truck and instead download the event data recorder by means of a "truck in a box", a sophisticated device that allows the simulation of an operating truck for the event data recorder. Otherwise, valuable data will be lost in the limited memory because of sensor signal inputs from destroyed sensors. Your request for a temporary restraining order or your letter to all affected parties should give advance notice of your intent to take out the event data recorder.

QualComm data is different. QualComm units on trucks are satellite receivers and transmitters. Essentially, a QualComm unit is a tattle-tail, reporting the truck's whereabouts at a frequency the customer specifies. Some units are capable of sending text messages to the home office from the truck and receiving text messages. QualComm, Inc.'s sales pitch includes potential usages such as on-board panic buttons, driver authentication and tamper detection alerts, remote disabling of the truck in the event of a security breach due to on-board tamper detection or invalid driver log-in, and geo-fencing for alerting the trucking company when the vehicle enters restricted areas or leaves its designated route.

What you get when you finally obtain the QualComm data may not be what you think. The data listing is a series of geographic waypoints that are hard to interpret in the context of roadways, distances, and other variables. Usage of the data requires a lot of

derivative inferences for direction, speed, and the like, making the QualComm data something for experts to fight over.

QualComm text messaging may result in admissions against interest. If a driver sends a text message to the home office like "Wreck. Ran over vehicle I did not see", it may prove critical to the subsequent litigation. GPS data in the QualComm data may be sufficient to show inaccuracies in driver log books and other records as well. Not all motor carriers get the full available range of QualComm options and just getting a listing of periodic GPS coordinates may be all you get.

C. Securing On-Board Data/"Black Box" - A New Statute - Tex. Trans. Code §547.615, effective 9/1/2006

House Bill 160, now codified as TEX.TRANS.CODE §547.615 details the legal requirements for downloading event data recorders. To download black box data after that date, one must get the consent of the vehicle owner or get a court order. Section 547.615(c) and (d) controls the reasons for which a court order may be obtained, which are limited to:

1. To "protect public safety" and
2. the information is evidence of an offense or constitutes evidence that a particular person committed an offense."

In other words, event data recorder printouts may soon be a staple of criminal court proceedings.

Unknown at this time is what evidentiary showing will satisfy the "public safety" specification. Conceivably, a given judge may conclude your request to get a potential adverse driver's Black Box data may not affect the public or increase any public safety and therefore deny access.

VII. INVESTIGATION "AFTER" THE WRECK

A. Plaintiff's Perspective

1. Secure complete copy of police report. Make FOIA request if necessary

2. Consider a Temporary Restraining Order to retain valuable information and preserve the vehicles as evidence to give you time to have an accident reconstructionist inspect the vehicles and download any on board computer or tracking systems.
3. Photograph scene with your expert as quickly as possible.
4. Do an internet search of media links for their scene investigation data, video footage of the accident and/or witness interviews.

5. Consider using a TRCP 202 proceeding to do discovery depositions

- a. Authorizes depositions in anticipation of lawsuit
- b. 202.2 Petition requires these items
- c. verification
- d. filed in a proper county
- e. where venue of the anticipated suit may lie; or
- f. where residence of witness, if no suit is anticipated
- g. indicate suit will be filed or that petitioner wishes to investigate a potential claim by or against petitioner
- h. list the subject matter of anticipated action
- i. disclose the identity of the persons who may be adverse to the petitioner or whose interests may be adverse but cannot be ascertained through diligent inquiry
- j. list the persons to be deposed and the substance of their expected testimony and the petitioner's reasons for desiring to obtain the testimony of each
- k. request an order authorizing the petitioner to take the deposition of the persons named in the petition

2. Letter of representation with a request for the preservation of evidence such as ECM's, driver logs, the tractor/trailer, if practicable

B. Defendant's Perspective

1. The Driver reports accident to the carrier (the first phone call or QualComm text message)
2. Internal Management of the motor carrier reacts
 - a. First Response Initiated
 - b. Assign outside adjuster to begin information collection
 - c. Notify primary liability carrier
 - d. Make the determination to conduct on scene investigation by motor carrier
 - e. Contact and control the driver, and caution him to avoid making any statements
 - f. Contact external defense counsel to administer the investigation
 - g. Retain qualified accident reconstructionist to view the scene and preserve the physical markings and their location for a later reconstruction.
 - h. On site investigation
 - i. Interviews
 - j. Claimants, if possible
 - k. Witnesses
 - l. Police and investigative authorities
 - m. Fire department
 - n. EMS/Paramedics
 - o. Towing company personnel
 - p. Photographs
 - q. Measurements of skids, pavement markings, etc.

r. Consider meeting each witness and taking a formal statement if they will cooperate

s. Affidavits of witnesses

t. Media contacts

u. Hazardous material clean up

3. Management of driver and vehicle - post accident

a. Driver medical condition

b. Emotional condition of driver

c. Drug & alcohol testing

d. Criminal proceedings, if any. Does the driver need criminal defense counsel?

e. Rule out fatigue issues

f. Vehicle inspections

g. Data retention (logs, fuel receipts, bill of lading)

h. Tracking systems

i. Qualcomm - positioning history

j. Qualcomm - message history

k. Electronic vehicle data/black box downloading

l. Vehicle securement and disposition. Please see the discussion on the Black Box.

4. Legal analysis by defense counsel

a. Comparative negligence, joint and several liability

b. Punitive damage exposure

VIII. THE ACCIDENT - HANDLING THE LAWSUIT

A. Suit Has Been Filed - What Discovery Is Really Needed from the Motor Carrier?

Litigation has started, but what do you ask for in discovery? Always make a request to the motor carrier for the following information:

1. The Driver Qualification File.

2. The Driver's logs for the two week period before the accident.

3. The maintenance records for the tractor and trailer involved in the accident, for the year before the accident.

4. Any post-accident drug or alcohol test records.

5. The pre-trip inspection records for the two weeks before the accident.

6. The cargo papers, such as the bill of lading, weight tickets.

7. Any trip records, like the fuel tickets, reimbursable expense tickets, etc.

8. Any QualComm readouts for the two-week period before the accident.

9. Carrier's safety policy and procedures.

10. Attendance records of drivers to company safety meetings.

The two-week period is a reasonable parameter to separate meaningful, relevant data and the irrelevant, overbroad, harassing and burdensome requests for documents. Clearly, Plaintiff's counsel has a legitimate right to determine whether the driver was overworked, out of service hours, or was too tired to be driving at the time of this collision. Conversely, plaintiff's requests seeking production of information dating back more than a year prior to the accident are simply irrelevant.

After the paper discovery has been exchanged, the parties may consider the following depositions:

1. Plaintiff and passengers, if any

2. Truck driver

3. Motor carrier's safety director

4. Dispatcher (optional)
5. Investigating police officer
6. Significant eyewitnesses
7. Co-driver (if applicable)
8. Motor carrier's accident expert

B. Do Your Own Research.

You do not have to wait for discovery to begin to start your office research. Along with getting every accident participant's criminal record from sources like www.Publicdata.com and every participant's driving record from the DPS, you need to hit other sources. The best source by far is the Federal Motor Carrier Safety Administration's (FMCSA) web page at <http://www.fmcsa.dot.gov/>. This site (as currently constructed and published) includes links to a wide variety of databases and other sites yielding information of significant value. For example, one can obtain licensing and insurance information on authorized for-hire motor carriers. Such information was long available under the Freedom of Information Act (FOIA) but, with the Internet, it is instantly available on your computer screen in a printable format.

As a further example, you can discover how much insurance a potential adverse trucking company carries, what the policy or policies cover, and by whom such policies are underwritten. Since the availability of trucker's insurance can assure the collection of any potential judgment, this information can be of strategic importance.

The FMCSA site also provides links to several very useful sites, among them the Motor Carrier Analysis and Information on-line site, which can be found at <http://ai.volpe.dot.gov/mcspa.asp>. This site contains a motor carrier's "SafeStat" data, along with other useful information, such as the number of fatal accidents a trucking company reported in the past 30 months. The site also contains a carrier's "SafeStat" ranking, which determines the current relative safety status of individual motor carriers in comparison to the industry as a whole. The SafeStat ranking is more

oriented to FMCSA regulatory purposes than it is to litigation, in that may be used by the FMCSA to determine when a trucking company should receive an onsite FMCSA compliance review. The SafeStat score is also a tool used to determine if police authorities will subject a driver and his rig to a random roadside DOT inspection.

Whether you are defending a motor carrier or representing a plaintiff injured in a trucking accident, it is helpful to know whether the FMCSA considers this trucking company to have a poor safety record. The fact that the SafeStat rating recommends that a company's trucks be subjected to roadside DOT inspections at every opportunity is also important. It can easily lead to questions as to whether or not an alleged negligent driver's rig was improperly maintained, had deficient equipment, or was not roadworthy at the time of the accident.

Another useful web page is the Safety and Fitness Electronic System, or the "Safer System," found at <http://www.saferysys.org>. This information site keys to each carrier's DOT number. When entered, the site gives a "carrier snapshot" of a particular trucking company, including addresses, number of power units, drivers, and types of cargo carried. The snapshot also gives a capsule of inspection history, including a comparison of out-of-service percentages to the national averages. The snapshot gives crash statistics for 24 months and the results of the last Agency compliance review. Insurance information for liability and cargo purposes is provided. For the really curious, the snapshot offers a direct connection on the subject of the carrier snapshot to the Analysis and Information site and the SafeStat information we already discussed.

C. Use the Texas Open Records Act – Tex. Gov't Code §552.221

Frequently, what you get from the Texas Peace Officer's Report may be enough. However, you might want more, such as the officer's handwritten notes, his raw measurement data, and other information. Always do an open records act request to the investigating police agency for all file materials. In our experience, the officer's

handwritten data might even include previously unknown witnesses.

D. What Do You Need in Your Trucking Library?

We recommend the following:

1. The TMTA Texas Motor carrier Safety Regulations book, most recent edition. This handy volume discusses the Texas "amendments" created by DPS, which may affect the outcome of various issues, such as whether a 19-year-old driver can drive a Commercial motor vehicle (yes in Texas, but not in interstate commerce) and other local wrinkles.

2. A hard copy of 49 CFR subparts parts 200-399. This volume is the Federal Motor carrier Safety regulations and is the "law" for commercial trucking. You can get this over the Internet, but the bound volume lets you search faster and read more.

E. The Art and Science of Reconstructing Truck Accidents

Collisions involving trucks are high-energy events. Reconstructing those accidents is a specialized form of reconstruction and you need a re-constructionist experienced and qualified in handling trucking accidents. Each accident is unique with its own set of facts. The following is a "short list" of items you may need to discuss with an accident expert to evaluate the relative strengths and weaknesses in the case.

Inappropriate crush data: What crushes a target vehicle is the energy of the vehicle hitting the target vehicle and not its speed. 18-wheelers weigh up to 80,000 pounds. If your accident reconstructionist does not take this weight into account, he/she will overestimate the speed of the impacting 18-wheeler. If you go into a trial expecting to show the defendant's 18 wheeler was moving at 87 mph before impact and your reconstructionist's error comes out and the true speed at impact is really 45 mph, your case has a major last second problem.

Air brake lag time. Air brakes have a built in 0.5 second lag time before they start working. At 60 mph, that extra half second

equates to an additional 44 feet, which may make all the difference whether an 18 wheeler could have avoided a collision. Do not make the assumption that a truck can speed up or slow down like a small sports car.

ABS brakes. This system is in common use in 18 wheelers, but not always. ABS brakes improve braking efficiency, but if the reconstructionist does not compensate for ABS presence, then his/her calculations will be significantly off.

Computer simulations: A computer simulation is nothing more than a cartoon and cartoons do not have to follow the laws of physics. What makes a computer simulation valuable is if the vehicles behave in a realistic manner in accord with the laws of physics. Unless that simulation follows the laws of motion and all the variables are ironed out, they are worthless. All the defense has to do is show one variable is out of reality and the entire simulation is inadmissible.

Brakes out of adjustment: It is possible to examine air brakes after a collision and determine if braking and lack of brake maintenance played a factor in causing a given accident. However, the experienced truck accident reconstructionist knows that truck brakes, unlike automobiles, are never 100% efficient because of variables in the brake pads, rotors, drums, and other components. The minimum legally acceptable efficiency is 43.5% and it is possible to have as many as two of the five available axles out of adjustment and still meet this standard. If the reconstructionist does not measure braking efficiency, then any calculations based on brake efficiency will lead to overestimates of initial speed.

Perception / Reaction Time: Whether an accident was avoidable or not frequently turns on whether the driver(s) saw the events about to unfold in their windshields. We know it takes about 1.5 seconds to perceive a potential accident and to react to it. A truck driver has an additional problem in that it takes an additional ½ second for the air brakes to react. At 60 mph, that extra half second equates to an additional 44 feet

traveled, which may make all the difference between whether an 18 wheeler could have avoided a collision or could have reacted in time to avoid the resulting accident.

Frictional Forces: The essential part of any vehicle braking system is the frictional resistance of the roadway. Smooth concrete will offer less resistance to a locked up truck tire than a freshly paved asphalt surface. To do an accurate reconstruction, roadway frictional resistance must be measured and the actual number used in calculations. A qualified reconstructionist will have a small sled and scale and will do an actual frictional drag force measurement all over the accident site. If the reconstructionist doesn't do this, any resulting opinion will be suspect.

Investigating Police Officers may not be qualified accident reconstructionists with regard to truck collisions. Unfortunately, some Police Officers are not even qualified to fill out the Officer's opinion section on the SR-3 form. Interview the Officer carefully with regard to his experience, his schooling in accident reconstruction, and his opinions. If the qualifications are weak and his opinions do not seem to fit the facts of the accident, then consider whether you want to employ a private reconstructionist.

F. Multiple Claimants and Insufficient Liability Coverage – the *Soriano* Dilemma

How should an insurance company handle a situation in which there is a single liability limit policy, multiple claimants and the aggregate value of all claims far exceed the available liability limits?

1. Identify all potential claimants. If any of the individuals involved in the accident died as a result of the accident, determine who are the heirs of the estate as well as all potential wrongful death claimants. Also you need to be cognizant of any loss of consortium claims.

2. Invariably, each of the claimants will present their claims at different times. Depending on the nature and extent of the injuries, it may not be possible for the most

seriously injured individuals to present a claim until a substantial amount of medical treatment has been completed.

3. In these situations, time limit demands will be presented at different times and many of these demands will be for the policy limits.

The seminal case on this issue is *Texas Farmers Ins. Co. v. Soriano*, 881 S.W.2d 312 (Tex. 1994). In *Soriano*, the Texas Supreme Court gave insurance companies some guidance for these scenarios. Admittedly, these are very difficult situations and there are rarely "right answers." The *Soriano* Court adopted the general principles in *G. A. Stowers Furniture Co., v. American Indemnity Co.*, 15 S.W.2d 544, 547 (Tex. Comm'n App. 1929, holding approved), as reiterated in *American Physicians Insurance Exchange v. Garcia*, 876 S.W.2d 842, 848 (Tex. 1994), for evaluating a settlement demand:

- a. The claim against the insured must be within the scope of coverage;
- b. There is a demand within in policy limits; and
- c. The terms of the demand are such that an ordinarily prudent insurer would accept it, considering the likelihood and degree of the insured's potential exposure to an excess judgment.

Id. at 314.

The *Soriano* Court went on to hold as follows:

We conclude that when faced with a settlement demand arising out of multiple claims and inadequate proceeds, an insurer may enter into a reasonable settlement with one of the several claimants even though such settlement exhausts or diminishes the proceeds available to satisfy other claims. Such an approach, we believe promotes settlement of lawsuits and encourage claimants to make their claims promptly.

Id. at 315.

Plaintiff counsel who move slowly may lose valuable compensation to faster counsel.

4. The best practice for the defense is to identify all potential claimants as early in the process as possible. If there is likelihood your driver will be found liable for the accident and there is a reasonable belief the claimants will seek in excess of the policy limits, you should commence settlement negotiations with all claimants as soon as practicable. You might be able to settle some of the claims for a relatively minimal amount and those claims should be resolved. However, you want to have your insured involved in this process and obtain the insured's permission to settle. The best possible scenario is to have all parties agree to mediation before any time limit demands are sent.

Additionally, if the insurance carrier reasonably believes the claimants will seek an amount in excess of the policy limits, the Insured should be offered independent counsel to represent his interest. Having independent counsel familiar with the facts of the claims as well as allowing independent counsel to evaluate the potential value of each of the claimants' claims provides protection to the insurance carrier when time limit demands are made.

IX. TRUCKING AND NON-TRUCKING LIABILITY INSURANCE POLICIES

A. Insurance for Trucking Use (including "Statutory Coverage")

Liability insurance policies covering liability arising from the operation of tractor-trailers (and tractors alone---so-called "bobtail" operation) generally fall into two categories. Trucking liability policies cover motor carriers and drivers operating under their federal or state motor carrier authority. Non-trucking liability ("NTL") policies generally cover owner/operators (and their hired drivers) when *not* engaged in the business of the motor carrier. If a tractor-trailer is involved in a collision when hauling cargo for hire, it is operated in the business of some motor carrier—or else its use is flagrantly illegal. Such hauling for hire creates statutory and regulatory liability

for the motor carrier under federal or state law. Such motor carrier liability will, in turn, trigger coverage under the trucking liability policy of the motor carrier.

Motor carriers, like other insureds, sometimes fail to schedule vehicles, list drivers or otherwise assure they have trucking liability coverage in force for every vehicle operated under their authority when used in their business (i.e., to haul cargo). That does not prevent statutorily mandated coverage under a trucking liability policy. Both federal and state law include a statutorily prescribed form of insurance coverage to assure there is money available at minimum limits to pay members of the public injured by negligent operation of a vehicle licensed to the motor carrier, and used in the scope of its business.

Federal law requires that each policy issued to a motor carrier operating under federal authority (i.e., a motor carrier with interstate operations) include Form MCS-90. Most states have long required that motor carriers operating under state authority (i.e., for intrastate hauls of cargo) use a comparable endorsement—Form F. The effect of each statutorily mandated endorsement is to assure coverage for victims of the negligence of a driver operating a truck under a motor carrier's authority, regardless of whether that motor carrier failed to request or its insurer failed to provide coverage for all vehicles and all drivers operated under the motor carrier's authority.

The "statutory coverage" provided by each endorsement requires the motor carrier insurer to pay the injured member of the public, but does not create coverage for the benefit of the insured. All other policy limitations remain in effect as between insurer and insured (you might think of it as the "voluntary coverage"), notwithstanding the statutory endorsements that assure coverage directly benefiting the injured public. The trucking liability insurer is entitled to recoup from the insured any payment it is obligated to make to an injured member of the public, if the liability paid via the endorsement is not within the scope of voluntary coverage provided by the policy's insurer-chosen forms and endorsements,

aside from the statutorily mandated endorsement.

Coverage under MCS-90 must be a minimum of \$750,000. Coverage under Form F may be less—in Texas the statutory minimum has been \$500,000. Thus, coverage under a statutory endorsement may be less than the policy limit when the “voluntary coverage” of the policy—i.e., the insurer’s policy forms other than MCS-90 in Form F—does not apply.

Coverage issues arising under trucking liability policies include the usual suspects: whether the driver has insured status, the truck is a “covered auto,” the policy was in force, etc. Those issues are common to the Business Auto Policy (“BAP”) as issued to insureds with auto-based exposure not involving trucks. Trucking liability coverage, via the BAP or another form, raises another significant issue: Was the truck being operated in the business of the motor carrier (i.e., under the motor carrier’s regulatory authority) at the time of an accident? That is a standard requirement for trucking liability coverage. It tracks federal and state law placing sole and complete responsibility upon motor carriers for trucks operated under their authority. The requirement exists in order to avoid the independent contractor defense that motor carriers formerly asserted, based upon the content of owner/operator leasing agreements before regulation superseded them.

Thus, one standard in essence governs both motor carrier liability and insurance coverage for such liability. Its effect is to push liability onto the owner/operator when a truck was *not* being operated in the business of the motor carrier at the time of an accident. That also pushes liability coverage away from the trucking policy, to the non-trucking liability (“NTL”) policy. Such NTL policies have often been called “bobtail coverage,” referring to the description given to a tractor being operated without any attached trailer. NTL policies vary in their terms, but share the defining element of such coverage—the NTL policy is not triggered during for liability that arises from operation of a truck “in the business

of” the motor carrier. Non-trucking liability coverage typically applies to an owner/operator’s casual use of the truck around the area of his residence (and sometimes elsewhere), for personal use rather than hauling cargo. It can be more restrictive.

The existence of the Form MCS-90 or Form F in a trucking liability policy for a motor carrier thus assures the injured member of the public will be paid, but does not eliminate coverage issues between the insurer and the insured. An insurer’s motive to pursue its right of reimbursement against the insured, for a liability within statutory coverage but outside voluntary coverage, may greatly depend upon whether the motor carrier has net assets substantial enough to justify litigation and collection efforts. Possible application of NTL coverage, concurrently with or even excess over trucking liability coverage, may also motivate the trucking insurer to pursue its reimbursement rights by offering a source of payment for a judgment the trucking insurer takes.

B. Non-Trucking Liability Policies

Non-trucking liability coverage is generally quite inexpensive, consistent with its very narrow scope. As one might expect from the physical characteristics of a 10-wheel tractor, not to mention the price of fuel, it will seldom be driven for leisure purposes. The non-trucking uses NTL policies are typically intended to cover (not to say they are limited to it) include: (1) traveling bobtail in the tractor to and from places where the driver picks up and drops off the motor carrier’s trailer or (if the owner/operator has his own trailer attached) the motor carrier’s cargo; (2) local travel to and from truck shops and other maintenance locations; and (3) any other non-trucking use within the scope of the grant of coverage and outside any exclusion.

An interesting issue, justifying attention yet to be directly given by courts, is whether the many motor carriers with both federal and state authority to haul cargo automatically fall under MCS-90 (with its higher limit) even for intrastate hauls, or fall under Form

F for such hauls (with perhaps a lower limit, depending upon the state).

Of the three non-trucking use categories listed above, category one is often by far the broadest. That is all the more true for owner/operators who routinely travel bobtail a significant distance to the motor carrier's terminal, or other cargo drop-off/pick-up location. Category two involves frequent use, though typically with limited mileage. That category of NTL coverage overlaps with trucking use, and thus trucking liability coverage, because federal (and typically state) law makes the motor carrier responsible for maintenance of the truck. Many courts, as noted below, declare even local maintenance of the leased tractor, though not under or pending dispatch by the motor carrier, to be within the scope of trucking use and thus a trucking liability policy.

The only hard-and-fast policy language in the realm of trucking liability and NTL policies is that stated by the statutory endorsements, Form MCS-90 and Form F. Voluntary coverage (i.e., the insurer's chosen forms) in trucking liability and NTL policies varies among insurers and by state, based upon regulatory approval where applicable. As a result, precedent diverges nationwide regarding what particular truck operations come within the scope of a trucking liability policy and an NTL policy.

Most insurers use standard forms promulgated by the Insurance Services Offices ("ISO"). Policies issued to motor carriers typically include the Business Auto Policy ("BAP") or a comparable form, with a trucking liability endorsement or modifications for trucking liability use. Policies issued to owner/operators often use the same BAP form with an NTL endorsement. Texas has approved the BAP (TE 0001 in Texas) and an NTL endorsement (TE 2309 in Texas), each promulgated by ISO, as the means of providing NTL coverage.

Trucking and NTL coverage precedent tends to be very fact-dependent. Even after accounting for distinguishable facts, precedent greatly diverges from one state to

another. Thus, predicting whether a court will declare trucking liability coverage, NTL coverage or both often requires a comprehensive examination of national precedent unless there happens to be a decision on point that is authoritative within the particular state or court where coverage litigation is pending.

C. Truck Insurance Precedent

Representative (divergent) precedent on truck insurance issues, particularly whether a particular truck use is "in the business of" or under the authority of the motor carrier, is set forth below.

First, controlling federal law and regulations can be found at 49 U.S.C. 14102; 49 C.F.R. 376.11, 376.12; 49 C.F.R. 390.3. Federal statutes and regulations governing the operation of leased vehicles by federally regulated motor carriers are essential to identifying operations "in the business of" a motor carrier.

Many courts have addressed when a driver begins to be, and ceases to be, "in the business of" or operating under the authority of a motor carrier. Some give a liberal scope to the statutes and policy text:

St. Paul Fire & Marine Ins. Co. v. Frankhart, 370 N.E.2d 1058, 1062 (Ill. 1977) held that the driver of a leased tractor remains in the business of the motor carrier "at least until the owner-driver returns to the point where the haul originated . . ., to the terminal from which the haul was assigned . . ., or to the owner-driver's terminal from which he customarily obtained his next assignment"—so there was no NTL coverage for a driver who had dropped off the motor carrier's load and was returning home.

Empire Fire and Marine Insurance Company v. Brantley Trucking, Inc., 220 F.3d 679 (5th Cir. 2000) held that a trucking policy, not Empire's NTL policy, covered Brantley Trucking (the owner/operator) for an accident that occurred when owner's driver was returning, bobtail, to the motor carrier's terminal from a maintenance facility after having work done on tractor while waiting to pick up a load, and after

spending the night in the cab at motor carrier's terminal; driver was clearly furthering the commercial interest of the motor carrier, and thus using the tractor "in the business of" that lessee.

Even under the most liberal point of view, there are limits to how long a driver can remain under the motor carrier's authority once a haul has ended:

Empire Fire & Marine Ins. Co. v. Liberty Mutual Ins. Co., 699 A.2d 482, 496 (Md. Spec. App. 1996), cert. denied 703 A.2d 148 (1997) held that a driver was no longer "in the business of" the lessee, but within NTL coverage, once he had returned to the area from which he was dispatched, dropped off the lessee's loads and trailer, put the tractor in a repair shop for four days, drove to a Peterbilt dealer to buy parts for his toolbox, then had a wreck on the way home from that dealership.

Many courts construe trucking coverage as starting and ending with pick-up and drop-off of trailer or cargo at the motor carrier's terminal:

Axta Global Risks v. Empire Fire & Marine Ins. Co., 554 S.E.2d 755 (Ga. App. 2001): A driver was within NTL coverage after completing hauls for motor carrier, and dropping off its trailer, the day before he caused a collision on his way home.

LeBlanc v. Bailey, 700 S.2d 1311 (La. App. 1997): A driver was within NTL coverage during return home after making deliveries.

Acceptance Ins. Co. v. Canter, 927 F.2d

1026, 1028 (8th Cir. 1991): A driver was within NTL rather than trucking liability coverage during return home after making deliveries for the motor carrier, given Minnesota's "closest to the risk" doctrine).

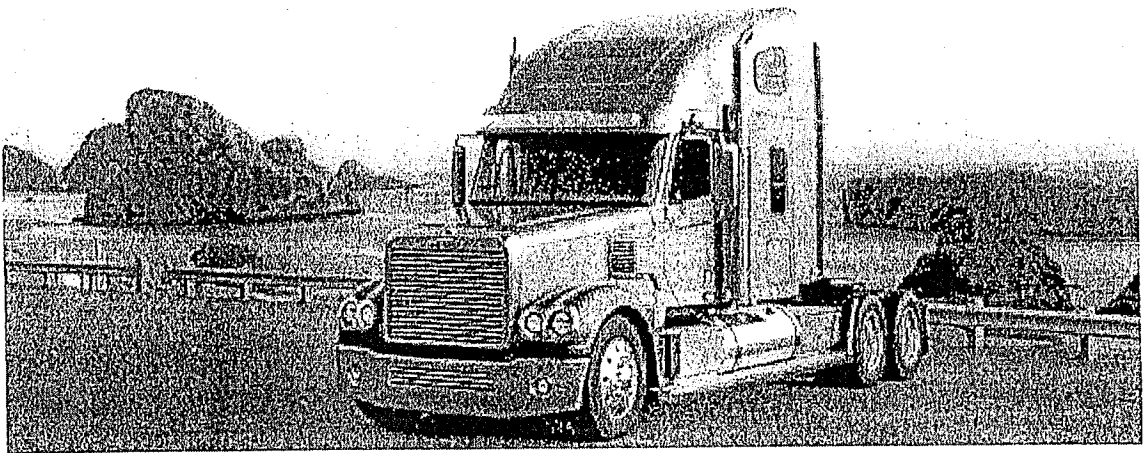
Assicurazioni Generali, S.P.A. v. Ranger Insurance Company, 64 F.3d 979 (5th Cir. 1995): NTL coverage applied, and motor carrier insurer admitted trucking liability coverage, for driver taking a leased tractor, bobtail, to a shop for brake repair when not under dispatch; policies applied *pro rata*.

Some courts apply state law concepts in determining trucking liability and/or coverage:

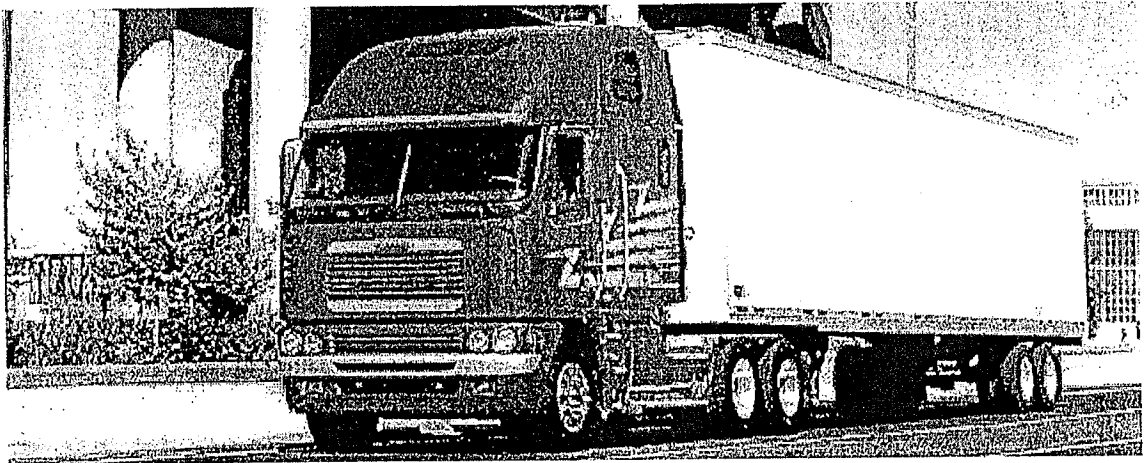
Mata v. Andrews Transport, Inc., 900 S.W.2d 363 (Tex. App.—Houston [14th Dist.] 1995) rejected statutory (vicarious) liability for a motor carrier for an accident that occurred when the driver of leased truck was on his way to the motor carrier's terminal in Houston from his home in Austin. The court held his uncompensated transit to/from work was outside the scope of employment, nor did the motor carrier own the vehicle.

Other courts, sometimes in the same state, separate ordinary tort law (such as course and scope of employment) from trucking liability and coverage rules, and are therefore more inclined to find trucking use and trucking liability (rather than NTL) coverage. See *Morris v. JTM Materials, Inc.*, 78 S.W.3d 28 (Tex. App.—Fort Worth 2002).

APPENDIX



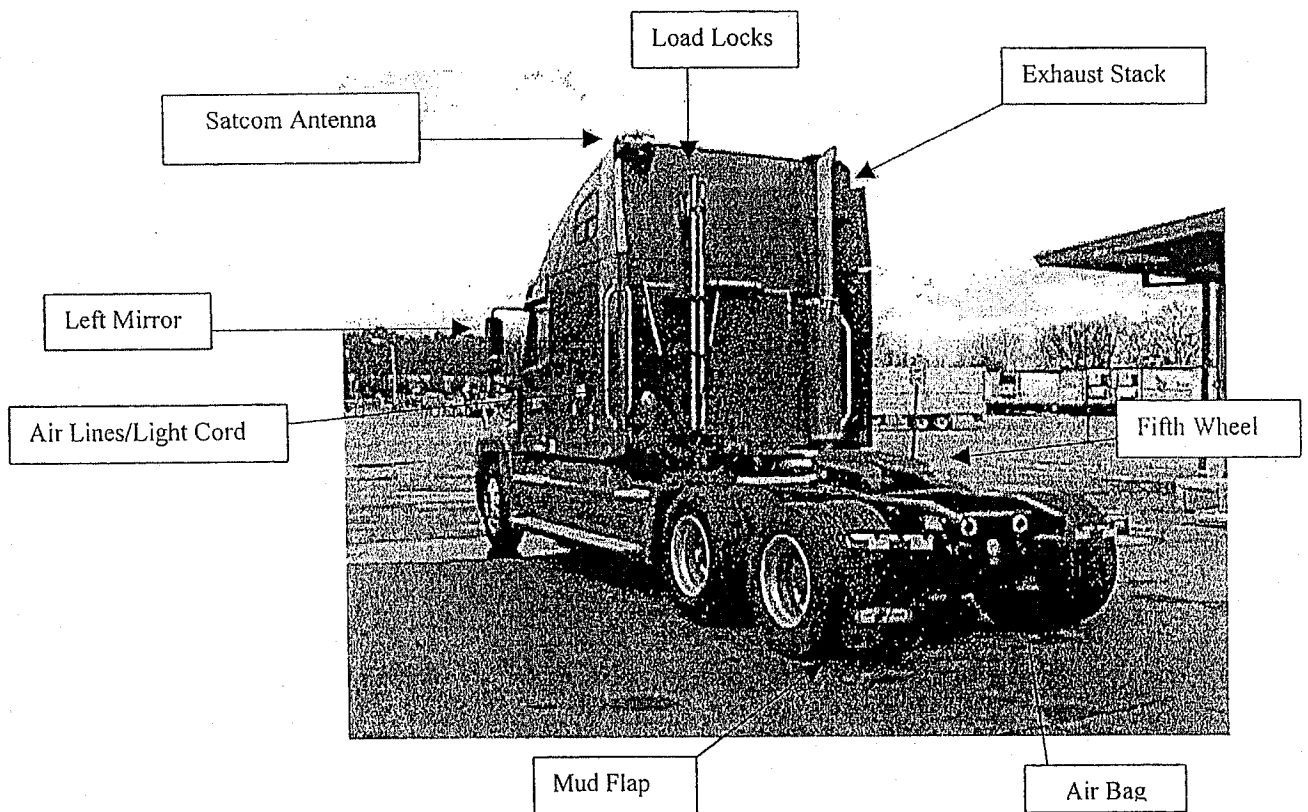
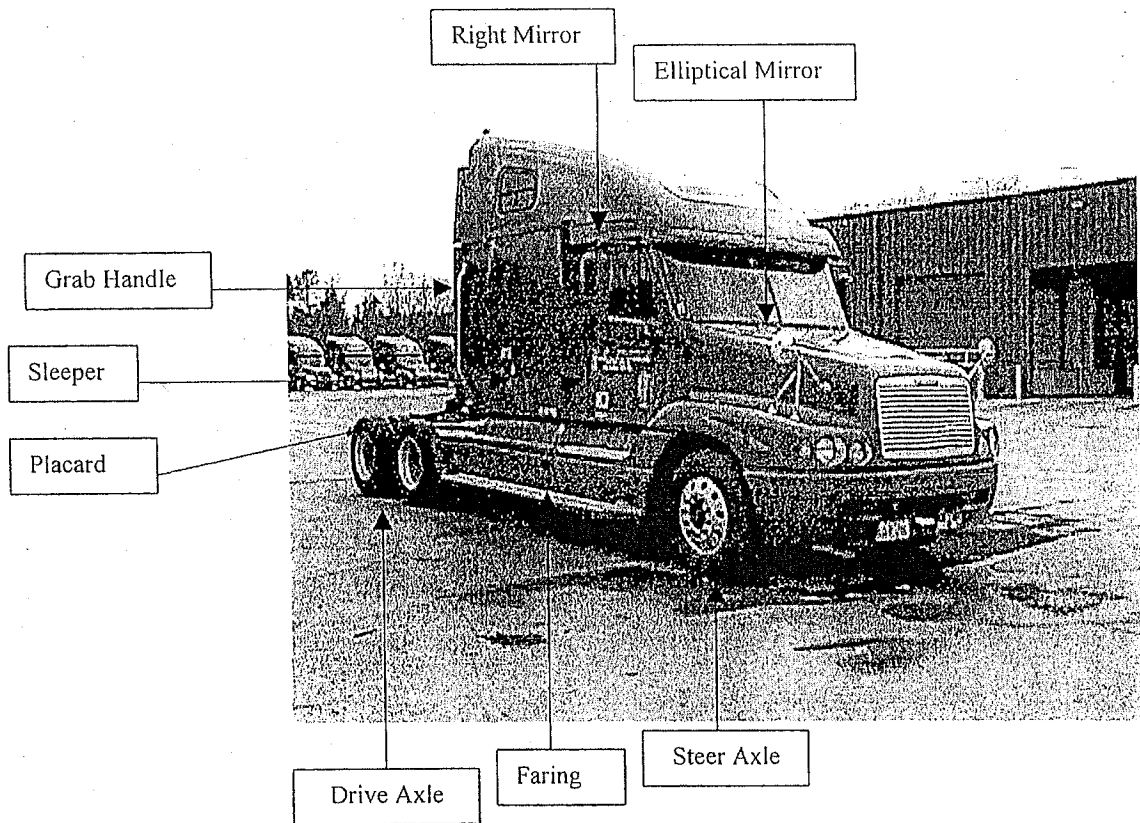
Conventional Tractor

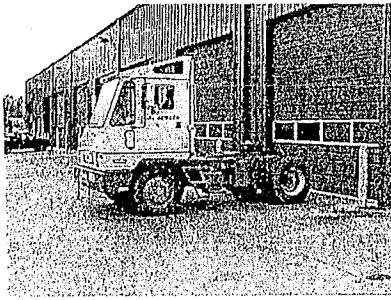


Cab Over Tractor

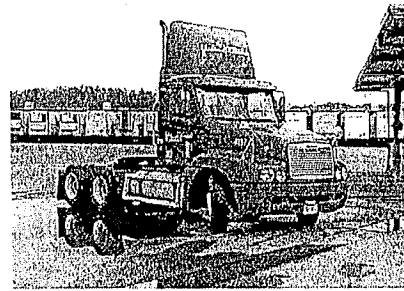


Straight Truck

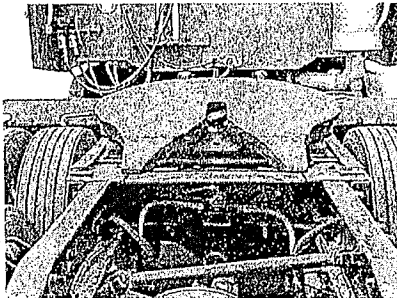




Yard truck (Yard dog)

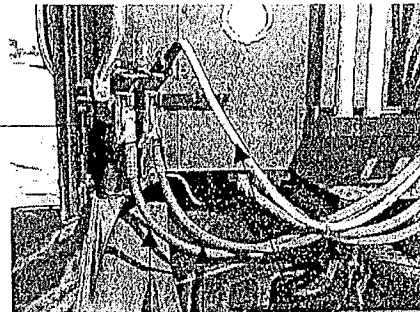


Day cab (City truck)

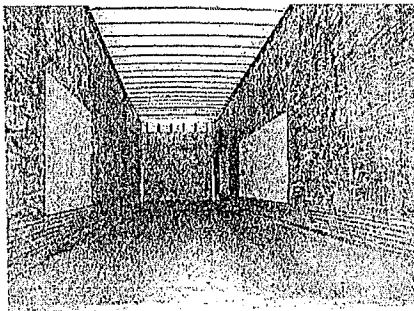


Fifth wheel

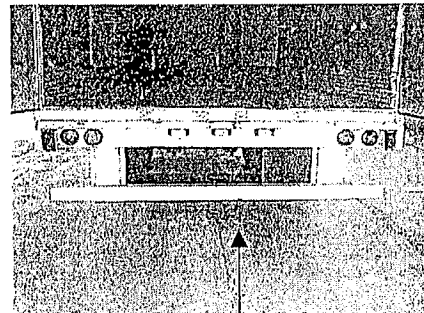
Glad hands



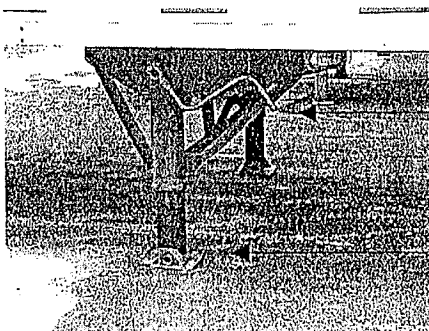
Air lines and light cord



Interior of trailer



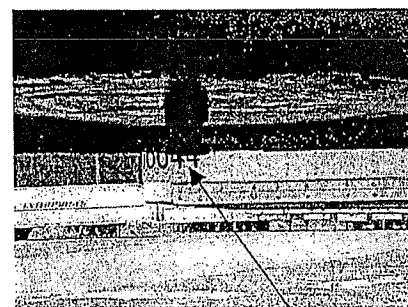
DOT Bumper



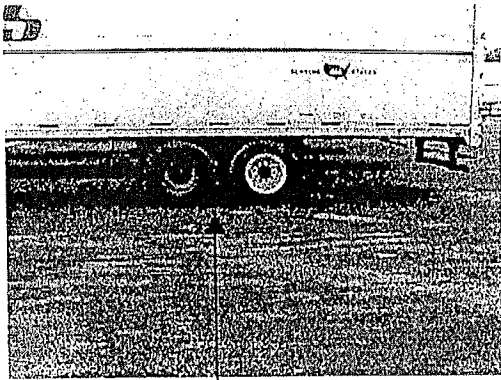
Crank

Sand shoe

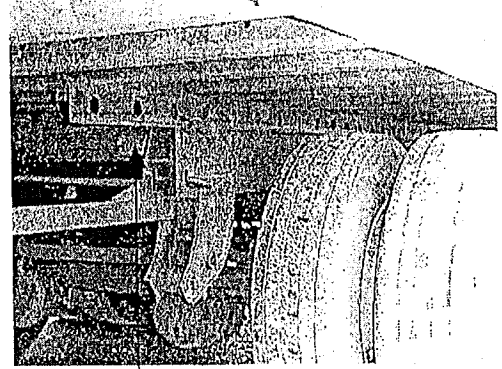
Landing gear (Dolly)



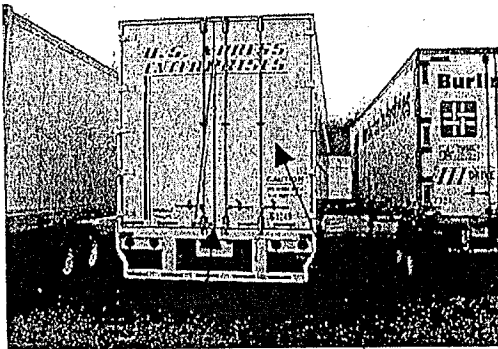
King pin



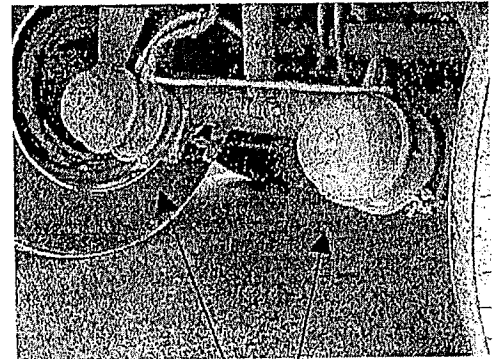
Trailer tandems slid forward



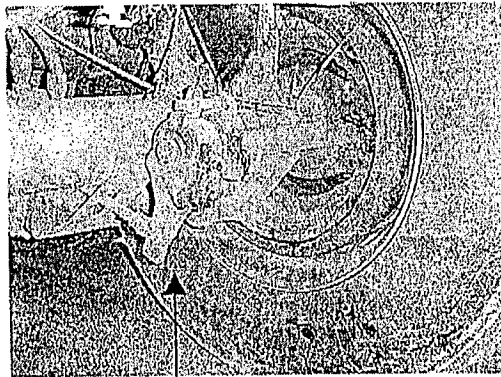
Trailer tandem sliding rail



Trailer door latches and lock rods



Air chamber



Slack adjuster

Glossary of Truck Terms

A

ABS (Antilock Braking System)

Computer, sensors and solenoid valves which together monitor wheel speed and modulate braking force if wheel lockup is sensed during braking. Helps the driver retain control of the vehicle during heavy braking on slippery roads.

Air Ride Suspension

Suspension which supports the load on air-filled rubber bags rather than steel springs. Compressed air is supplied by the same engine-driven air compressor and reservoir tanks which provide air to the air brake system.

ATC (Automatic Traction Control)

Usually an optional feature based on ABS, it prevents spinning of the drive wheels under power on slippery surfaces by braking individual wheels and/or reducing engine throttle. Also called ASR, an acronym sometimes loosely translated from the German as anti-spin regulation.

AVI (Automatic Vehicle Identification)

System combining an on-board transponder with roadside receivers to automate identification of vehicles. Uses include electronic toll collection and stolen vehicle detection. (see IVHS)

AVL (Automated Vehicle Location)

Class of technologies designed to locate vehicles for fleet management purposes and for stolen vehicle recovery. Infrastructure can be land-based radio towers or satellites. (see IVHS)

Axle

Structural component to which wheels, brakes and suspension are attached.

- Drive axles are those with powered wheels.
- Front axle is usually called the steer axle.
- Pusher axles are unpowered and go ahead of drive axles.
- Rear axles may be drive, tag or pusher types.
- Tag axles are unpowered and go behind drive axles.

B

BBC

Distance from a truck's front bumper to the back of its cab.

Bill of Lading

Itemized list of goods contained in a shipment.

Blind Spot

Areas around a commercial vehicle that are not visible to the driver either through the windshield, side windows or mirrors.

Bobtail

Tractor operating without a trailer.

Bogie (also spelled bogey)

Assembly of two or more axles, usually a pair in tandem.

Brake Horsepower (bhp)

Engine horsepower rating as determined by brake dynamometer testing. (see Horsepower)

Bridge Formula

A bridge protection formula used by federal and state governments to regulate the amount of weight that can be put on each of a vehicle's axles, and how far apart the axles (or groups of axles) must be to legally carry a given weight.

Bunk

See Sleeper.

C

Cabover (Cab-Over-Engine, COE)

Truck or tractor design in which the cab sits over the engine on the chassis. Cargo Weight Combined weight of all loads, gear and supplies on a vehicle.

Cartage Company

Company that provides local (within a town, city or municipality) pick-up and delivery.

Cast Spoke Wheel

Wheel with five or six spokes originating from a center hub. The spoked portion, usually made of cast steel, is bolted to a multiple-piece steel rim (see Demountable Rim; Disc Wheel).

CB (Citizens Band Radio)

Two-way radio for which no license is required by the Federal Communications Commission (FCC). Long beyond its heyday in the '70s, CB is still used by truckers and motorists for everything from traffic condition reports to emergency calls to idle chatter.

CDL (Commercial Driver's License)

License which authorizes an individual to operate commercial motor vehicles and buses over 26,000 pounds gross vehicle weight. For operators of freight-hauling trucks, the maximum size which may be driven without a CDL is Class 6 (maximum 26,000 pounds gross vehicle weight).

Chassis Weight (Curb Weight, Tare Weight)

Weight of the empty truck, without occupants or load.

COE

See Cabover.

Common Carrier

Freight transportation company which serves the general public. May be regular route service (over designated highways on a regular basis) or irregular route (between various points on an unscheduled basis).

Compensated Intracorporate Hauling

Freight transportation service provided by one company for a sister company.

Container (Shipping Container)

Standard-sized rectangular box used to transport freight by ship, rail and highway. International shipping containers are 20 or 40 feet long, conform to International Standards Organization (ISO) standards and are designed to fit in ships' holds. Containers are transported on public roads atop a container chassis towed by a tractor. Domestic containers, up to 53 feet long and of lighter construction, are designed for rail and highway use only.

Container Chassis

Single-purpose semitrailer designed to carry a shipping container.

Contract Carrier

Company that transports freight under contract with one or a limited number of shippers.

Converter Dolly (Dolly)

Auxiliary axle assembly equipped with a fifth wheel (coupling device), towed by a semitrailer and supporting the front of, and towing, another semitrailer.

Cube (Cubic Capacity)

Interior volume of a truck body, semitrailer or trailer, measured in cubic feet.

Curb Weight

See Chassis Weight.

D

Dead-Heading

Operating a truck without cargo.

Demountable Rim

Multi-piece steel wheel rim assembly which is bolted to a spoke hub. Demountable rims are still in use, though they have been replaced in many applications by the simpler disc wheel. (see Cast Spoke Wheel)

Disc Wheel

Single-piece rim/wheel assembly of stamped and welded steel or forged aluminum, anchored by 8 or 10 nuts to a hub. A "Budd wheel" is a ten-hole, stud-piloted disc wheel; a design originated by the Budd Corporation.

Displacement (Piston Displacement)

Sum of the volumes swept by an engine's pistons as they travel up and down in their cylinders. Based upon bore (diameter of cylinder) and stroke (distance traveled by piston). Expressed in liters or cubic inches.

Dolly

See Converter Dolly.

Doubles (Twins, Twin Trailers)

Combination of a tractor and two semitrailers connected in tandem by a converter dolly. (see Converter Dolly; Pintle Hook)

Driveline

All the components which together transmit power from the transmission to the drive axle(s). These consist of at least one driveshaft (propeller shaft) with a universal joint at each end.

Drivetrain (Powertrain)

All the components, excluding engine, which transmit the engine's power to the rear wheels: clutch, transmission, driveline and drive axle(s). (See Powertrain)

Daytime Running Lights

System that automatically turns on a vehicle's low beam headlights when the parking brake is released and the ignition is on.

E

EDI (Electronic Data Interchange)

The business-to-business interconnection of computers for the rapid exchange of a wide variety of documents, from bills of lading to build tickets at auto plants.

Exempt Carrier

Company which transports commodities exempted from Interstate Commerce Commission (ICC) economic regulation.

F

Fifth Wheel

Coupling device attached to a tractor or dolly which supports the front of a semitrailer and locks it to the tractor or dolly. The fifth wheel's center is designed to accept a trailer's kingpin, around which the trailer and tractor dolly pivot in turns.

Fixed Tandem

Assembly of two axles and suspension that is attached to the chassis in one place, and cannot be moved fore and aft. (see Sliding Tandem)

For-Hire Carrier

Company in the business of transporting freight belonging to others (see Private Carrier)

G

GAWR (Gross Axle Weight Rating)

Maximum weight an axle is rated to carry by the manufacturer. Includes both the weight of the axle and the portion of a vehicle's weight carried by the axle.

GCW (Gross Combination Weight)

Total weight of a loaded combination vehicle, such as a tractor-semitrailer or truck and full trailer(s).

Geared Speed

Calculated vehicle speed at the engine's governed rpm in each transmission gear, or (commonly) in top gear.

Gear Ratio

Number, usually expressed as a decimal fraction, representing how many turns of the input shaft cause exactly one revolution of the output shaft. Applies to transmissions, power takeoffs, power dividers and rear axles. Example: If 2.5 revolutions of an input shaft cause one revolution of the output shaft, the gear ratio is 2.5:1.

Grade

Steepness of a grade, expressed as a percentage. Example: A vehicle climbing a 5% grade rises 5 feet for every 100 feet of forward travel.

Gradeability

Vehicle's ability to climb a grade at a given speed. Example: A truck with a gradeability of 5% at 60 mph can maintain 60 mph on a grade with a rise of 5%.

GVW (Gross Vehicle Weight)

Total weight of a vehicle and everything aboard, including its load.

GVWR (Gross Vehicle Weight Rating)

Total weight a vehicle is rated to carry by the manufacturer, including its own weight and the weight of its load.

H

Hazmat

Hazardous materials, as classified by the U.S. Environmental Protection Agency (EPA). Transport of hazardous materials is strictly regulated by the U.S. Department of Transportation.

Headache Rack

Heavy protective barrier mounted behind the tractor's cab. Designed to prevent "headaches" caused by load shifting forward from the trailer and crushing the cab.

Horsepower

Measure of power (the amount of work that can be done over a given amount of time). One horsepower is defined as 33,000 foot-pounds of work in one minute. Example: Lifting 33,000 pounds one foot in one minute, or lifting 3300 pounds ten feet in one minute.

Horsepower, Gross Laboratory

Tested horsepower of a "bare" engine without fan, water pump, alternator, exhaust system or any other accessories.

Horsepower, SAE Net

Horsepower capability of an engine with full accessories and exhaust system. Test procedures per standards of Society of Automotive Engineers (SAE).

Hours-Of-Service

U.S. Department of Transportation safety regulations which govern the hours of service of commercial vehicle drivers engaged in interstate trucking operations.

I

Independent Trucker

See Owner Operator.

ITS (Intelligent Transportation Systems)

Formerly called IVHS.

IVHS (Intelligent Vehicle Highway Systems)

Blanket term for a wide array of technologies, including electronic sensors, computer hardware and software and radio communications. The purpose of IVHS is to increase efficiency of use of existing highways, reducing travel time, fuel consumption, air pollution and accidents. There are five functional areas:

- Advanced Public Transportation Systems (APTS)
- Advance Traffic Management Systems (ATMS)
- Advance Traveler Information Systems (ATIS)
- Advanced Vehicle Control Systems (AVCS)
- Commercial Vehicle Operations (CVO)

A more recently coined term, Intelligent Transportation Systems (ITS), encompasses both IVHS and modes of transportation other than highway, such as rail. (see AVI, AVL, WIM)

J

Jackknife

To place the trailer at a very sharp angle to the tractor.

Jake Brake

See Retarder.

Just-In-Time

Manufacturing system which depends on frequent, small deliveries of parts and

supplies to keep on-site inventory to a minimum.

K

Kingpin (axle)

Pin around which a steer axle's wheels pivot.

Kingpin (trailer)

Anchor pin at the center of a semitrailer's upper coupler which is captured by the locking jaws of a tractor's fifth wheel to attach the tractor to the semitrailer.

L

Landing Gear

Retracting legs which support the front of a semitrailer when it is not coupled to a tractor.

Long Combination Vehicle

In general, vehicles longer than a standard doubles rig (tractor and two 28-foot semitrailers). Examples of LCVs which are permitted in some U.S. western states and eastern toll roads: Twin 48-foot trailers; triple 28-foot trailers.

Lessee

Company or individual which leases vehicles.

Lessor

Company which leases vehicles.

Lift Axle

Extra, unpowered axle needed only when the vehicle is loaded, allowing it to meet federal and state vehicle weight standards. The lift axle is mounted to an air spring suspension that raises the axle when it is not required.

Load Range (Tires)

Letter code system for the weight carrying capacity of tires. Comparable ply ratings are shown below.

LR		PR	LR	PR
A	....	2	E	10
B	....	4	F	12
C	....	6	G	14
D	....	8		16

(LR = Load Range PR = Ply Rating)

Logbook

Book carried by truck drivers in which they record their hours of service and duty status for each 24-hour period. Required in interstate commercial trucking by the U.S. Department of Transportation.

Lowboy

Open flat-bed trailer with a deck height very low to the ground, used to haul construction equipment or bulky or heavy loads.

LTL (Less-Than-Truckload)

A quantity of freight less than that required for the application of a truckload (TL) rate; usually less than 10,000 pounds. (see TL)

LTL Carrier

Trucking company which consolidates less-than-truckload cargo for multiple destinations on one vehicle. (see TL Carrier)

O

On-Board Computer

See Trip Recorder.

Overdrive

Gearing in which less than one revolution of a transmission's input shaft causes one turn of the output shaft. The purpose of overdrive is to reduce engine rpm in high gear for better fuel economy. Example: A transmission with an overdrive top gear has

a ratio of 0.70 to one. Turning the input shaft 0.7 revolutions causes 1.0 revolution of the output shaft.

Owner-Operator

Trucker who owns and operates his own truck(s).

P

Payload

Weight of the cargo being hauled.

Peddle Run

Truck route with frequent delivery stops.

Pigtail

Cable used to transmit electrical power from the tractor to the trailer. So named because it is coiled like a pig's tail.

Piggyback

Semitrailer built with reinforcements to withstand transport by a railroad flatcar. (see TOFC)

Pintle Hook

Coupling device used in double trailer, triple trailer and truck-trailer combinations. It has a curved, fixed towing horn and an upper latch that opens to accept the drawbar eye of a trailer or dolly.

Piston Displacement

See Displacement.

Ply Rating (PR)

Relative measure of tire casing strength. (see Load Range)

Powertrain (Drivetrain)

All the components, including engine, which transmit the engine's power to the rear wheels: clutch, transmission, driveline and drive axle(s).

Private Carrier

Business which operates trucks primarily for the purpose of transporting its own products and raw materials. The principle business activity of a private carrier is not transportation. (see For-Hire Carrier)

PSI (Pounds Per Square Inch)

In trucking, unit of measurement for tire air pressure, air brake system pressure and turbocharger boost.

PTO (Power Takeoff)

Device used to transmit engine power to auxiliary equipment. A PTO often drives a hydraulic pump, which can power a dump body, concrete mixer or refuse packer. Some designs mount to a standard opening on the transmission, while others attach at the front or rear of the engine.

Pull Trailer

Short, full trailer (supported by axles front and rear) with an extended tongue.

Pup Trailer

Short semitrailer, usually between 26 and 32 feet long, with a single axle.

R

Relay (Relay Driving)

Common practice in the less-than-truckload industry, in which one driver takes a truck for 8 to 10 hours, then turns the truck over to another driver, pony express style.

Reefer

Refrigerated trailer with insulated walls and a self-powered refrigeration unit. Most commonly used for transporting food.

Retarder

Device used to assist brakes in slowing the vehicle. The most common type of retarder on over-the-road trucks manipulates the engine's valves to create engine drag. (This

type is commonly referred to as "Jake Brake" because the predominant manufacturer is Jacobs Vehicle Equipment Co.) Other types of retarders include exhaust retarders, transmission-mounted hydraulic retarders and axle-mounted electromagnetic retarders.

Rolling Radius

Tire dimension from center of the axle to the ground; measured with tire loaded to rated capacity. Used in calculating geared speed.

RPM (Revolutions Per Minute)

Measure of the speed at which a shaft spins. Most often used to describe engine crankshaft speed. Indicated by a tachometer.

S

Semitrailer

Truck trailer supported at the rear by its own wheels and at the front by a fifth wheel mounted to a tractor or dolly.

Setback Axle

Front steering axle moved rearward from the generally accepted standard position. Advantages: Shorter turning radius and more of a vehicle's weight shifted to front axle.

Shipping Weight

"Dry" weight of a truck including all standard equipment, but excluding fuel and coolant.

Single-Source Leasing

Service in which companies can lease drivers and trucks from the same source, rather than having to procure them from different companies.

Sleeper

Sleeping compartment mounted behind a truck cab, sometimes attached to the cab or even designed to be an integral part of it.

Sleeper compartments allow drivers to stop and rest with the goal of

Sliding Fifth Wheel

Fifth wheel mounted to a mechanism that allows it to be moved back and forth for the purpose of adjusting the distribution of weight on the tractor's axles. Also provides the capability to vary vehicle combination lengths .

Sliding Tandem (Slider)

Mechanism that allows a tandem axle suspension to be moved back and forth at the rear of a semitrailer, for the purpose of adjusting the distribution of weight between the axles and fifth wheel.

Speedability

Top speed a vehicle can attain as determined by engine power, engine governed speed, gross weight, driveline efficiency, air resistance, grade and load.

Spread Axle (Spread Tandem)

Tandem axle assembly spaced further apart than the standard spacing of 54 inches. The U.S. federal bridge formula favors trailer axles with an eight or nine foot spread by allowing higher weight than on tandems with standard spacing.

Synchronized Transmission

Transmission with built-in mechanisms to automatically "equalize" the speed of its gears to allow smooth shifting without the need to double-clutch.

Tag Axle

See Axle.

Tare Weight

See Chassis Weight.

Tandem Axle (Tandems)

Pair of axles and associated suspension usually located close together. (see Spread Axle)

Team (Driver Team)

Team of two drivers who alternative driving and resting. Team Drivers can keep a truck in almost continuous motion.

Truckload

The quantity of freight required to fill a trailer; usually more than 10,000 pounds. (see LTL)

Truckload Carrier

Trucking company which dedicates trailers to a single shipper's cargo, as opposed to an LTL (Less Than Truckload) carrier which transports the consolidated cargo of several shippers and makes multiple deliveries. (see LTL Carrier)

Trailer On Flatcar

Method of moving cargo which involves transporting semitrailers on railroad flat cars. (see Piggyback)

Tractor

Truck designed primarily to pull a semitrailer by means of a fifth wheel mounted over the rear axle(s). Sometimes called a truck tractor or highway tractor to differentiate from it from a farm tractor.

Tractor Trailer

Tractor and semitrailer combination.

Tri-Axle

Truck, tractor or trailer with three axles grouped together at the rear. (see Tridem)

Tridem

Group of three axles on a truck, tractor or trailer. Tridems are most common on European semitrailers.

Trip Leasing

Leasing a company's vehicle to another transportation provider for a single trip.

Trip Recorder (On-Board Computer)

Cab-mounted device which electronically or mechanically records data such as truck speed, engine rpm, idle time and other information useful to trucking management.

Truck

Vehicle which carries cargo in a body mounted to its chassis, rather than on a trailer towed by the vehicle.

Twins (Twin Trailers)

See Doubles.

U

Upper Coupler

Load bearing surface on the underside of the front of a semitrailer. It rests on the fifth wheel of a tractor or dolly and has a downward-protruding kingpin which is captured by the locking jaws of the fifth wheel.

V

VIN (Vehicle Identification Number)

Assigned by the manufacturer, this number is unique to each vehicle and appears on the vehicle's registration and title.

Vehicle Maintenance Reporting Standards

Set of codes developed to facilitate computerized tracking of parts and labor used in equipment repair. Established and maintained by the American Trucking Associations.

W

Walking Beam Suspension

Type of truck and tractor rear suspension consisting of two beams, one at each side of the chassis, which pivot in the center and connect at the front to one axle of a tandem and at the rear to the other axle.

WIM (Weigh-In-Motion)

Technology for determining a vehicle's weight without requiring it to come to a complete stop.

Y

Yard Tractor or Yard Dog

Special tractor used to move trailers around a terminal, warehouse, distribution center, etc.