

Skill Standards for Professional Solo Tractor-Trailer Drivers



Spring, 2000

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PREFACE

This publication is made available in the interest of truck safety and the advancement of tractor-trailer driver training.

The skill standards are the product of the collective wisdom of more than 250 motor carrier safety personnel, drivers, and educators teaching in the field of tractor-trailer operating, curriculum, and safety. The standards represent the touchstones that a tractor-trailer driver finishing program should contain and against which any such program may be judged. The absence of any particular performance element(s) and/or criterion (criteria) from a finishing program should not signify a deficiency in that program as each program of instruction must be considered individually.

The standards and requirements of program certification that may be attached hereto have been adopted as the official policy of PTDI and serve as the criteria by which PTDI evaluates the driver finishing programs of organizations seeking certification. The standards specified in this document must be met before PTDI approves of and issues its certification to a tractor-trailer driver finishing program.

The contents of this publication do not represent official policy of any government or quasi-governmental agency. PTDI expressly disclaims any and all liability for the content, use, and application of these skill and program certification standards and makes no representation or warranty as to the fitness of any individual who has been trained in accordance with the standards or procedures detailed herein.

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Note: *Skill Standards for Professional Solo Tractor-Trailer Drivers* is one of two sets of standards prepared to guide the development of driver-finishing training for truck drivers. The other set is entitled *Certification Standards and Requirements for Tractor-Trailer Driver Finishing Programs*.

INTRODUCTION

Skill standards describe in detail the work and quality of work that truckers perform. The standards position our industry to continue to improve safety and be profitable into the next century, and they provide a basis for many of the materials and processes that we use in training and in performance assessment for workers in the industry.

Skill standards enable at least the following:

- Enable training providers to better plan and develop curriculum, assessment, and instructional materials.
- Encourage individual workers to set goals and to assess their progress toward those goals in terms of the things they know how to do as truck drivers.
- Allow employers to differentiate and market their product with confidence that the work done by their employees is of high quality, use safe procedures, and is very productive.
- Help the industry achieve international recognition for quality and indicate that the jobs performed by truck drivers are significant and well performed.
- Are the statements of what drivers must actually know and do on the job, as reported by the drivers themselves. Skill standards and curriculum standards are not the same thing. Skill standards are a “role map” of content for driver training programs to use as they develop curriculum and instructional exercises. Curriculum standards are what and how the organizations teach their selected course content. Each has a role in ensuring mastery of the necessary skills and knowledge.

OVERVIEW

A set of standards for first-seat or solo professional tractor-trailer drivers follows. The standards describe the skill and knowledge base as well as the performance criteria critical for success as a **first-seat, solo driver**. The standards are based on information collected from high-performance drivers, as nominated by their companies throughout North America. The skills address issues ranging from managing life on the road to backing a tractor-trailer in traffic. The materials form a baseline from which to develop curriculum, instructional materials, exercises, and assessment routines in training.

APPROACH

The skill standards have been developed through a collaborative effort of schools, truck drivers, trucking firms, and trucking associations throughout the industry. The information builds from data originally created by the U.S. Department of Transportation and the Professional Truck Driver Institute (PTDI) about the tasks, skills, and duties necessary to be a successful truck driver. The process of updating that information involved performing an extended search of the literature; conducting extensive structured interviews with high-performing truck drivers; and involving truckers, trucking firm representatives, and driver/trainers in a survey and structured group interviews to document the importance and frequency of the skills, tasks, and knowledge suggested through the extended search and the initial structured group interviews.

The information then was compiled into a role map for truckers, which experts from trucking firms and schools reviewed and refined, and this was used as the basis of developing the skill standards. The standards then were reviewed and elaborated upon by owners and trainers from trucking firms, as well as teachers and school administrators from trucking schools.

The result is a set of standards that should be useful to guide the training and performance of first-seat, solo professional tractor-trailer drivers.

BENEFITS

The benefits arising from skill standards include specific outcomes useful to each of the major stakeholders in the industry. That is, there are benefits for employers, education and training providers, and individual workers. Each of those is expressed below.

For employers, skill standards will provide the following:

- Improve employee recruitment and retention by more clearly identifying skill requirements.
- Encourage improved responsiveness and performance of education and training providers.
- Enlarge the pool of skilled workers.
- Focus attention on the importance of the training investment.

For education and training providers, skill standards will provide the following:

- Provide information on changes in the modern workplace for all major industries and occupations.
- Contribute to program and curriculum development by providing an inventory of critical work performances.
- Strengthen the relationship between education and training providers and the trucking industry.
- Help them communicate with students and workers to improve career planning.

For trainees and workers, skill standards will provide the following:

- Help them make better decisions about careers and the training necessary to obtain well-paying jobs.
- Allow them to communicate more effectively to an employer what they know and can do.
- Allow them to work more effectively with employers in career development and skill upgrading.

FORMAT

The following standards are for professional, first-seat (solo) tractor-trailer drivers. Standards are presented for each of the major duties or functions of truckers, as defined by the role map. Each standard contains a statement of the duty competency, a performance criterion, and a list of necessary elements for the duty. Knowledge required to perform the duty, attitude statements (if applicable), and the skill matrix are included in the appendices.

PRIMARY FUNCTIONS OR DUTIES: PROFESSIONAL TRACTOR-TRAILER DRIVER

A professional tractor-trailer driver should be able to perform the following functions:

1. Read and interpret control systems
2. Perform vehicle inspections
3. Exercise basic control
4. Execute shifting
5. Back and dock tractor-trailer
6. Couple trailer
7. Uncouple trailer
8. Perform visual search
9. Manage and adjust vehicle speed
10. Manage and adjust vehicle space relations
11. Check and maintain vehicle systems and components
12. Diagnose and report malfunctions
13. Identify potential driving hazards and perform emergency maneuvers
14. Identify and adjust to difficult and extreme driving conditions
15. Handle and document cargo
16. Deal with accident scenes and reporting procedures
17. Deal with environmental issues
18. Plan trips and make appropriate decisions
19. Use effective communication and public relations skills
20. Manage personal resources and deal with life on the road
21. Record and maintain Hours of Service requirements

SKILL STANDARDS FOR PROFESSIONAL SOLO TRACTOR-TRAILER DRIVERS

PERFORMANCE SKILL: READ AND INTERPRET CONTROL SYSTEMS

PERFORMANCE SKILL STANDARD

Conditions of Performance:

Given the cab instrumentation and control panels of a typical truck tractor that the driver will operate,

Statement of Work to Be Performed:

the driver will identify, locate, read, and correctly interpret the typical vehicle instruments and controls of a tractor-trailer rig.

Performance Criteria:

- Identify and locate each of the vehicular driving controls and the various monitoring devices (gauges, alarms, lights, etc.) required to operate the vehicle safely and efficiently.
- Read instrument and gauge accurately within ± 1 unit of measure correctly each time.
- Operate control and switch correctly each time.
- Supplement gauge and control information with other data.
- Make appropriate adjustments for all types of company-specific equipment and operations.

PERFORMANCE ELEMENTS AND ASSESSMENT CRITERIA

1. Identify, locate, and read and operate each of the primary controls including those required for steering, accelerating, shifting, braking, and parking.
2. Identify, locate, and read and operate each of the secondary controls including those required for control of lights, signals, windshield wipers and washers, interior climate, engine starting and shutdown, suspension, and coupling.
3. Identify, locate, read and operate, and indicate the acceptable reading range of the various instruments required to monitor vehicle and engine speed as well as the status of fuel, oil, air, cooling, exhaust, and electrical systems.
4. Augment with displayed information from other sources, given that instruments may malfunction or not be entirely accurate.
5. Make appropriate adjustments for company-specific equipment, especially for various transmissions, engines, types of trailers, types of loads, and other factors.
6. Identify typical problem points in equipment specific to an individual carrier's operation.

PERFORMANCE SKILL: PERFORM VEHICLE INSPECTIONS

PERFORMANCE SKILL STANDARD

Conditions of Performance:

Given a typical tractor-trailer truck and a trip,

Statement of Work to Be Performed:

the driver will conduct pre-trip, en route, and post-trip inspections of all types and correctly complete required reports.

Performance Criteria:

- Inspect and make a correct determination of the condition of various critical vehicle components, including instruments and controls; engine and drive train; chassis and suspension; steering system, braking system; tires; wheels and rims; lighting and signaling system; emergency equipment; and cargo securement device(s).
- Perform pre-trip inspections in a regular, systematic sequence that is legal, accurate, uniform, and time efficient.
- Perform en route inspections by checking mirrors for signs of trouble; checking connections, hoses, and gauges; and monitoring instruments and looking, listening, and feeling for indications of malfunctions.
- Make periodic roadside stop inspections of critical items, and meet en route requirements for transporting various cargoes.
- Perform post-trip inspections by making accurate notes of actual and suspected component abnormalities or malfunctions that occurred during the trip using a Vehicle Condition Report (VCR) or Vehicle Inspection Report (VIR).
- Refuse to operate a vehicle found to be in unsafe (for vehicle, drivers, and other road users) operating condition, either prior to a trip or en route.
- Deal with issues such as vehicle registration, permits, tags, road-based inspections, border crossings, scaling, and other situations.

PERFORMANCE ELEMENTS AND ASSESSMENT CRITERIA:

1. Perform each type of inspection according to rules and policy and as adjusted for specific equipment or cargo.
2. Inspect and determine the condition of critical vehicle components, including the instrument and controls, engine and drive train, chassis and suspension, steering system, braking system, coupling system, emergency equipment, and cargo securement devices.
3. Perform pre-trip inspections in a regular, systematic sequence that is legal, accurate, uniform, and time efficient.
4. Perform en route inspections by checking mirrors for signs of trouble, monitoring instruments and looking, listening, and feeling for malfunctions, making periodic roadside inspections of critical components, and meeting en route requirements for transporting all types of cargo.
5. Perform post-trip inspections by making accurate notes of actual and suspected component abnormalities or malfunctions, accurately complete required reports in a timely fashion.
6. Deal effectively with all types of external inspections such as road-based inspections and border crossings, as well as issues such as permits, tags, vehicle registration, and so forth.

PERFORMANCE SKILL: EXERCISE BASIC CONTROL

PERFORMANCE SKILL STANDARD

Conditions of Performance:

Given a typical tractor-trailer rig, loaded or unloaded, a typical road surface, and a trip to make,

Statement of Work to Be Performed:

the driver will start, move (drive), and steer the tractor-trailer effectively and efficiently.

Performance Criteria:

- Start and drive tractor-trailer such that he/she scores acceptable proficiency rating on an operational checklist for basic controls in areas such as executing sharp left and right turns, centering the vehicle, and maneuvering in restricted areas.
- Keep tractor-trailer in center of traffic lane.
- Avoid obstacles on both sides, front, and back.
- Achieve smooth and effective acceleration and stopping.
- Position tractor-trailer to begin and complete turns in lane.
- Perform all necessary adjustments for equipment, cargo, and conditions.
- Demonstrate safe operating procedures.

PERFORMANCE ELEMENTS AND ASSESSMENT CRITERIA:

1. Get into cab, adjust seat, and fasten seat belt.
2. Start, warm up, cool down, and shut off engine.
3. Make correct adjustments for company and cargo-specific equipment.
4. Monitor controls, mirrors, instruments, and gauges.
5. Get out and check position for obstructions, position, and paths or use appropriate spotters with clearly understood signals.
6. Judge path and clearances of trailer.
7. Activate warning flashers prior to moving into reverse gear. Tap horn periodically if tractor does not have a back-up alarm. (Keep window open and radio off.)
8. Position vehicle correctly before beginning a backing/docking maneuver.
9. Execute reverse steering of an articulated vehicle.
10. Back slowly (using idle speed) in straight and curved lines.
11. Check constantly on both sides and to the rear when backing—look in mirrors; watch for things that could tilt trailer; watch for overhead obstructions; watch behind tractor tires.
12. Pull up and start over when necessary.
13. Park trailer in jackknife and parallel positions.
14. Parallel park rig.
15. Use and adjust for sliding tandems on trailers.
16. Demonstrate correct use of speed control and engine brakes.
17. Demonstrate safe operating procedures for driving in all types of situations.
18. Demonstrate appropriate driving behavior for all types of high-risk areas, in various conditions, in different climates, and in unfamiliar surroundings.
19. Demonstrate company-appropriate and safe use of communication devices.

PERFORMANCE SKILL: EXECUTE SHIFTING
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PERFORMANCE SKILL STANDARD**Conditions of Performance:**

Given a multi-speed, dual range transmission and any number of driving conditions (traffic, terrain, speed, and highway conditions),

Statement of Work to Be Performed:

the driver will execute proper, smooth, and efficient up and down shifting technique, matched to engine needs and safe operations for road and traffic conditions.

Performance Criteria:

- Match shifting to engine needs and safe operations for road conditions.
- Shift smoothly to protect equipment and to control vehicle while shifting.
- Shift to maximize fuel efficiency.

PERFORMANCE ELEMENTS AND ASSESSMENT CRITERIA:

1. Shift up and down through all gears of multi-speed, dual range transmissions.
2. Double clutch and time shift for smooth and fuel-efficient performance.
3. Select proper gear for speed, terrain, turns, and highway conditions.
4. Avoid riding the clutch.
5. Demonstrate progressive shifting technique.
6. Demonstrate and explain skip shifting.
7. Demonstrate proper gear recovery.
8. Demonstrate how to stop in any gear.
9. Make appropriate adjustments for the typical company-specific equipment the driver will be operating.

PERFORMANCE SKILL: BACK AND DOCK TRACTOR-TRAILER

PERFORMANCE SKILL STANDARD

Conditions of Performance:

Given a typical tractor-trailer the driver operates in a specific carrier, a load, a route, or direction to back, and a place to park the rig,

Statement of Work to Be Performed:

the driver will back and dock the tractor-trailer safely and efficiently.

Performance Criteria:

- Back trailer on performance test to acceptable criteria with at least three 100' backs to within 6 inches of the dock.
- Back and park in restricted area within appropriate tolerances.
- Back in straight and curved lines within appropriate tolerances.
- Park at alley docks, in jackknife and parallel positions.
- Safely execute “blind-side” backing.
- Pull away from dock safely and efficiently.
- Execute backing and docking maneuvers in a reasonable amount of time.

PERFORMANCE ELEMENTS AND ASSESSMENT CRITERIA:

1. Get out and check dock area for obstructions, position, and paths.
2. Judge path and clearances of trailer.
3. Activate warning flashers prior to moving into reverse gear. Tap horn periodically if tractor does not have a back-up alarm. (Keep window open and radio off.)
4. Position vehicle correctly before beginning a backing/docking maneuver.
5. Use appropriate spotter with clear signals, as necessary.
6. Avoid blind-side backing where/when possible; where blind-side backing must be done, get out and look at situation.
7. Execute reverse steering of an articulated vehicle.
8. Back slowly (using idle speed) in straight and curved lines.
9. Perform serpentine backing slowly and using idle speed.
10. Back into restricted space.
11. Constantly check when backing—look in mirrors; watch for things that could tilt trailer; watch for overhead obstructions; watch behind tractor tires.
12. Pull up and start over when necessary.
13. Park trailer in jackknife and parallel positions.
14. Parallel park rig.
15. Adjust to differences at a given customer location.
16. Follow audio and visual directions, as necessary, for authorized personnel.
17. Execute backing and docking maneuvers in a reasonable amount of time.

PERFORMANCE SKILL: COUPLE TRAILER

PERFORMANCE SKILL STANDARD

Conditions of Performance:

Given verbal or written instructions to connect to a specific trailer, given the trailer and the time for pick-up,

Statement of Work to Be Performed:

the driver will demonstrate safe coupling of typical tractor-trailer units.

Performance Criteria:

- Couple tractor-trailer units within a reasonable amount of time, often 8 to 10 minutes.
- Complete coupling in accord with safety requirements and approved practices.
- Complete coupling with secure connections, including air lines and electrical cables.
- Make specific adjustments to deal with company equipment, cargo needs, or rules/regulations.
- Check trailer and connections for correct load, connections, and conformance to regulations.

PERFORMANCE ELEMENTS AND ASSESSMENT CRITERIA:

1. Check and adjust mirrors.
2. Check trailer numbers to ensure match of specific trailer to paperwork.
3. Align tractor and trailer units and back to position where fifth wheel plate just touches apron of trailer. Get out and check height of fifth wheel.
4. Secure trailer against movement and recheck trailer height.
5. Connect and check air lines.
6. Connect and check electrical cable.
7. Back tractor slowly and straight into trailer kingpin at right level and with appropriate force, check coupling and pin engagement.
8. Visually check kingpin to ensure connection has been made and locked in; also tug on trailer to check connection.
9. Check connection for security by pulling tractor forward gently. If it is okay, release brake; if not, secure connection.
10. Check for symptoms of improper/incomplete connections and make necessary adjustments.
11. Set in-cab air brake controls, retract and secure landing gear, and adjust mirrors and remove chocks (if used).
12. Deal with tandems, as necessary.
13. Make any necessary adjustments for company-specific equipment, state/provincial regulations, and/or for cargo to deal with weight distribution and axle limits, for example.

PERFORMANCE SKILL: UNCOUPLE TRAILER

PERFORMANCE SKILL STANDARD

Conditions of Performance:

Given verbal or written instructions about where and when to leave a trailer, and a trailer of any size attached to a tractor,

Statement of Work to Be Performed:

the driver will demonstrate safe uncoupling of typical tractor-trailer units.

Performance Criteria:

- Make any necessary adjustments for company-specific equipment, cargo, or location.
- Uncouple tractor-trailer units within a reasonable amount of time, often 5 to 7 minutes and in accordance with approved procedures.
- Complete uncoupling in accord with safety requirements and approved practices.
- Secure trailer from movement.
- Follow correct sequence for disconnecting electric lines and air hoses.
- Pull away safely and efficiently.

PERFORMANCE ELEMENTS AND ASSESSMENT CRITERIA:

1. Spot trailer on surface capable of supporting weight, adjust for surface conditions, and secure vehicle against movement.
2. Set in-cab air brake controls and trailer brakes.
3. Lower gear to raise trailer to correct height and check support.
4. Let tension off the fifth wheel so it is easier to uncouple.
5. Uncouple trailer and disconnect dolly.
6. Disconnect and secure air and electrical units prior to uncoupling.
7. Pull tractor partially clear of trailer.
8. Secure tractor, check trailer supports and brakes/chocks.
9. Pull tractor completely clear of trailer.
10. Complete paperwork, as necessary.

PERFORMANCE SKILL: PERFORM VISUAL SEARCH

PERFORMANCE SKILL STANDARD**Conditions of Performance:**

Given a typical tractor-trailer and a driving situation,

Statement of Work to Be Performed:

the driver will efficiently, effectively, and continually conduct a systematic visual search of the road for potential hazards and critical objects.

Performance Criteria:

- Demonstrate adequate, appropriate, and effective visual search technique by pointing out important obstacles in various types of traffic, as scored on the performance test, using the “commentary driving” technique.
- Demonstrate appropriate visual behavior by time (frequency) and locations checked.

PERFORMANCE ELEMENTS AND ASSESSMENT CRITERIA:

1. Correctly adjust any type of rear view mirror to appropriate specifications.
2. Correctly calculate speed and distance to maintain a minimum 12 to 15 second eye lead time.
3. Scan both sides of the road using quick glances to observe roadside activity and vehicles nearby.
4. Check mirrors for hazards every few seconds, and always before changing speed or direction.
5. Check instrument panel frequently.
6. Look ahead as far as possible during turns and on curves.
7. Check to the side before turning or changing lanes.
8. Monitor overtaking traffic in order to be aware of vehicles behind and in blind spots.
9. Avoid diverting attention from the path ahead.
10. Maintain a straight-line path whenever necessary to divert attention/eyes from the path ahead.
11. Check all intersections and crossings using proper technique.
12. Recognize and adjust for blind spots and no-see zones.

PERFORMANCE SKILL: MANAGE AND ADJUST VEHICLE SPEED

PERFORMANCE SKILL STANDARD

Conditions of Performance:

Given a tractor-trailer, a trip, and a route with varying conditions,

Statement of Work to Be Performed:

the driver will read/identify conditions, adjust speed, and manage speed effectively in response to various road, terrain, weather, and traffic conditions.

Performance Criteria:

- Adjust speed correctly to the configuration and condition of the roadway; terrain, weather, and visibility conditions; traffic conditions; and vehicle, cargo, and driver conditions.
- Maintain ramp speed 10 mph or more below posted speed, under ideal conditions; reduce ramp speed to 50 percent of posted speed for top-heavy loads.
- Obey the legal speed limit.
- Drive at speeds appropriate to road condition, traffic, and necessary stopping distances.

PERFORMANCE ELEMENTS AND ASSESSMENT CRITERIA:

1. Judge maximum safe speed at which a curve and on/off ramps can be entered and adjust speed to under maximum.
2. Obey speed limit.
3. Maintain proper speed to manage the space around the truck from other vehicles.
4. Judge maximum safe speed that traction will permit and adjust speed accordingly.
5. Recognize and interpret all types of driving conditions and road surfaces.
6. Adjust speed appropriately and effectively to various conditions and load.
7. Judge and adjust maximum safe speed at which vehicle control can be maintained under traffic conditions, crosswinds, road conditions, weather conditions, and limited visibility.

PERFORMANCE SKILL: MANAGE AND ADJUST VEHICLE SPACE RELATIONS

PERFORMANCE SKILL STANDARD

Conditions of Performance:

Given a typical tractor-trailer, a road, a route of travel, and traffic,

Statement of Work to Be Performed:

the driver will properly manage the space required for safe vehicle operation.

Performance Criteria:

- Select a lane offering the best mobility and least traffic interruption, in accordance with the law, to cause minimum interference to other vehicles.
- Ensure a safe gap before changing lanes, passing other vehicles, merging, and crossing or entering traffic; position vehicle correctly in the lane and relative to crosswalks so as to minimize hazards to other road users.
- Position tractor-trailer appropriately before initiating and completing a turn so as to prevent other vehicles from passing on the wrong side and to minimize encroachment on other lanes
- Maintain a following distance appropriate to traffic, road surface, visibility, and vehicle weight; maximize separation from traffic when vehicle is disabled.
- Avoid structures having inadequate overhead clearance.
- Demonstrate safe following distance guideline.
- Manage space in relationship to speed and speed in relationship to safe distance.

PERFORMANCE ELEMENTS AND ASSESSMENT CRITERIA:

1. Explain basic formula for determining safe following distance.
2. Demonstrate capacity to use formula for safe following distances such as one second of following distance for each 10 feet of vehicle length plus one second for speeds above 40 mph.
3. Adjust following distances for loads, road conditions, environmental factors, and traffic density.
4. Judge adequacy of gaps in traffic for passing, crossing traffic, entering traffic, changing lanes, and dealing with vehicles moving at different speeds.
5. Use proper visual search techniques to determine and achieve appropriate space.
6. Properly position vehicle for making all driving moves and avoiding getting other drivers or pedestrians in the wrong spot.
7. Judge clearances on all sides of truck in motion, especially above the trailer.

PERFORMANCE SKILL: CHECK AND MAINTAIN VEHICLE SYSTEMS AND COMPONENTS

PERFORMANCE SKILL STANDARD

Conditions of Performance:

Given a typical tractor-trailer rig, a trip, and a basic tool kit,

Statement of Work to Be Performed:

the driver will check each system function, correctly note indications of problems for various systems, and fix those within his/her jurisdiction. Systems to check include engine, steering, cooling, electrical, tires, fuel, air intake and exhaust systems, brakes, drive train, coupling systems, and suspension.

Performance Criteria:

- Explain proper range of function for all key vehicle systems.
- Check each component and vehicle system.
- Correct problems within jurisdiction.
- Explain company policy on maintenance.

PERFORMANCE ELEMENTS AND ASSESSMENT CRITERIA:

1. Check and service engine, fuel, oil, coolant, battery, and filters.
2. Perform simple emergency repairs to enable a vehicle to reach a maintenance facility.
3. Check tire air pressure.
4. Check for proper tire and wheel mounting. Report problem.
5. Drain moisture from air brake supply reservoirs and fuel system.
6. Check brakes. Report problems or adjust according to regulation, certification, and company policy.
7. Clean and repair light bulbs and lenses.
8. Change fuses and reset circuit breakers.
9. Differentiate among company policy for driver-controlled maintenance items, shop maintenance, and vendor maintenance.

PERFORMANCE SKILL: DIAGNOSE AND REPORT MALFUNCTIONS

PERFORMANCE SKILL STANDARD

Conditions of Performance:

Given a typical tractor-trailer rig and either a description of problem symptoms or actual symptoms of poor performance ,

Statement of Work to Be Performed:

the driver will troubleshoot symptoms, identify vehicle malfunctions, and report problem.

Performance Criteria:

- Identify symptom and vehicle systems and match symptom to likely problem.
- Troubleshoot/identify problem, and/or identify if a problem exists.
- Report problem accurately and according to guidelines.
- Fix problems within jurisdiction of driver, as described by company policy and regulation.
- Follow company policy on repairs and reporting.

PERFORMANCE ELEMENTS AND ASSESSMENT CRITERIA:

1. Know and recognize the types of issues or typical breakdowns for the company-specific equipment operated by the driver.
2. Check each component and vehicle system. Identify vehicle systems or components that are functioning properly, are in imminent danger of failing, or are functioning improperly.
3. Identify and interpret symptoms of malfunction.
4. Match symptom to possible list of problems.
5. Describe symptoms of improper operation completely and accurately to maintenance personnel.
6. Correct problems within jurisdiction.
7. Avoid attempting to perform maintenance for which driver is unqualified.
8. Follow company procedure for arranging for other repairs.
9. Properly report breakdowns occurring en route within company policy.
10. Properly complete a Vehicle Condition Report (VCR)/Vehicle Inspection Report (VIR).

PERFORMANCE SKILL: IDENTIFY POTENTIAL DRIVING HAZARDS AND PERFORM EMERGENCY MANEUVERS
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PERFORMANCE SKILL STANDARD**Conditions of Performance:**

Given a typical tractor-trailer rig, a trip, and any number of potential problems,

Statement of Work to Be Performed:

the driver will recognize the potential dangers in the driving environment and take appropriate action(s) before the dangers develop into emergency situations, or will respond appropriately to an emergency.

Performance Criteria:

- Identify road conditions and other road users that are a potential threat to the safety of the tractor-trailer.
- Suggest appropriate adjustments, as indicated by passing a written test on the topic or demonstrating skill.
- Explain causes of and techniques to avoid skids and jackknives.
- Explain how to deal with skid.
- Demonstrate through proper speed and space management and proper acceleration and braking techniques that he/she should be able to avoid a skid.
- Explain how to perform emergency evasive maneuvers.
- Explain what to do in case of a front axle blowout.

PERFORMANCE ELEMENTS AND ASSESSMENT CRITERIA:

1. Perceive immediately a potential threat from visible characteristics and actions of other road users, road conditions, and the environment.
2. Match and initiate prompt defensive or evasive action.
3. Use proper evasive steering techniques.
4. Practice good visual search techniques.
5. Identify and explain situations where skids and jackknives are likely.
6. Use brakes in a manner that will stop the vehicle in the shortest possible distance while maintaining directional control.
7. Oversteer and countersteer out of a skid in a way that will regain directional control and not produce another skid.
8. Operate brakes properly to provide maximum braking without loss of control.
9. Judge maximum safe speed for slippery surface conditions.
10. Deal with blowout with proper steering and stopping.
11. Maintain control.

PERFORMANCE SKILL: IDENTIFY AND ADJUST TO DIFFICULT AND EXTREME DRIVING CONDITIONS

PERFORMANCE SKILL STANDARD**Conditions of Performance:**

Given a typical tractor-trailer rig, a load, a route, and a set of difficult or extreme driving conditions,

Statement of Work to Be Performed:

the driver will identify the conditions and make the appropriate defensive adjustments before the dangers develop into emergency situations.

Performance Criteria:

- Explain and demonstrate correct defensive adjustments for at least the following conditions:
 - night operations
 - cold weather operation
 - hot weather operation
 - mountainous terrain
 - wet conditions
 - windy conditions
 - foggy conditions

- Check for weather information before and during trip.

PERFORMANCE ELEMENTS AND ASSESSMENT CRITERIA:**Night Operations**

1. Judge and adjust speed, distances, and separation under nighttime conditions so as to operate safely and not overrun headlights/outdrive visibility.
2. Demonstrate improved scanning technique.
3. Use high beams legally; dim headlights in accord with law and safety.
4. Respond safely to glare of other vehicles.
5. Manage driver's fatigue.
6. Use proper signaling techniques.
7. Make appropriate physical adjustments for night operation such as cleaning mirrors and lights, removing glasses, taking frequent breaks, and so forth.

Cold Weather

8. Prepare for operation in cold weather, including removing snow and ice from windows, mirrors, brakes, lights, and hand holds.
9. Inspect for cold weather operation by paying special attention to coolant level and mixture, heater, defrosters, wipers, washers, tire tread, brakes, lights, reflectors, wiring system, hoses, fuel, exhaust system, and fifth wheel.
10. Make sure that moisture is expelled from the air tanks after each trip.
11. Check weather information before and during trips and adjust plan accordingly.
12. Check for ice accumulation (and remove it) on brakes, air hoses, electrical wiring, and radiator shutters during operation.
13. Adjust operation of vehicle to weather conditions and ice, including speed selection, braking, direction changes, and following distance to maintain control and avoid jackknifing.
14. Ensure safe operation of brakes after driving through deep water.
15. Use windshield wipers, washers, and defrosters to maintain visibility.
16. Start engine in cold weather.
17. Observe road surface for changes in conditions.
18. Continually check for changing road conditions and adjust rate of change in speed and direction to road conditions to avoid skidding.
19. Coordinate acceleration and shifting to overcome the resistance of snow, sand, and mud.
20. Carry additional food, water, and clothing to deal with “stop” situations.
21. Deal with fuel mixtures and additive for extreme cold weather.

Hot Weather

22. Check tires, lubrication, levels and operation of cooling system, fan belts, fans, and hoses and check the radiator for debris.
23. Carry an ample supply of drinking water.
24. Inspect tires frequently.
25. Avoid leaving the vehicle if it is disabled in the desert.

Mountains

26. Check brake adjustment prior to mountain driving.
27. Use right lane or special truck lane going up grades.
28. Place transmission in appropriate gear for engine braking before starting downgrade.
29. Use proper braking technique and maintain proper engine braking before starting downgrades.
30. Use special speed reduction devices properly; e.g., engine brakes.
31. Use truck escape ramp, if available, when brakes fail on a downgrade.
32. Observe temperature gauge frequently when pulling heavy loads up long grades.
33. Use four-way flashers.

Fog

34. Use lights appropriately.
35. Adjust speed and distance for safe operations.
36. Do not drive on another driver’s lights; if unable to see safe following distance, stop.

PERFORMANCE SKILL: HANDLE AND DOCUMENT CARGO

PERFORMANCE SKILL STANDARD

Conditions of Performance:

Given a typical trailer, a typical load, and a “bill of lading” or cargo list,

Statement of Work to Be Performed:

the driver will perform all cargo handling safely and complete documentation procedures accurately.

Performance Criteria:

- Verify nature, amount, and condition of cargo on both pick-up and delivery.
- Verify load is distributed and tied down correctly to meet legal and safety requirements.
- Verify information on “bill of lading” and properly record and report discrepancies and damage to the cargo.
- Obtain appropriate signatures on delivery receipts and other required forms.
- Properly prepare a manifest.
- Move heavy loads safely, as verified by a performance test.
- Obtain hazardous materials endorsement prior to carrying hazardous materials.
- Follow company procedure on handling cargo.
- Ensure safe and secure locations to park and/or drop cargo.

PERFORMANCE ELEMENTS AND ASSESSMENT CRITERIA:

1. Prepare manifest, as required.
2. Verify cargo types, nature, amount, and condition on pick-up and delivery.
3. Verify seals, if used.
4. Cover cargo, as necessary.
5. Obtain appropriate signatures.
6. Verify information on “bill of lading” and properly record/report discrepancies and damage.
7. Adjust/verify that load distribution on trailer fits within regulations.
8. Adjust/verify that placards match load and meet regulations; correct placards, as necessary.
9. Safely operate common types of cargo handling equipment; demonstrate correct use of cargo handling equipment such as a pallet jack.
10. Select proper sizes of chain, cable, nylon webbing, steel strapping, or rope.
11. Secure load with chains, cables, webbing, or strapping and correctly use the binding system.
12. Block and brace cargo properly.
13. Stop to inspect cargo, according to regulations.
14. Demonstrate knowledge of proper lifting techniques required to safely load and unload cargo.
15. Adjust controls or elements of tractor and/or trailer for cargo and load.
16. Ensure secure places to park and/or drop cargo.
17. Open, close, and secure doors safely and appropriately.
18. Choose routes and stops to avoid theft risk.

PERFORMANCE SKILL: DEAL WITH ACCIDENT SCENES AND REPORTING PROCEDURES
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PERFORMANCE SKILL STANDARD**Conditions of Performance:**

Given an accident on the road,

Statement of Work to Be Performed:

the driver will follow safe and legal procedures at an accident scene and properly report accidents, all according to company procedure.

Performance Criteria:

- Pass a written or oral test on procedures, achieving a score of at least 80 percent correct on accident procedures. Among the topics to include are guarding the scene of an accident to prevent further injury or damage and obtain assistance; obtaining all information needed for accident reports to law enforcement, the employer, and the insurance company; rendering assistance to any injured parties, including providing first aid, provided he/she has had proper training; extinguishing fire including cargo, engine, electrical, and tire fires; and discussing liability only with law enforcement, the company, or the company's representative.

PERFORMANCE ELEMENTS AND ASSESSMENT CRITERIA:

1. Stop and park truck in safe location.
2. Notify police; call for assistance; place warning devices.
3. Apply first aid and CPR procedures as necessary, especially in relation to shock, resuscitation, and stopping bleeding.
4. Protect injured persons from others, except from trained emergency personnel.
5. Choose and operate fire extinguishers correctly.
6. Protect self from blood-borne pathogens.
7. Direct traffic, as necessary.
8. Obtain information for accident reporting, including photographs.
9. Discuss accident details only with appropriate officials.
10. Make sure any truck cargo that is spilled is cleaned up. Arrange for cleanup as necessary.
If hazardous materials are involved, call appropriate authorities.
11. Stay at scene until law enforcement and company say it is okay to leave.
12. Follow company policy on issues involving accidents.

PERFORMANCE SKILL: DEAL WITH ENVIRONMENTAL ISSUES
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PERFORMANCE SKILL STANDARD**Conditions of Performance:**

Given a typical tractor-trailer rig and a trip,

Statement of Work to Be Performed:

the driver will recognize environmental hazards/issues and obligations and act to meet responsibilities.

Performance Criteria:

- Identify hazard and match correct response with problems as written on a situational test.
- Indicate idle requirements and demonstrate how to monitor and adjust to them.
- Follow company policy and regulations on environmental issues.

PERFORMANCE ELEMENTS AND ASSESSMENT CRITERIA:

1. Check hoses, couplings, and other components that may contribute to environmental issues.
2. Monitor idle time and make appropriate adjustments.
3. Check regularly for signs of leaks.
4. Fuel carefully to avoid spills.
5. Recognize and report spills en route.
6. Make appropriate adjustments in operation, especially idle, as indicated in state/provincial regulations.
7. Act to mitigate spill as indicated by company policy and the Emergency Response Guide.

PERFORMANCE SKILL: PLAN TRIPS AND MAKE APPROPRIATE DECISIONS

PERFORMANCE SKILL STANDARD**Conditions of Performance:**

Given proposed trip orders, loads, and resources

Statement of Work to Be Performed:

the driver will lay out and plan trips attending to breaks, sleep, permits, regulations, money, fuel, weather, time of arrival, and other issues, as necessary.

Performance Criteria:

- Follow regulations.
- Correctly identify necessary/required permits.
- Estimate time of arrival to within 30 minutes.
- Identify fuel stops.
- Calculate and budget money correctly to within \$10.
- Choose most effective route for time, budget, load, and conditions.
- Identify and prepare for all adjustments such as bridge regulations, anticipated traffic conditions, weather, scales, and so forth.

PERFORMANCE ELEMENTS AND ASSESSMENT CRITERIA:

1. Plan a route from one point to another that is optimal in terms of travel time; fuel costs; potential hazards; and federal, state, and local travel restrictions.
2. Arrange to secure permits required by the nature of the vehicle, its cargo, and route to be traveled.
3. Arrange a secure place for vehicle on layovers, especially when transporting hazardous materials.
4. Use math to calculate miles, fuel use, and expenses.
5. Interpret maps and regulations.
6. Estimate travel time and plan rest stops and layovers to ensure adequate rest.
7. Estimate fuel consumption and plan fuel stops.
8. Estimate needed expense money and obtain funds and/or company credit cards.
9. Accurately document expenses according to policy and regulation.
10. Scale loads.

<p style="text-align: center;">PERFORMANCE SKILL: USE EFFECTIVE COMMUNICATION AND PUBLIC RELATIONS SKILLS</p>
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PERFORMANCE SKILL STANDARD

Conditions of Performance:

Given a trip order, a truck, and a route,

Statement of Work to Be Performed:

the driver will communicate effectively with all those around him/her as well as those with whom the driver must communicate to complete his/her work.

Performance Criteria:

- Convey clear intentions so message receiver knows intention.
- Deal effectively with dispatch; receive and send clear messages from/to dispatcher with on-board devices.
- Present a good public image.
- Follow company policy when communicating/using communication equipment.

PERFORMANCE ELEMENTS AND ASSESSMENT CRITERIA:

1. Signal intentions such as lane changes, hazards, and backing up.
2. Use horn, headlights, and other lights appropriately.
3. Establish and use eye contact with drivers and pedestrians as a warning.
4. Avoid making decisions only on basis of another's signal.
5. Interact tactfully with customers and general public, family, and company.
6. Use effective and appropriate conversation with customers, company personnel, and family.
7. Use on-board communication devices. To extent possible, operate devices when vehicle is not moving. Follow company policy around this issue.
8. Ask effective questions, including clarifying questions.
9. Avoid directing traffic while operating vehicle.
10. Use conflict resolution techniques to help resolve issues with others.

PERFORMANCE SKILL: MANAGE PERSONAL RESOURCES AND DEAL WITH LIFE ON THE ROAD
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PERFORMANCE SKILL STANDARD**Conditions of Performance:**

Given a trip over the road that requires days and nights away from home,

Statement of Work to Be Performed:

the driver will actively manage own life and resources so as to take care of self and job, as well as meet responsibilities.

Performance Criteria:

- Correctly identify problems and strategies that deal effectively with personal resources by describing, demonstrating, and matching problems and solutions for issues such as
 - fatigue
 - diet
 - exercise
 - personal hygiene
 - stress
 - financial issues
 - free time/entertainment

PERFORMANCE ELEMENTS AND ASSESSMENT CRITERIA:

1. Employ fatigue-reducing strategies.
2. Use stress-reducing techniques, as needed.
3. Exercise restraint with diet and recreation while on the road.
4. Get exercise while on the road.
5. Make good decisions about where to stop and stay; remain always aware of surroundings.
6. Practice good personal hygiene.
7. Practice good communication skills with family.
8. Manage financial resources prudently, both those of self and of company.
9. Actively work to resolve conflict with company or within family.
10. Find effective ways to stay connected to family or significant others and to company.
11. Manage rest time, given the circumstances, so that loads can be picked up and delivered in compliance with federal motor carrier rules.

<p style="text-align: center;">PERFORMANCE SKILL: RECORD AND MAINTAIN HOURS OF SERVICE REQUIREMENTS</p>
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PERFORMANCE SKILL STANDARD

Conditions of Performance:

Given a trip and a tractor-trailer,

Statement of Work to Be Performed:

the driver will adhere to the legal requirements of the "Hours of Service Regulations" and complete a driver's daily log and logbook recap.

Performance Criteria:

- Comply with Hours of Service requirements.
- Maintain a complete, neat, and accurate driver's daily log and logbook recap.
- Perform all necessary calculations correct to the closest quarter (1/4) hour.

PERFORMANCE ELEMENTS AND ASSESSMENT CRITERIA:

1. Interpret Hours of Service regulations correctly.
2. Use and follow Hours of Service regulations correctly.
3. Keep time accurately.
4. Perform arithmetic calculations necessary to recap and apply totals to the Hours of Service regulations.
5. Determine driving hours remaining on a particular day or tour of duty.
6. Keep pick-up and delivery record.

APPENDIX A: SKILL MATRIX

Read and Interpret Control Systems

1. Identify, locate, and read and operate each of the primary controls including those required for steering, accelerating, shifting, braking, and parking.
2. Identify, locate, and read and operate each of the secondary controls including those required for control of lights, signals, windshield wipers and washers, interior climate, engine starting and shutdown, suspension, and coupling.
3. Identify, locate, read and operate, and indicate the acceptable reading range of the various instruments required to monitor vehicle and engine speed as well as the status of—fuel, oil, air, cooling, exhaust, and electrical systems.
4. Augment with displayed information from other sources, given that instruments may malfunction or not be entirely accurate.
5. Make appropriate adjustments for company-specific equipment, especially for various transmissions, engines, types of trailers, types of loads, and other factors.
6. Identify typical problem points in equipment specific to an individual carrier's operation.

Perform Vehicle Inspections

1. Perform each type of inspection according to rules and policy and as adjusted for specific equipment or cargo.
2. Inspect and determine the condition of critical vehicle components, including the instrument and controls, engine and drive train, chassis and suspension, steering system, braking system, coupling system, emergency equipment, and cargo securement devices.
3. Perform pre-trip inspections in a regular, systematic sequence that is legal, accurate, uniform, and time efficient.
4. Perform en route inspections by checking mirrors for signs of trouble, monitoring instruments and looking, listening, and feeling for malfunctions, making periodic roadside inspections of critical components, and meeting en route requirements for transporting all types of cargo.
5. Perform post-trip inspections by making accurate notes of actual and suspected component abnormalities or malfunctions, accurately complete required reports in a timely fashion.
6. Deal effectively with all types of external inspections such as road-based inspections and border crossings, as well as issues such as permits, tags, vehicle registration, and so forth.

Exercise Basic Control

1. Get into cab, adjust seat, and fasten seat belt.
2. Start, warm up, cool down, and shut off engine.
3. Get out and check position for obstructions, position, and paths or use appropriate spotters with clearly understood signals.
4. Make correct adjustments for company and cargo-specific equipment.
5. Monitor controls, mirrors, instruments, and gauges.
6. Judge path and clearances of trailer.
7. Activate warning flashers prior to moving into reverse gear. Tap horn periodically if tractor does not have a back-up alarm. (Keep window open and radio off.)
8. Position vehicle correctly before beginning a backing/docking maneuver.
9. Execute reverse steering of an articulated vehicle.
10. Back slowly (using idle speed) in straight and curved lines.
11. Check constantly on both sides and to the rear when backing—look in mirrors; watch for things that could tilt trailer; watch for overhead obstructions; watch behind tractor tires.
12. Pull up and start over when necessary.
13. Park trailer in jackknife and parallel positions.
14. Parallel park rig.
15. Use and adjust for sliding tandems on trailers.
16. Demonstrate correct use of speed control and engine brakes.
17. Demonstrate safe operating procedures for driving in all types of situations.
18. Demonstrate appropriate driving behavior for all types of high-risk areas, in various conditions, in different climates, and in unfamiliar surroundings.
19. Demonstrate company-appropriate and safe use of communication devices.

Execute Shifting

1. Shift up and down through all gears of multi-speed, dual range transmissions.
2. Double clutch and time shift for smooth and fuel-efficient performance.
3. Select proper gear for speed, terrain, turns, and highway conditions.
4. Avoid riding the clutch.
5. Demonstrate progressive shifting technique.
6. Demonstrate and explain skip shifting.
7. Demonstrate proper gear recovery.
8. Demonstrate how to stop in any gear.
9. Make appropriate adjustments for the typical company-specific equipment the driver will be operating.

Back and Dock Trailer

1. Get out and check dock area for obstructions, position, and paths.
2. Judge path and clearances of trailer.
3. Activate warning flashers prior to moving into reverse gear. Tap horn periodically if tractor does not have a back-up alarm. (Keep window open and radio off.)
4. Position vehicle correctly before beginning a backing/docking maneuver.
5. Use appropriate spotter with clear signals, as necessary.
6. Avoid blind-side backing where/when possible; where blind-side backing must be done, get out and look at situation.
7. Execute reverse steering of an articulated vehicle.
8. Back slowly (using idle speed) in straight and curved lines.
9. Perform serpentine backing slowly and using idle speed.
10. Back into restricted space.
11. Constantly check when backing—look in mirrors; watch for things that could tilt trailer; watch for overhead obstructions; watch behind tractor tires.
12. Pull up and start over when necessary.
13. Park trailer in jackknife and parallel positions.
14. Parallel park rig.
15. Adjust to differences at a given customer location.
16. Follow audio and visual directions, as necessary, for authorized personnel.
17. Execute backing and docking maneuvers in a reasonable amount of time.

Couple Trailer

1. Check and adjust mirrors.
2. Check trailer numbers to ensure match of specific trailer to paperwork.
3. Align tractor and trailer units and back to position where fifth wheel plate just touches apron of trailer. Get out and check height of fifth wheel.
4. Secure trailer against movement and recheck trailer height.
5. Connect and check air lines.
6. Connect and check electrical cable.
7. Back tractor slowly and straight into trailer kingpin at right level and with appropriate force, check coupling and pin engagement.
8. Visually check kingpin to ensure connection has been made and locked in; also tug on trailer to check connection.
9. Check connection for security by pulling tractor forward gently. If it is okay, release brake; if not, secure connection.
10. Check for symptoms of improper/incomplete connections and make necessary adjustments.
11. Set in-cab air brake controls, retract and secure landing gear, and adjust mirrors and remove chocks (if used).
12. Deal with tandems, as necessary.
13. Make any necessary adjustments for company-specific equipment, state/provincial regulations, and/or for cargo to deal with weight distribution and axle limits, for example.

Uncouple Trailer

1. Spot trailer on surface capable of supporting weight, adjust for surface conditions, and secure vehicle against movement.
2. Set in-cab air brake controls and trailer brakes.
3. Lower gear to raise trailer to correct height and check support.
4. Let tension off the fifth wheel so it is easier to uncouple.
5. Uncouple trailer and disconnect dolly.
6. Disconnect and secure air and electrical units prior to uncoupling.
7. Pull tractor partially clear of trailer.
8. Secure tractor, check trailer supports and brakes/chocks.
9. Pull tractor completely clear of trailer.
10. Complete paperwork, as necessary.

Perform Visual Search

1. Correctly adjust any type of rear view mirror to appropriate specifications.
2. Correctly calculate speed and distance to maintain a minimum 12 to 15 second eye lead time.
3. Scan both sides of the road using quick glances to observe roadside activity and vehicles nearby.
4. Check mirrors for hazards every few seconds, and always before changing speed or direction.
5. Check instrument panel frequently.
6. Look ahead as far as possible during turns and on curves.
7. Check to the side before turning or changing lanes.
8. Monitor overtaking traffic in order to be aware of vehicles behind and in blind spots.
9. Avoid diverting attention from the path ahead.
10. Maintain a straight-line path whenever necessary to divert attention/eyes from the path ahead.
11. Check all intersections and crossings using proper technique.
12. Recognize and adjust for blind spots and no-see zones.

Manage and Adjust Vehicle Speed

1. Judge maximum safe speed at which a curve and on/off ramps can be entered and adjust speed to under maximum.
2. Obey speed limit.
3. Maintain proper speed to manage the space around the truck from other vehicles.
4. Judge maximum safe speed that traction will permit and adjust speed accordingly.
5. Recognize and interpret all types of driving conditions and road surfaces.
6. Adjust speed appropriately and effectively to various conditions and load.
7. Judge and adjust maximum safe speed at which vehicle control can be maintained under traffic conditions, crosswinds, road conditions, weather conditions, and limited visibility.

Manage and Adjust Vehicle Space Relations

- 1.Explain basic formula for determining safe following distance.
- 2.Demonstrate capacity to use formula for safe following distances such as one second of following distance for each 10 feet of vehicle length plus one additional second for speeds above 40 mph.
- 3.Adjust following distances for loads, road conditions, environmental factors, and traffic density.
- 4.Judge adequacy of gaps in traffic for passing, crossing traffic, entering traffic, changing lanes, and dealing with vehicles moving at different speeds.
- 5.Use proper visual search techniques to determine and achieve appropriate space.
- 6.Properly position vehicle for making all driving moves and avoiding getting other drivers or pedestrians in the wrong spot.
- 7.Judge clearances on all sides of truck in motion, especially above the trailer.

Check and Maintain Vehicle Systems and Components

- 1.Check and service engine, fuel, oil, coolant, battery, and filters.
- 2.Perform simple emergency repairs to enable a vehicle to reach a maintenance facility.
- 3.Check tire air pressure.
- 4.Check for proper tire and wheel mounting. Report problem.
- 5.Drain moisture from air brake supply reservoirs and fuel system.
- 6.Check brakes. Report problems or adjust according to regulation, certification, and company policy.
- 7.Clean and repair light bulbs and lenses.
- 8.Change fuses and reset circuit breakers.
- 9.Differentiate among company policy for driver-controlled maintenance items, shop maintenance, and vendor maintenance.

Diagnose and Report Malfunctions

- 1.Know and recognize the types of issues or typical breakdowns for the company-specific equipment operated by the driver.
- 2.Check each component and vehicle system. Identify vehicle systems or components that are functioning properly, are in imminent danger of failing, or are functioning improperly.
- 3.Identify and interpret symptoms of malfunction.
- 4.Match symptom to possible list of problems.
- 5.Describe symptoms of improper operation completely and accurately to maintenance personnel.
- 6.Correct problems within jurisdiction.
- 7.Avoid attempting to perform maintenance for which driver is unqualified.
- 8.Follow company procedure for arranging for other repairs.
- 9.Properly report breakdowns occurring en route.
10. Properly complete a Vehicle Condition Report (VCR)/Vehicle Inspection Report (VIR).

Identify Potential Driving Hazards and Perform Emergency Maneuvers

1. Perceive immediately a potential threat from visible characteristics and actions of other road users, road conditions, and the environment.
2. Match and initiate prompt defensive or evasive action.
3. Use proper evasive steering techniques.
4. Practice good visual search techniques.
5. Identify and explain situations where skids and jackknives are likely.
6. Use brakes in a manner that will stop the vehicle in the shortest possible distance while maintaining directional control.
7. Oversteer and countersteer out of a skid in a way that will regain directional control and not produce another skid.
8. Operate brakes properly to provide maximum braking without loss of control.
9. Judge maximum safe speed for slippery surface conditions.
10. Deal with blowout with proper steering and stopping.
11. Maintain control.

Identify and Adjust to Difficult and Extreme Driving Conditions

Night Operations

1. Judge and adjust speed, distances, and separation under nighttime conditions so as to operate safely and not overrun headlights/outdrive visibility.
2. Demonstrate improved scanning technique.
3. Use high beams legally; dim headlights in accord with law and safety.
4. Respond safely to glare of other vehicles.
5. Manage driver's fatigue.
6. Use proper signaling techniques.
7. Make appropriate physical adjustments for night operation such as cleaning mirrors and lights, removing glasses, taking frequent breaks, and so forth.

Cold Weather

8. Prepare for operation in cold weather, including removing snow and ice from windows, mirrors, brakes, lights, and hand holds.
9. Inspect for cold weather operation by paying special attention to coolant level and mixture, heater, defrosters, wipers, washers, tire tread, brakes, lights, reflectors, wiring system, hoses, fuel, exhaust system, and fifth wheel.
10. Make sure that moisture is expelled from the air tanks after each trip.
11. Check weather information before and during trips and adjust plan accordingly.
12. Check for ice accumulation (and remove it) on brakes, air hoses, electrical wiring, and radiator shutters during operation.
13. Adjust operation of vehicle to weather conditions and ice, including speed selection, braking, direction changes, and following distance to maintain control and avoid jackknifing.
14. Ensure safe operation of brakes after driving through deep water.
15. Use windshield wipers, washers, and defrosters to maintain visibility.
16. Start engine in cold weather.
17. Observe road surface for changes in conditions.
18. Continually check for changing road conditions and adjust rate of change in speed and direction to road conditions to avoid skidding.

19. Coordinate acceleration and shifting to overcome the resistance of snow, sand, and mud.
20. Carry additional food, and clothing to deal with “stop” situations.
21. Deal with fuel mixtures and additive for extreme cold weather.

Hot Weather

22. Check tires, lubrication, levels and operation of cooling system, fan belts, fans, and hoses and check the radiator for debris.
23. Carry an ample supply of drinking water.
24. Inspect tires frequently.
25. Avoid leaving the vehicle if it is disabled in the desert.

Mountains

26. Check brake adjustment prior to mountain driving.
27. Use right lane or special truck lane going up grades.
28. Place transmission in appropriate gear for engine braking before starting downgrade.
29. Use proper braking technique and maintain proper engine braking before starting downgrades.
30. Use special speed reduction devices properly; e.g., engine brakes.
31. Use truck escape ramp, if available, when brakes fail on a downgrade.
32. Observe temperature gauge frequently when pulling heavy loads up long grades.
33. Use four-way flashers.

Fog

34. Use lights appropriately.
35. Adjust speed and distance for safe operations.
36. Do not drive on another driver’s lights; if unable to see safe following distance, stop.

Handle and Document Cargo

1. Prepare manifest, as required.
2. Verify cargo types, nature, amount, and condition on pick-up and delivery.
3. Verify seals, if used.
4. Cover cargo, as necessary.
5. Obtain appropriate signatures.
6. Verify information on “bill of lading” and properly record/report discrepancies and damage.
7. Adjust/verify that load distribution on trailer fits within regulations.
8. Adjust/verify that placards match load and meet regulations; correct placards, as necessary.
9. Safely operate common types of cargo handling equipment; demonstrate correct use of cargo handling equipment such as a pallet jack.
10. Select proper sizes of chain, cable, nylon webbing, steel strapping, or rope.
11. Secure load with chains, cables, webbing, or strapping and correctly use the binding system.
12. Block and brace cargo properly.
13. Stop to inspect cargo, according to regulations.
14. Demonstrate knowledge of proper lifting techniques required to safely load and unload cargo.
15. Adjust controls or elements of tractor and/or trailer for cargo and load.
16. Ensure secure places to park and/or drop cargo.
17. Open, close, and secure doors safely and appropriately.
18. Choose routes and stops to avoid theft risk.

Deal with Accident Scenes and Reporting Procedures

1. Stop and park truck in safe location.
2. Notify police; call for assistance; place warning devices.
3. Apply first aid and CPR procedures as necessary, especially in relation to shock, resuscitation, and stopping bleeding.
4. Protect injured persons from others, except from trained emergency personnel.
5. Choose and operate fire extinguishers correctly.
6. Protect self from blood-borne pathogens.
7. Direct traffic, as necessary.
8. Obtain information for accident reporting, including photographs.
9. Discuss accident details only with appropriate officials.
10. Make sure any truck cargo that is spilled is cleaned up. Arrange for cleanup as necessary. If hazardous materials are involved, call appropriate authorities.
11. Stay at scene until law enforcement and company say it is okay to leave.
12. Follow company policy on issues involving accidents.

Deal with Environmental Issues

1. Check hoses, couplings, and other components that may contribute to environmental issues.
2. Monitor idle time and make appropriate adjustments.
3. Check regularly for signs of leaks.
4. Fuel carefully to avoid spills.
5. Recognize and report spills en route.
6. Make appropriate adjustments in operation, especially idle, as indicated in state/provincial regulations.
7. Act to mitigate spill as indicated by company policy and the Emergency Response Guide.

Plan Trips and Make Appropriate Decisions

1. Plan a route from one point to another that is optimal in terms of travel time; fuel costs; potential hazards; and federal, state, and local travel restrictions.
2. Arrange to secure permits required by the nature of the vehicle, its cargo, and route to be traveled.
3. Arrange a secure place for vehicle on layovers, especially when transporting hazardous materials.
4. Use math to calculate miles, fuel use, and expenses.
5. Interpret maps.
6. Estimate travel time and plan rest stops and layovers to ensure adequate rest.
7. Estimate fuel consumption and plan fuel stops.
8. Estimate needed expense money and obtain funds and/or company credit cards.
9. Accurately document expenses according to policy and regulation.
10. Scale loads.

Use Effective Communication and Public Relations Skills

- 1.Signal intentions such as lane changes, hazards, and backing up.
- 2.Use horn, headlights, and other lights appropriately.
- 3.Establish and use eye contact with drivers and pedestrians as a warning.
- 4.Avoid making decisions only on basis of another's signal.
- 5.Interact tactfully with customers and general public, family, and company.
- 6.Use effective and appropriate conversation with customers, company personnel, and family.
- 7.Use on-board communication devices. To extent possible, operate devices when vehicle is not moving. Follow company policy around this issue.
- 8.Ask effective questions, including clarifying questions.
- 9.Avoid directing traffic while operating vehicle.
10. Use conflict resolution techniques to help resolve issues with others.

Manage Personal Resources and Deal with Life on the Road

- 1.Employ fatigue-reducing strategies.
- 2.Use stress-reducing techniques, as needed.
- 3.Exercise restraint with diet and recreation while on the road.
- 4.Get exercise while on the road.
- 5.Make good decisions about where to stop and stay; remain always aware of surroundings.
- 6.Practice good personal hygiene.
- 7.Practice good communication skills with family.
- 8.Manage financial resources prudently, both those of self and of company.
- 9.Actively work to resolve conflict with company or within family.
10. Find effective ways to stay connected to family/significant others and to company.
11. Manage rest time, given the circumstances, so that loads can be picked up and delivered in compliance with federal motor carrier rules.

Record and Maintain Hours of Service Requirements

- 1.Interpret Hours of Service regulations correctly.
- 2.Use and follow Hours of Service regulations correctly.
- 3.Keep time accurately.
- 4.Perform arithmetic calculations necessary to recap and apply totals to the Hours of Service regulations.
- 5.Determine driving hours remaining on a particular day or tour of duty.
- 6.Keep pick-up and delivery record.

APPENDIX B: RELATED SKILLS AND KNOWLEDGE

Duty

Read and Interpret Control Systems

Knowledge

Identify, locate, and explain function of each of the primary controls including those required for steering, accelerating, shifting, braking, and parking.

Identify, locate, and explain function of each of the secondary controls including those required for control of lights, signals, windshield wipers and washers, interior climate, engine starting and shutdown, suspension, and coupling.

Identify, locate, explain, and indicate the acceptable reading range of the various instruments required to monitor vehicle and engine speed as well as the status of fuel, oil, air, cooling, exhaust, and electrical systems.

Realize and be willing to read and use gauge information in making ongoing decisions.

Realize that instruments malfunction so that displayed information must be augmented from other sources.

Make appropriate adjustments for company-specific equipment, especially for various transmissions, engines, types of trailers/loads, and types of loads.

Identify typical problem points in equipment specific to an individual carrier's operation.

Perform Vehicle Inspections

Explain systematic procedure to ensure quick and complete inspection.

Suggest the effect of undiscovered malfunctions upon safety, effectiveness, and economy.

Know federal, state, and other rules and regulations governing inspection, including special regulations for hazardous cargo.

Know procedures for post-trip inspection.

Know out-of-service Commercial Vehicle Safety Alliance (CVSA) criteria for drivers and vehicles.

Know responsibilities including ensuring vehicles are in safe operating condition before taking them on the road.

Know how to report malfunctions and problems.

Know location and tolerances for all components and systems.

Know consequences of vehicle out-of-service orders at roadside inspections and recognize negative impact on driver, company, shipper, and entire industry.

Know that time spent on inspections saves lives and down time later.

Know how to manage with road-based inspections and violations.

Know how to deal with border crossings.

Know how to plan for and acquire permits, registration, and other documents.

Exercise Basic Control

Know clearance requirements of rig for all dimensions.

Know starting, warm-up, and shut-down procedures according to manufacturer's specifications.

Know modulation procedure for air brakes.

Know steering techniques to track vehicle in lane and drive a straight line.

Illustrate proper position from which to begin a turn and how to "set up," execute, and recover from a turn.

Know the purpose/use/consequences of engine retarders.

Know space requirements for at least 48-foot and 53-foot trailers.

Describe consequences of excessive idling.

Understand split axle and dump valve.

Know proper hand placement on wheel.

State how to apply ABS and non-ABS brakes.

Accept that "Safety is an Attitude," an ongoing one that allows for continuing learning.

Know how to use engine brakes on vehicles driver will operate.

Know rules for all types of railroad crossings and other high-risk areas.

Explain do's and don'ts for using cruise controls.

Know requirements and rules for restricted and permitted routes, based on equipment, cargo, and other factors.

Know and use appropriate adjustments for all types of company-specific equipment such as refrigerated units, for example.

Know company policy for use of communication devices.

Know how to identify high-risk areas and situations.

Know the causes and circumstances of each type of crash and driver responsibilities associated with each.

Execute Shifting

Know shifting procedures and patterns for different transmissions.

Read instruments and controls necessary to shift gears.

Recognize common shifting errors and their consequences.

Know gears that most likely will be the best choice under certain traffic, turns, highway, and terrain conditions.

Know outcomes of proper shifting in terms of improved fuel mileage, reduced operating costs, and other benefits.

Know the importance of matching RPM and MPH for down shifting.

Know specific requirements for types of company equipment—manual, automatic, hybrid—the driver will operate.

Understand and demonstrate how to control vehicle while shifting.

Back and Dock Trailer

Know proper mirror adjustment and use.

Know rules and procedures for backing in and across traffic.

Know procedures for backing, “jack and chase,” parallel, and jackknife parking.

Identify and explain hazards of backing and specific dangers/problems in various situations.

Explain how to stop traffic and warn of backing process.

Explain principles of reverse steering.

Know how to use checks, locks, and cones in operation.

Explain hazards associated with backing.

Know that the best backing is finding a way not to back.

Know idiosyncrasies of specific customers, shippers, and receivers concerning backing, docking, and leaving.

Know idiosyncrasies of company-specific equipment.

Know and describe how to “set up” to back into typical types of spaces.

Couple Trailer

Know how to confirm trailer number.

Know and use chocking procedures, if necessary.

Know components and function of fifth wheel, trailer apron, and kingpin.

Know coupling test procedures.

Know position, components, and function of air and electrical lines.

Know connection procedures.

Know signs of improper/incomplete connections.

Know air pressure requirements.

Know how to adjust mirrors for optimal vision field.

Know importance of and how to inspect trailer before driving.

Know what optimal vision field is and how to recognize it.

Know techniques of chassis vs. trailer.

Know how to add trailer number to logbook.

Know how to adjust tandems.

Know how to match tandem and fifth wheel adjustments to accomplish weight distribution and meet axle limits.

Uncouple Trailer

Know surface conditions and characteristics necessary to support weight; know how to identify/characterize surfaces.

Know air pressure system and controls.

Know procedure for uncoupling.

Know position, components, and function of air and electrical lines

Perform Visual Search

Know the correct adjustments and specifications for various types of mirrors.

Recognize the differences in images presented by flat and convex mirrors.

Know the importance of making all visual checks to the sides and rear of the vehicle quickly to limit the amount of time eyes are off the road ahead.

Know the relationship between speed and sight distance.

Know the search patterns appropriate for straight driving, changing speed or direction, and entering or crossing traffic.

Recognize that effective visual searches will reduce fatigue.

Recognize importance of visual searches as critical techniques for monitoring changing road and traffic conditions.

Know and effectively use concepts of blind spots and “no-zones.”

Manage and Adjust Vehicle Speed

Know the relationship of speed to stopping distance, hydroplaning, crash severity, ability to maneuver, and fuel economy.

Know the proper use of cruise control and engine brakes.

Know the effect on maximum safe speed of vehicle weight, center of gravity, loss of stability, available sight distance, and road surface conditions.

Know consequences of speeding violations.

Know effect of all types of environmental conditions on speed management.

Manage and Adjust Vehicle Space Relations

Know the appropriate following distances for various conditions.

Know the importance of maintaining maximum separation from other vehicles to ensure room to maneuver when responding to errors of other drivers.

Know the importance of checking positions of one's own vehicle and other road users by mirrors.

Know the dangers of trailer overhang.

Know dangers created by overhead obstructions.

State the regulations concerning commercial vehicle following distances, lane use, changing lanes, and passing other vehicles.

Know techniques to determine space according to speed.

Recognize potential hazards and subtle danger signs in traffic such as increases in density.

Check and Maintain Vehicle Systems/Components

Know the location, function, operation, and common failures of the following vehicle components: frames, suspension, and axles; engines; fuel systems, air intake, and exhaust systems; lubrication systems; cooling systems; electrical systems; drive trains; brake systems; wheels, bearings, rims, and tires; steering systems; and coupling systems.

Describe simple emergency repairs to enable a vehicle to reach a maintenance facility.

Know the procedure for performing inspections and authorized maintenance and repairs.

Know the importance of periodic inspections and authorized maintenance and repairs.

Know to avoid attempting repairs for which they are unqualified.

Recognize the importance of periodic inspections and repair to prevent enroute breakdowns, longevity of parts, safety, and economy of operation.

Know the inspection, repair, and maintenance regulations of the Federal Motor Carrier Safety Regulations.

Know company procedure for driver-controlled maintenance items, shop maintenance, and vendor maintenance.

Diagnose and Report Malfunctions

Know the procedures for starting vehicles with dead batteries or without air pressure (if equipped with air starters).

Recognize the symptoms of improper operation revealed through instruments, vehicle operation characteristics, sight, sound, feel, and smell.

Know company-specific methods for contacting company, arranging for repairs, and moving disabled vehicles.

Know company codes for various issues and problems.

Know and recognize the types of issues or typical breakdowns for company-specific equipment operated by the driver.

Identify Potential Hazards and Deal with Emergency Maneuvers

Know the visible characteristics of road conditions that present a hazard to safe operations including slippery, soft, sloping, or uneven surfaces; dangerous curves; obstructions to visibility; and locations where there are likely to be strong crosswinds.

Know the characteristics of other road users (drivers or pedestrians) that make them potentially dangerous, including obstructed vision, distractions, confusion, impatience, impairment, and low speed.

Know activities of other road users (drivers and pedestrians) that provide clues to potential danger, including head and body movement, vehicle movement, and conflict situations.

Know the consequences of using the engine brakes or trailer brake on slippery roads.

Know that the vehicle can be turned more quickly than it can be stopped.

Know that in an impending head-on collision, it is generally safer to leave the roadway to the right than to strike another vehicle.

Know procedures for quick stops, quick turns, and evasive turns off the roadway.

Know procedures for handling brake failure and blowouts.

Know that trailer brakes are not to be used for skid recovery.

Know the role of skid control in preventing crashes.

Know skid dynamics, including friction, wheel load, and force.

Know causes of skidding—power and braking.

Know the characteristics of a tractor jackknife, trailer jackknife, front wheel skids, and all wheel skids.

Know skid recovery procedures—focus on where you want to go, power off, clutch in.

Know counter-steer operation.

Know difference between ABS and non ABS brakes and how each affects skid control and recovery.

Know how to maintain directional control while operating over a slippery surface.

Know how to bring tractor-trailer to a stop in the shortest possible distance while maintaining directional control when operating on a slippery surface.

Know importance of seat belts in emergency maneuvers.

Know to keep truck in gear to maintain control.

Know skids can occur at any speed.

Know how to maintain directional control while operating over a slippery surface.

Know that only the driver can be willing to stop, report conditions, and stand firm.

Identify and Adjust to Difficult and Extreme Driving Conditions

Night Operation

Know proper use of cruise control at night.

Know the effect of level of illumination on ability to see.

Know the value of high beams to nighttime visibility.

Know state laws covering use of headlights and auxiliary lights.

Know the symptoms and danger of fatigue.

Know the effect of headlight glare on visibility of others and its implications for the safety of both drivers.

Know the general factors affecting night vision, including interior illumination and use of sunglasses during daytime.

Know about increased wildlife movement at night.

Know physical adjustments to make for night driving.

Cold and Adverse Weather

Know the conditions that produce low traction, including initial rainfall, ice, snow, and mud.

Identify the effects of rain, snow, and ice upon the ability to maneuver and stop the vehicle.

Explain causes and procedures for avoiding skidding and jackknifing.

Know about fuel mixes and add-mixtures.

Recognize the nature of hydroplaning and the road and vehicle conditions that produce it.

Know the effect of ice, snow, water, mud, and debris on the operation of the brakes. Recognize the need to make sure all wheels are free to turn.

Know how to mount and dismount tire chains. Explain how to extricate the vehicle from snow, sand, and mud by maneuvering or towing.

Know company policy on chain use.

Hot Weather

Know procedures for hot weather driving.

Know hazards of hot weather driving.

Know the effect of hot weather upon vehicle operation.

Know the effect of hot weather upon tire pressure and tire life.

Know about food and liquid needs.

Mountains

Know the effect of vehicle weight and speed upon braking and shifting ability on long downgrades.

Identify the function and value of escape ramps.

Understand the meaning and use of percent of grade signs.

Recognize that the weight of the truck poses hazards on long downgrades unless the truck is put into proper gear.

Know attempting to downshift on steep declines is too dangerous to

attempt.

Fog

Know how to use lights effectively.

Know how to determine safe operating distances.

All

Know how to stop, report in, and stand firm.

Handle and Document Cargo

Know the company-specific procedures for proper completion of freight bill, cargo manifest, “bill of lading,” and other required forms.

Know that it is the driver’s responsibility to ensure paperwork is properly filled out.

Explain the possible consequences and penalties of improperly completed documentation.

Know rules and regulations for Hazmat.

Know proper lifting techniques.

Know proper way to prepare “bill of lading” for types of load.

Know procedures for loading and unloading.

Know procedures for securing cargo—including methods of blocking, bracing, packing, and stacking, and use of straps, rope, cable, chains, and chain binders for tie down to prevent damage and accidents.

Know the nature, function, and operation of common cargo handling equipment specific to equipment typically used, including pallets, jacks, dollies, hand trucks, forklift trucks, nets, slings, rug poles, Johnson bars, and other equipment.

Know federal and state regulations on loading, weight limits, and distribution of cargo, bridge law, and the special concerns of a 53-foot trailer.

Know rules about various categories of cargo.

Know how to install the various types of seals and record the seal number on the paperwork.

Know weight distribution allowances and how to deal with them.

Know and follow the Occupational Safety and Health Administration (OSHA) standards and/or the Canadian equivalents.

Know how to use pallet jack safely and effectively, if applicable.

Know company-specific cargo handling policy.

Know company policy on theft/risk avoidance.

Know how to find and use safe routes and places to stop or park.

Deal with Accident Scenes and Reporting Procedures

Know state laws and company-specific requirements dealing with stopping and rendering assistance at the scene of an accident.

Explain procedures for protecting the scene of an accident and federal and state requirements for same.

Identify federal, state, insurance company, and employer requirements regarding accident reporting.

Suggest proper first aid procedures for the types of injuries most likely to be sustained in highway accidents.

Know procedures for extinguishing cargo, engine, electrical, and tire fires.

Explain where to stop vehicle in the event of a fire.

Know how to gather information at the scene.

Know how to complete Accident Reporting Kit.

Know the importance of carrying a camera.

Know and follow company procedures regarding accidents.

Know how to use the Emergency Response Guide.

Know how to deal with law enforcement officials.

Know how to deal with media.

Know how to deal with and help manage the general public, such as crowds, individuals, and motor traffic.

Deal with Environmental Issues

Know environmental regulations that affect the profession.

Recognize symptoms of problems.

Know how to contain spills.

Know how to report and document problems.

Know state and federal regulations about environmental issues.

Know what actions to take at the scene of a spill or problem by referring to the Emergency Response Guide (ERG).

Know accepted safe practices.

Know environmental impact of excessive idle time.

**Plan Trips and Make
Appropriate Decisions**

Know the types of vehicles, cargoes, and routes requiring special permits.

Know and use state regulations and the procedures for obtaining special permits.

Identify common map symbols.

Learn methods for good record keeping.

Know procedures for route planning, including preparing paperwork, route selection, and estimating time, fuel, money, and personal needs.

Know state and local law restrictions on vehicle size and weight.

Know how to use road atlases.

Know how permit system operates.

Know failure to obtain necessary permits can result in extensive delay and fines.

Know how to document expenses.

Know how to scale loads.

Know bridge laws and regulations.

**Use Effective Communication
and Public Relations Skills**

Know universally accepted signals.

Know laws and regulations concerning traffic signals.

Know relationship of signals to intent and that signals do not

convey the “right” to execute maneuver.

Know and use procedure for handling complaints.

Know how to listen and respond effectively.

Read and respond to on-board or verbal messages.

Know procedures for using (receiving and sending messages) on-board devices.

Know how to take and/or deal with dispatch—both sending and receiving communications.

Know how and when to use company communication methods and procedure such as Qualcomm, phone, call-in, etc.

Know techniques for resolving conflict.

**Manage Personal Resources
and Deal with Life on the Road**

Recognize signs of fatigue.

Know symptoms of stress and match personal techniques of how to deal with the problem.

Know strategies for dealing effectively with fatigue.

Know how to exercise and use free time on the road.

Know the elements of a good diet.

Understand the pay process as well as advances.

Identify good exercise program for life on the road.

Know personal sleep requirements and individual biorhythms or patterns

Identify safe and quiet truck stops.

Know rules of truck-stop safety.

Know the effects of drugs and alcohol.

Discuss stress caused by life on the road and being away from home.

Know how to manage finances while on the road.

Know dynamics of industry and the role and importance of the

driver.

Know how life on the road affects family life.

Know how to stay connected to family while on the road.

Understand issues of personal and company money management on the road.

Know rules of truck-stop safety.

Know how to maintain family contact while on the road.

Record and Maintain Hours of Service Requirements

Know all the requirements and rules of laws and regulations covering Hours of Service, where applicable.

Understand how to comply with the Hours of Service Regulations and know the procedures for completing the driver's daily log.

Know the procedures for using logbook recap.

Explain the consequences of failure to comply with Hours of Service regulations.

Know en route inspection requirements.

Know electronic methods of double-checking documentation/records, according to company policy.

Explain how to use logbooks in planning a trip/meeting schedules.

Identify and recognize the potential pressures in the industry to exceed Hours of Service units and know strategies for dealing with them.

**APPENDIX C:
ATTITUDES/APTITUDES/PSYCHOMOTOR SKILLS**

Duty	Attitude/Aptitude
Read and Interpret Control Systems	Be willing to read and use gauge information in making ongoing decisions while driving.
Perform Vehicle Inspections	Believe that the time spent on inspections saves lives and downtime later.
Exercise Basic Control	Accept that “Safety is an Attitude.”
Execute Shifting	Coordinate hand and feet movement, eyesight, and hearing to execute safe, smooth, and efficient operation.
Back and Dock Trailer	Be willing to get out and look. Be willing to stop process and begin again.
Couple Trailer	Believe that accidents caused by improper coupling are preventable. Possess the strength to raise landing gear and deal with chocks (if used).
Uncouple Trailer	Believe that accidents caused by improper uncoupling are preventable.
Perform Visual Search	Value visual searches as critical techniques for monitoring changing road and traffic conditions.
Manage and Adjust Vehicle Speed	Believe that only through proper speed management can a driver acquire the space to safely maneuver the truck.
Manage and Adjust Vehicle Space Relations	Believe that space management is critical to the safe operation of the truck.
Identify Potential Hazards and Perform Emergency Maneuvers	Be willing to stop, report conditions, and stand firm. Believe that good judgment is essential for skid avoidance.

Duty

Attitude/Aptitude

Identify and Adjust to Difficult and Extreme Driving Conditions

Understand that night driving has additional requirements for driving safely and requires additional attributes and skills. Acknowledge that adverse weather conditions require special driving techniques and that bad weather accidents and jackknifing can be prevented by proper driving techniques

Handle and Document Cargo

Be willing to exercise care with paperwork, securing loads, and reporting damage.

Deal with Accident Scenes and Reporting

Be able to maintain self-control and be a professional. Be willing to offer assistance.

Deal with Environmental Issues

Obey the rules for states and nation. Recognize that environmental issues are everyone's concern.

Use Effective Communication

Be willing to demonstrate self-control when communicating. Be willing to use proper signaling techniques. Recognize that signals do not convey the "right" to execute a maneuver.

Manage Personal Resources and Deal with Life on the Road

Become a professional driver and accept the responsibility of being one. Recognize need for strong support group at home.

Record and Maintain Hours of Service Requirement

Accept responsibility of keeping an accurate, legal, and current logbook at all times.