DEPARTMENT OF THE AIR FORCE
Headquarters US Air Force
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Rescue and HAZMAT Response Apparatus

Vehicle Management Codes: C122, L140, L142

QUALIFICATION TRAINING PACKAGE

CONTENTS

Section 1—OVERVIEW

1.1. Overview.

1.1.1. Send comments and suggested improvements on AF Form 847, *Recommendation for Change of Publication* through Air Force Installation and Mission Support Center (AFIMSC) functional managers via e-mail at AFIMSC.IZLO.GroundTrans@us.af.mil.

1.1.2. How to use this plan:

1.1.2.1. Trainer:

1.1.2.1.1. Provide overview of training, **Section 2** and **Section 3.**

1.1.2.1.2. Trainer's lesson plan for trainee preparation, give classroom lecture, **Section 4.**

1.1.2.1.3. Trainer's lesson plan for required knowledge, **Section 5**.

1.1.2.1.4. Trainer's lesson plan for demonstration, **Section 6**.

1.1.2.1.5. Trainer's lesson plan for performance and evaluation, **Section 7**.

1.1.2.2. Trainee:

1.1.2.2.1. Reads material entire lesson plan prior to classroom lecture.

1.1.2.2.2. Follows along with lecture using this lesson plan and its attachments.

1.1.2.2.3. Takes required performance tests (**Attachment 5)**.

Section 2—RESPONSIBILITIES

2.1. Responsibilities.

2.1.1. The trainee shall:

2.1.1.1. Ensure the trainer explains the Qualification Training Package (QTP) process and the trainee's responsibilities.

2.1.1.2. Review the lesson plan with the trainer.

2.1.1.3. Ask questions if he/she does not understand the objectives for each unit.

2.1.1.4. Complete training hours required for the vehicle.

2.1.1.5. Take the required Performance Tests.

2.1.2. The trainer shall:

2.1.2.1. Be on the unit's approved trainers list for the management codes covered by this QTP.

2.1.2.2. Review the lesson plan with the trainee.

2.1.2.3. Conduct knowledge training with the trainee using the lesson plan and vehicle operator manuals.

2.1.2.4. Conduct performance task explanation and demonstration based on the requisite skills required by NFPA 1002, *Standard for Fire Apparatus Driver/Operator Professional Qualifications*, Chapters 4 **(Attachment 5)**.

2.1.2.5. Review questions with the trainee to ensure that required task knowledge has been gained to complete the task.

2.1.2.6. Document total hours trained on AF Form 171, *Request for Driver's Training and Addition to U.S. Government Driver's License*.

2.1.2.7. Coordinates with the trainee's supervisor to have vehicle licensing signed-off in the member's training record.

2.1.3. The Evaluator shall:

2.1.3.1. Evaluate the Airman's task performance in accordance with (IAW) the requisite skills required by NFPA 1002, *Standard for Fire Apparatus Driver/Operator Professional Qualifications*, Chapters 4 **(Attachment 5)**.

Section 3—INTRODUCTION

3.1. Objectives.

3.1.1. Given lectures, demonstrations and hands-on operations sessions, trainees will be able to complete all Performance Tests required in Attachment 5 with zero instructor assists.

3.1.1.1. Ensure the trainee becomes trained and licensed as a Driver/Operator; an operator who has the knowledge and skills to execute safe and professional vehicle operations and preventative maintenance requirements.

3.1.1.2. Re-familiarize qualified operators in the safe operation and maintenance requirements of the vehicle.

3.2. Desired Learning Outcome.

3.2.1. Understand the safety precautions to be followed pre-, during- and post-operation of the vehicle.

3.2.2. Understand the purpose of the vehicle and its role in the mission.

3.2.3. Know the proper operator maintenance procedures of the vehicle IAW applicable technical orders, manufacturer's operator's manuals and use of AF Form 1800, *Operator's Inspection Guide and Trouble Report*.

3.2.4. Safely and proficiently operate the vehicle.

3.3. Lesson Duration.

3.3.1. Recommended minimum instructional and hands-on training time is 20 hours:

Figure 3.1. Recommended Training Time for Training Activities.

Training Activity	Training Time
Trainer's Instruction & Demonstration	4 Hours
Pre-Operations	4 Hours
Operations	9 Hours
Performance Evaluation	3 Hours

Note: This is a recommended minimum time; training time may be more depending how quickly a trainee learns new tasks and demonstrates competency.

3.4. Instructional References.

3.4.1. DoD 6055.06M, *DoD Fire and Emergency Services Certification Program*

3.4.2. Risk Management (RM) and Safety Principles IAW Air Force Pamphlet (AFPAM) 90-803, *Risk Management (RM) Guidance and Tools*.

3.4.3. Applicable Technical Orders (TOs) or manufacturer's operator's manual(s).

3.4.4. Air Force Manual (AFMAN) 24-306, *Operation of Air Force Government Motor Vehicles*, Chapters 1-5, 7-9 and 12.

3.4.5. AF Form 1800, *Operator's Inspection Guide and Trouble Report*.

3.4.6. AF Form 171, *Request for Driver's Training and Addition to U.S. Government Driver's License*

3.4.7. Performance tests requirements based on NFPA 1002, *Standard for Fire Apparatus Driver/Operator Professional Qualifications*, Chapters 4 (**Attachment 5**).

3.4.8. Code of Federal Regulations (CFR), Title 49—Transportation, Subtitle B—Other Regulations Relating to Transportation (Continued), Chapter III—Federal Motor Carrier Safety Administration, Department of Transportation, parts 300-399; online at http://www.access.gpo.gov/nara/cfr/cfr-table-search.html.

3.4.9. United States Department of Transportation, Federal Motor Carrier Safety Administration; on-line at http://www.fmcsa.dot.gov/index.htm.

3.4.10. NFPA 1002, *Standard for Apparatus Driver/Operator Professional Qualifications.*

3.4.11. NFPA 1901, *Standard for Automotive Fire Apparatus*.

3.4.12. NFPA 1911, *Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Emergency Vehicles.*

3.4.13. NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*.

3.4.14. TO 36-1-191, *Technical and Managerial Reference for Motor Vehicle Maintenance*.

3.5. Instructional Training Aids and Equipment.

3.5.1. This Qualification Training Package.

3.5.2. Rescue/HAZMAT vehicle.

3.5.3. Applicable TO and/or manufacturer's operator's manual(s).

3.5.4. Fire Department training area with driving course marked IAW with course specifications in the Performance Tests **(Attachment 5)**.

3.5.5. Traffic cones.

Section 4—TRAINEE PREPARATION

4.1. Licensing Requirements.

4.1.1. Trainee must have in his/her possession a valid state driver's license.

4.1.2. AF Form 171 IAW AFI 24-301, *Ground Transportation*.

4.1.3. Applicable local licensing jurisdiction requirements.

4.2. Required Reading.

4.2.1. Read this Qualification Training Package in its entirety.

4.2.2. Read AFMAN 24-306, Chapters 1-5, 7-9 and 12.

4.2.3. Read manufacturer's operator's manual(s) for the specific vehicle being trained on.

Section 5—KNOWLEDGE LECTURE AND EVALUATION.

5.1. Knowledge Overview (Lecture).

5.1.1. The material below was written using the instructional references listed in **Section 3**.

5.2. Overview of Training and Requirements.

5.2.1. Inspection, maintenance and servicing.

5.2.1.1. Conduct and document routine tests, inspections, and servicing functions.

5.2.1.2. Identify and explain the use of the apparatus' automotive gauges and potential performance problems based upon gauge readings.

5.2.2. Vehicle and equipment operations.

5.2.2.1. Explain in common measurements the basic dimensions and turning radius of the apparatus.

5.2.2.2. Drive a fire department apparatus on a public road/highway.

5.2.2.3. Perform unique or technical vehicle maneuvers.

5.2.3. Forms and documentation.

5.2.3.1. Required forms to be placed in the vehicle while in use:

5.2.3.1.1. AF Form 1800. Reference AFI 24-302, *Vehicle Management*, for most current guidance on completing AF Form 1800.

5.2.3.1.2. Standard Form 91, *Motor Vehicle Accident Report*.

5.2.3.1.3. DD Form 518, *Accident Identification Card*.

5.3. Vehicle specifications, design overview.

5.3.1. NFPA 1901, *Standard for Automotive Fire Apparatus*, specifies the minimum design,

performance, and acceptance criteria.

5.3.2. Specific characteristics.

5.3.2.1. For design characteristics of specific make/model of fire apparatus, refer to the manufacturer's operator's manual(s) or applicable TO

5.4. Vehicle Inspection.

5.4.1. Perform all pre-start servicing and inspections prior to operating the vehicle or at the beginning of each personnel change and after each use. Inspections cover the vehicle and its firefighting systems. The inspection enables the operator and crew personnel to detect discrepancies before they lead to vehicle malfunctions. Refer to the TO and manufacturer's operator's manual(s) for all items that need to be inspected and the required frequency.

Note: If discrepancies are found they must be reported to Vehicle Control Official, the supervisor, and/or vehicle maintenance:

5.4.2. Pre-trip inspection – find items/problems that could cause accident or breakdown. Use "systematic" or "walk around" method.

5.4.3. A Seven-Step Inspection Method will help ensure the inspection is the same each time it is conducted, and that nothing is left out. See **Attachment 3** for the Seven-Step Inspection Method.

5.5. Vehicle Safety and Equipment.

5.5.1. General. It is imperative that safety be considered at all times while driving the vehicle and that the operator reads and understand the manufacturer's operator's manual before driving the vehicle. The operator must become accustomed to the "feel" of the vehicle and learn its capabilities and limitations in order to maintain control while responding to an emergency.

5.5.2. Hazards and human factors:

5.5.2.1. Traffic due to size and weight.

5.5.2.2. Jerky starts and stops.

5.5.2.3. Traveling too fast and turning too sharply.

5.5.2.4. Cutting corners too sharply.

5.5.3. Safety requirements and PPE:

5.5.3.1. All jewelry removed.

5.5.3.2. Safety-toe boots.

5.5.3.3. Gloves will be worn when required.

5.5.3.4. Inclement and/or cold weather gear when required.

5.5.3.5. Hearing protection when required.

5.5.3.6. First Aid Kit.

5.6. Driving Safety and Precautions.

5.6.1. Before driving.

5.6.1.1. Tire pressure can be adjusted to increase handling on poor-weather and off-road surfaces. The driver must determine the tire pressure that provides the desired balance between off-road mobility, poor weather handling, and on-road performance.

5.6.1.2. Upon entering the vehicle cab, adjust the seat position. Make sure there is sufficient clearance between the head and the cab roof at the seat's maximum upward travel. Serious injury may occur if head clearance is not adequate.

5.6.1.3. Fasten seat belts immediately after adjusting the seat height and before moving the vehicle. All persons riding in the vehicle cab must be seated in approved riding positions and secured by seat belts any time the vehicle is in motion. Failure to use seat belts can result in serious injury or death.

5.6.1.4. Before starting the vehicle engine, completely understand the function of all gauges and know their normal readings. The operator must also understand the operation of all switches and vehicle controls.

5.6.1.5. Make sure to read and follow the start-up and shut-down procedures before starting the vehicle engine. Failure to follow proper start-up and shut-down procedures may result in severe engine damage.

5.6.2. General Safe Driving Procedures. Safety considerations are covered in detail in NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*, Chapter 6.

5.6.2.1. Operators of fire apparatus shall be directly responsible for the safe and prudent operation of the vehicle under all conditions.

5.6.2.2. Fire department vehicles shall be operated in compliance with all applicable traffic laws, including special provisions pertaining to emergency vehicles as established by the AHJ, as well as specific rules, regulations, and procedures adopted by the fire department.

Note: Procedures for all responses shall emphasize that the safe arrival of fire apparatus to the incident scene is the first priority.

5.6.2.3. During emergency response, drivers of fire apparatus shall bring the vehicle to a complete stop under any of the following circumstances:

5.6.2.3.1. When directed by a law enforcement officer.

5.6.2.3.2. At red traffic lights.

5.6.2.3.3. At stop signs.

5.6.2.3.4. At negative right-of-way intersections.

5.6.2.3.5. At blind intersections.

5.6.2.3.6. When the driver cannot account for all lanes of traffic in an intersection.

5.6.2.3.7. When other intersection hazards are present.

5.6.2.3.8. When encountering a stopped school bus with flashing warning lights.

5.6.2.4. Drivers shall proceed through intersections only when the driver can account for all lanes of traffic in the intersection.

5.6.2.5. During emergency response or non-emergency travel, drivers of fire apparatus shall come to a complete stop at all unguarded railroad grade crossing and ensure that it is safe to proceed before crossing the railroad track(s).

5.6.2.6. Drivers shall use caution when approaching and crossing any guarded railroad grade crossing.

5.7. Vehicle Operation.

5.7.1. Start the engine:

5.7.1.1. Do not pump the accelerator prior to starting a diesel engine.

5.7.1.2. Do not race the motor to warm up the vehicle.

5.7.1.3. Check the instrument panel for proper readings.

5.7.2. Steering.

5.7.2.1. Proper hand position on the steering wheel.

5.7.2.2. Wider turning radius due to length of the vehicle.

5.7.3. Turning.

5.7.3.1. Check traffic to the front, rear, and sides.

5.7.3.2. Check all mirrors, and be aware of vehicle blind spots.

5.7.3.3. Reduce vehicle's speed before beginning the turn.

5.7.3.4. Always yield the right of way to pedestrians and other vehicles

5.7.4. Braking.

5.7.4.1. Controlling speed.

5.7.4.2. Normal stopping effected by:

5.7.4.2.1. Reaction time.

5.7.4.2.2. Speed.

5.7.4.2.3. Inclement weather.

5.7.4.2.4. Conditions of tires and brakes.

5.7.4.2.5. Type and condition of road surface.

5.7.4.2.6. Weight of vehicle and weight of equipment and agent.

5.7.5. Backing.

5.7.5.1.1. Minimize the need for backing.

5.7.5.1.2. If backing is required, ensure the use of spotters.

5.7.5.1.3. Stop immediately is the spotter moves out of view of the mirror.

5.7.5.1.4. Ensure back-up alarms are working properly.

5.7.5.1.5. See AFMAN 24-306 for standard AF spotter hand signals and additional guidance on spotter safety.

Section 6—EXPLANATION AND DEMONSTRATION

6.1. Instructor's Preparation.

6.1.1. Establish a training location.

6.1.2. Obtain appropriate manufacturer's operating manual.

6.1.3. Schedule/reserve a vehicle.

6.1.4. Ensure trainee has properly completed AF Form 171 on person.

6.2. Safety Procedures and Equipment.

6.2.1. The following safety items should be followed by both the instructor and trainee.

6.2.1.1. Chock wheel(s) when vehicle is parked.

6.2.1.2. Remove all jewelry and identification tags.

6.2.1.3. Personal protective equipment and equipment items.

6.2.1.3.1. Safety steel-toed boots must be worn.

6.2.1.3.2. Gloves will be worn during cargo loading and unloading.

6.2.1.3.3. First aid kit.

6.2.1.3.4. Inclement weather gear, if required.

6.2.1.3.5. Hearing protection, if required.

6.2.1.4. Walk around vehicle to familiarize the trainee with all warning labels and signs.

6.2.1.5. Ensure trainee wears seat belt.

6.2.1.6. Properly adjust driver's seat and all mirrors.

6.2.1.7. Throughout demonstration, practice vehicle safety.

6.2.2. Practice AF risk management during demonstration:

6.2.2.1. Identify hazards.

6.2.2.2. Assess hazards.

6.2.2.3. Develop controls and make decisions.

6.2.2.4. Implement controls.

6.2.2.5. Supervise and evaluate.

6.3. Operator Maintenance Demonstration.

6.3.1. With trainee, accomplish vehicle inspection using AF Form 1800. The vehicle inspection will follow the seven-step method as described in **Attachment 3**. An inspection guide (**Attachment 2**) can also be used to ensure all areas of the vehicle are covered in addition to the "Operation Demonstration" guidelines provided below.

6.4. Operation Demonstration.

6.4.1. Throughout demonstration.

6.4.1.1. Allow for questions.

6.4.1.2. Repeat demonstrations as needed.

6.4.2. For the vehicle, within the training area, demonstrate and explain the following:

6.4.2.1. Vehicle specifications.

6.4.2.2. Vehicle controls.

6.4.2.3. Vehicle inspection, maintenance and servicing.

6.4.2.4. Use of the apparatus automotive gauges, and address potential performance problems based on gauge readings.

6.4.3. Vehicle equipment and operations demonstration.

6.4.3.1. Demonstrate and explain, in common measurements, the basic dimensions and turning radius of the apparatus.

6.4.3.2. Demonstrate and perform driving the apparatus on a public road/highway.

6.4.3.3. Demonstrate and perform unique or technical vehicle maneuvers.

6.4.4. Show trainee the after-operation inspection and report.

6.4.4.1. Following manufacturer's shut-down procedures.

6.4.4.2. Ensure vehicle is cleaned.

6.4.4.3. Perform a walk around inspection.

6.4.4.4. Annotate any discrepancies found on AF Form 1800.

6.4.5. Conclude by allowing time for questions and any requested re-demonstrations.

Section 7—TRAINEE PERFORMANCE AND EVALUATION

7.1. Trainee Performance Evaluation.

7.1.1. All Performance Evaluations will be conducted IAW the Rescue & HAZMAT Apparatus Performance Test Supplement (**Attachment 5)**.

7.1.2. All personnel who operate assigned FES vehicles must have a valid/current U.S Air Force Motor Vehicle License and a valid State issued driver's license.

7.1.3. All trainees are required to have in their possession a valid AF Form 171, *Request for Driver's Training and Addition to U.S. Government Driver's License*, listing the type of vehicle, whenever training on a vehicle and must be accompanied by a fully qualified and licensed trainer.

7.1.4. Trainees shall have training hours completed and documented on the Driver's Training Qualification Form **(Attachment 4)** completed prior to performance testing.

7.1.5. Evaluators:

7.1.5.1. The trainer and evaluator may not be the same individual IAW DoD 6055.06-M.

7.1.5.2. Ensure safety at all times. **Note:** Stop training when safety items are violated. Proceed only when the trainee fully understands how to avoid repeating the safety infraction(s).

7.1.5.3. Ensure wheels are chocked when vehicle is parked.

7.1.5.4. Ensure all jewelry and identification tags are removed.

7.1.5.5. Ensure required personal protective equipment is used.

7.1.5.5.1. Safety-toe boots.

7.1.5.5.2. Gloves when required.

7.1.5.5.3. Inclement/cold weather gear, if required.

7.1.5.5.4. Hearing protection, if required.

7.1.5.6. Pay particular attention to the cautions and warnings listed in the operator's manual.

7.1.5.7. Ensure trainee wears seat belt.

7.1.5.8. Properly adjust driver's seat and all mirrors.

7.1.5.9. Ensure the operator is aware of driving situations he/she is to perform.

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 24-301, *Ground Transportation*, 1 November 2018

AFI 24-302, *Vehicle Management*, 26 June 2012

AFMAN 24-306, *Operation of Air Force Government Motor Vehicles*, 9 December 2016

AFPAM 90-803, *Risk Management (RM) Guidance and Tools*, 11 February 2013

ASTM D4956, *Standard Specification for Retroreflective Sheeting for Traffic Control*, 15 July 2005

DoD 6055.06-M, *DoD Fire and Emergency Services Certification Program*, 16 September 2010

NFPA 1002, *Standard for Fire Apparatus Driver/Operator Professional Qualifications*

NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*

NFPA 1901, *Standard for Automotive Fire Apparatus*

NFPA 1911, *Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Emergency Vehicles*

Title 49 CFR Parts 300-399, *Federal Motor Carriers*, 23 August 2013

Adopted Forms

AF Form 171, *Request for Driver's Training and Addition to U.S. Government Drivers*

AF Form 847, *Recommendation for Change of Publication*

AF Form 1800, *Operator's Inspection Guide and Trouble Report*

DD Form 518, *Accident Identification Card*

Standard Form 91, *Motor Vehicle Accident Report*

Abbreviations and Acronyms

AFI—Air Force Instruction

AFIMSC—Air Force Installation and Mission Support Center

AFMAN—Air Force Manual

AFPAM—Air Force Pamphlet

AHJ—Authority Having Jurisdiction

ASTM—American Standard for Testing Materials

CDC—Career Development Course

CFR—Code of Federal Regulations

DOT—Department of Transportation

FES—Fire Emergency Services

FMCSA—Federal Motor Carrier Safety Administration

IFSTA—International Fire Service Training Association

IAW—In Accordance With

KPH—Kilometers per Hour

MPH—Miles per Hour

NFPA—National Fire Protection Association

RM—Risk Management

TO—Technical Order

Attachment 2

RESCUE/HAZMAT APPARATUS INSPECTION GUIDE

GENERAL

STEP 1. VEHICLE OVERVIEW

☐ Paperwork
- AF Form 1800
- Discrepancy Correction Complete (VM Annotation)

☐ Vehicle Approach
- Damage (to include light covers)
- Vehicle Leaning?
- Fresh Leakage of Fluids
- Inspect Winch
- Hazards Surrounding Vehicle

INTERNAL

STEP 2. ENGINE COMPARTMENT

☐ Leaks/Hoses/Electrical Wiring Insulation
☐ Oil Level
☐ Coolant Level
☐ Power Steering Fluid
☐ Brake Fluid
☐ Windshield Washer Fluid
☐ Battery Fluid Level (Both), Connections & Tie Downs
☐ Automatic Transmission Fluid Level
☐ Engine Compartment Belts
☐ Under Hood Light Operation
☐ Check Air Cleaner Element

STEP 3. ENGINE START/CAB CHECK (LEFT/FRONT/RIGHT)

☐ Safe Start
☐ Gauges
- Oil Pressure Gauge
- Air Pressure Gauge
- Temperature Gauge (Coolant/Engine Oil)
- Ammeter/Voltmeter

☐ Siren
☐ Communications System
☐ Windows
☐ Seat Adjustment
☐ Mirrors & Windshield
☐ Wipers/Washers
☐ Removable Equipment (missing/damaged)

☐ Winch Controller
☐ Emergency & Safety Equipment
- Spare Electrical Fuses
- Red Reflective Triangles
- 6 Fuses or 3 Liquid Burning Flares
- Properly Charged & Rated Fire Extinguisher
- Optional (Chains/Tire Changing Equip, Emergency Phone List)

☐ Ensure "DO NOT MOVE APPARATUS" Light is Operational
☐ Ensure Back-Up Camera is Operational
☐ **3B** – Lights/Reflectors/Reflector Tape Condition (Front/Sides/Rear)

(Dash Indicators for:)
- Left Turn Signal
- Right Turn Signal
- Four-Way Emergency Flashers
- High Beam Headlight
- ABS Indicator
- Clearance Lights
- Telescoping Lights

(Reflective Clean & Functional Light & Reflector Checks Include:)
- Headlights
- Taillights
- Backing Lights
- Turn Signals
- Four-Way Flashers
- Brake Lights
- Red Reflectors & Amber Reflectors
- Reflective Tape Condition

☐ Horn
☐ Heater/Defroster
☐ Brakes
- Parking Brake Check
- Hydraulic Brake Check
- Service Brake Check
- Safety Belt

(TURN-OFF ENGINE/TURN-ON HEADLIGHTS *LOW BEAM* AND FOUR-WAY FLASHERS)

STEP 4. WALK-AROUND INSPECTION

☐ **4A** – Steering
- Steering Box/Hoses
- Steering Linkages

☐ **4B** – Suspension
- Springs/Air/Torque
- Mounts
- Shock Absorbers

☐ **4C** – Brakes
- Slack Adjustors & Pushrods
- Brake Chambers
- Brake Hoses/Lines
- Drum Brake
- Brake Linings

☐ **4D** – Wheels
- Rims
- Tires
- Hub Oil Seals/Axle Seals
- Lug Nuts
- Spacers & Budd Spacing

LEFT SIDE/DRIVER SIDE

☐ **4E** – Body Panels
☐ **4E** – Doors
☐ **4E** – Mirrors
☐ **4E** – Fuel Tank

RIGHTSIDE/PASSENGER SIDE

☐ **4E** – Body Panels
☐ **4E** – Doors
☐ **4E** – Mirrors
☐ **4E** – Fuel Tank
☐ **4E** – Diesel Exhaust Fluid (DEF) Reservoir

UNDER VEHICLE

☐ **4F** – Drive Shaft
☐ **4F** – Exhaust
☐ **4F** – Frame

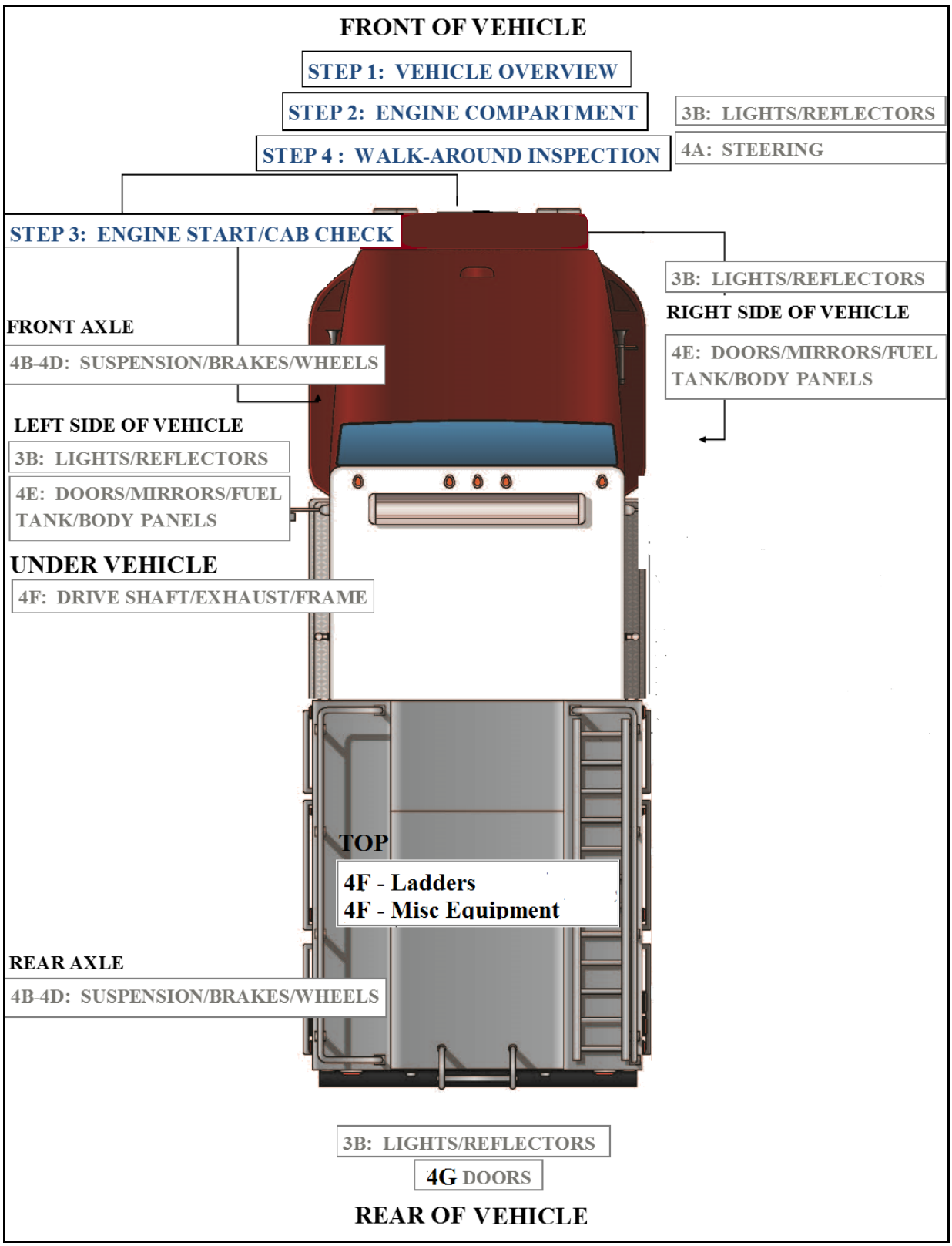
TOP

☐ **4F** – Ladders
☐ **4F** – Misc Equipment

REAR

☐ **4G** – Compartments/Doors

Figure A2.1. Rescue/HAZMAT Vehicle Inspection Guide.



Attachment 3

SEVEN-STEP INSPECTION PROCESS

Figure A3.1. Seven-Step Inspection Process (Universal).

Seven-Step Inspection Process (Universal)	
Step	**Procedure**
1. Vehicle Overview	• Review the AF Form 1800. o Ensure any discrepancy has been corrected. o Vehicle Management annotated the discrepancy was completed. o Approaching the vehicle. ▪ Damage or vehicle leaning to one side. ▪ Fresh leakage of fluids. ▪ Hazards around vehicle.
2. Check Engine Compartment	• **Note:** Check that the parking brakes are on and/or wheels chocked. The operator may have to raise the hood, tilt the cab (secure loose things so they don't fall and break something), or open the engine compartment door. • Check the following: o Engine oil level. o Coolant level in radiator; condition of hoses. o Power steering fluid level; hose condition (if so equipped). o Windshield washer fluid level. o Battery fluid level, connections and tie-downs (battery may be located elsewhere). o Automatic transmission fluid level (may require engine to be running).

	o Check belts for tightness and excessive wear (alternator, water pump, air compressor)--learn how much "give" the belts should have when adjusted right. o Leaks in the engine compartment (fuel, coolant, oil, power steering fluid, hydraulic fluid, battery fluid). Cracked, worn electrical wiring insulation.
3. Start Engine and Inspect Inside the Cab (Get in and Start Engine)	• Make sure parking brake is on. • Put gearshift in neutral (or park if automatic). Start engine; listen for unusual noises. • If equipped, check the Anti-lock Braking System (ABS) indicator lights. Light on dash should come on and then turn-off. If it stays on the ABS is not working properly. • Look at the gauges. o Oil pressure. Should come up to normal within seconds after engine is started. o Air pressure. Pressure should build from 50 to 90 psi within 3 minutes. Build air pressure to governor cut-out (usually around 120 – 140 psi. Know the vehicle's requirements. o Ammeter and/or voltmeter. Should be in normal range(s). o Coolant temperature. Should begin gradual rise to normal operating range. o Engine oil temperature. Should begin gradual rise to normal operating range. o Warning lights and buzzers. Oil, coolant, charging circuit warning, and antilock brake system lights should go out right away.

	o Check Condition of Controls. Check all of the following for looseness, sticking, damage, or improper setting: ▪ Steering wheel. ▪ Clutch. ▪ Accelerator (gas pedal). ▪ Brake controls. ▪ Foot brake. ▪ Trailer brake (if vehicle has one). ▪ Parking brake. ▪ Transmission controls. ▪ Interaxle differential lock (if vehicle has one). ▪ Horn(s). ▪ Windshield wiper/washer. ▪ Lights. ▪ Headlights. ▪ Dimmer switch. ▪ Turn signal. ▪ Four-way flashers. ▪ Parking – clearance – identification – marker switch (switches). • Check mirrors and windshield. o Inspect mirrors and windshield for cracks, dirt, illegal stickers, or other obstructions to seeing clearly. Clean and adjust as necessary. • Check emergency equipment. o Check for safety equipment: ▪ Spare electrical fuses (unless vehicle has circuit breakers). ▪ Three red reflective triangles, 6 fuses or 3 liquid burning flares. ▪ Properly charged and rated fire extinguisher. Check for optional items such as: ▪ List of emergency phone numbers Accident reporting kit (packet).

	o Check safety belt. Check that the safety belt is securely mounted, adjusts; latches properly and is not ripped or frayed.
4. Turn-off Engine	• Make sure the parking brake is set, turn-off the engine, and take the key with. • Turn-on headlights (low beams) and four-way emergency flashers, and get out of the vehicle.
5. Do Walk-Around Inspection	• General. o Go to front of vehicle and check that low beams are on and both of the four-way flashers are working. o Push dimmer switch and check that high beams work. o Turn-off headlights and four-way emergency flashers. o Turn-on parking, clearance, side-marker, and identification lights. o Turn-on right turn signal, and start walk-around inspection. o Walk around and inspect. ▪ Clean all lights, reflectors, and glass as while doing the walk-around inspection. • Left front side. o Driver's door glass should be clean. o Door latches or locks should work properly. • Left front wheel. o Condition of wheel and rim--missing, bent, broken studs, clamps, lugs, or any signs of misalignment. o Condition of tires--properly inflated, valve stem and cap OK, no serious cuts, bulges, or tread wear. o Use wrench to test rust-streaked lug nuts, indicating looseness.

	o Hub oil level OK, no leaks. Left front suspension. o Condition of spring, spring hangers, shackles, o U-bolts. o Shock absorber condition. • Left front brake. o Condition of brake drum or disc. o Condition of hoses. • Front. o Condition of front axle. Condition of steering system. o No loose, worn, bent, damaged or missing parts. o Must grab steering mechanism to test for looseness. o Condition of windshield. o Check for damage and clean if dirty. o Check windshield wiper arms for proper spring tension. o Check wiper blades for damage, "stiff" rubber, and securement. o Lights and reflectors. o Parking, clearance, and identification lights clean, operating, and proper color (amber at front). o Reflectors clean and proper color (amber at front). o Right front turn signal light clean, operating, and proper color (amber or white on signals facing forward). • Right side o Right front: check all items as done on left front. o Primary and secondary safety cab locks engaged (if cab-over-engine design). o Right fuel tank(s). o Securely mounted, not damaged, or leaking. Fuel crossover line secure.

	o Tank(s) contain enough fuel. Cap(s) on and secure. o Condition of visible parts. Rear of engine--not leaking. Transmission--not leaking. o Exhaust system--secure, not leaking, not touching wires, fuel, or air-lines. o Frame and cross members--no bends or cracks. o Air-lines and electrical wiring--secured against snagging, rubbing, wearing. o Spare tire carrier or rack not damaged (if so equipped). o Spare tire and/or wheel securely mounted in rack. o Spare tire and wheel adequate (proper size, properly inflated). o Cargo securement (trucks). o Side boards, stakes strong enough, free of damage, properly set in place (if so equipped). o Curbside cargo compartment doors in good condition, securely closed, latched/locked and required security seals in place. • Right rear. o Condition of wheels and rims--no missing, bent, or broken spacers, studs, clamps, or lugs. o Condition of tires--properly inflated, valve stems and caps OK, no serious cuts, bulges, tread wear, tires not rubbing each other, and nothing stuck between them. o Tires same type, e.g., not mixed radial and bias types. o Tires evenly matched (same sizes). Wheel bearing/seals not leaking. o Suspension.

	o Condition of spring(s), spring hangers, shackles, and u-bolts. o Axle secure. o Powered axle(s) not leaking lube (gear oil). Condition of torque rod arms, bushings. o Condition of shock absorber(s). o If retractable axle equipped, check condition of lift mechanism. If air powered, check for leaks. o Condition of air ride components. o Brakes. o Brake adjustment. o Condition of brake drum(s) or discs. o Condition of hoses--look for any wear due to rubbing. o Lights and reflectors. o Side-marker lights clean, operating, and proper color (red at rear, others amber). o Side-marker reflectors clean and proper color (red at rear, others amber). • Rear. o Lights and reflectors. o Rear clearance and identification lights clean, operating, and proper color (red at rear). o Reflectors clean and proper color (red at rear). o Taillights clean, operating, and proper color (red at rear). o Right rear turn signal operating, and proper color (red, yellow, or amber at rear). o License plate(s) present, clean, and secured. o Splash guards present, not damaged, properly fastened, not dragging on ground, or rubbing tires.

	o Rear doors securely closed, latched/locked. • Left side. o Check all items as done on right side, plus: o Battery (batteries) (if not mounted in engine compartment). o Battery box (boxes) securely mounted to vehicle. Box has secure cover. o Battery (batteries) secured against movement. Battery (batteries) not broken or leaking. o Fluid in battery (batteries) at proper level (except maintenance-free type). o Cell caps present and securely tightened (except maintenance-free type). o Vents in cell caps free of foreign material (except maintenance-free type).
6. Check Signal Lights	• Get in and turn-off all lights. • Turn-on stop lights (apply trailer hand brake or have a helper put on the brake pedal). • Turn-on left turn signal lights. • Get out and check lights. • Left front turn signal light clean, operating and proper color (amber or white on signals facing the front). • Left rear turn signal light and both stop lights clean operating, and proper color (red, yellow, or amber). • Get in vehicle. o Turn-off lights not needed for driving. o Check for all required papers, trip manifests, permits, etc.

	o Secure all loose articles in cab (they might interfere with operation of the controls or hit the operator in a crash). o Start the engine.
7. Start the Engine and Check Test for Hydraulic Leaks	• Test for hydraulic leaks. o If the vehicle has hydraulic brakes, pump the brake pedal three times. o Then apply firm pressure to the pedal and hold for five seconds. o The pedal should not move. If it does, there may be a leak or other problem. • Brake system. • Test parking brake. o Fasten safety belt. o Set parking brake (power unit only). Release trailer parking brake (if applicable). Place vehicle into a low gear. o Gently pull forward against parking brake to make sure the parking brake holds. o Repeat the same steps for the trailer with trailer parking brake set and power unit parking brakes released (if applicable). o If it doesn't hold vehicle, it is faulty; get it fixed. • Test service brake stopping action. o Go about 5 miles per hour. o Push brake pedal firmly. o "Pulling" to one side or the other can mean brake trouble. o Any unusual brake pedal "feel" or delayed stopping action can mean trouble.

	o If the trainee finds anything unsafe during the Vehicle inspection, get it fixed. Federal and state laws forbid operating an unsafe vehicle. • Check vehicle operation regularly: o Instruments. o Air pressure gauge (if the vehicle has air brakes). Temperature gauges. o Pressure gauges. Ammeter/voltmeter. o Mirrors. o Tires. o If the trainee sees, hears, smells, or feels anything that might mean trouble, he/she should check it out. • Safety inspection. • Document any discrepancy on AF Form 1800. Sign-off AF Form 1800 to signify accomplishment of inspection.

Figure A3.2. Additional Steps for Inspecting Air Brakes System (Universal).

Additional Steps for Inspecting Air Brakes (Universal)	
Step	**Procedure**
2. Engine Compartment Checks	• Check air compressor drive belt condition and tightness (if compressor is belt driven).
5. Walk-Around Inspecting	• Check manual slack adjusters on S-cam brakes. **Note:** Vehicles with automatic slack adjustors still must be checked. o Park on level ground and chock the wheels. o Release the parking brakes so the operator can move the slack adjusters. o Use gloves and pull hard on each slack adjuster that it can be reached. o Check slack adjuster, more than 1-inch indicates adjustments required (vehicles with too much brake slack can be very hard to stop). Adjust it or have it adjusted. • Check brake drums (or discs), linings, and hoses.
7. Final Air Brake Check	• Test low pressure warning signal.

	o Shut the engine off when the vehicle has enough air pressure so that the low pressure warning signal is not on. o Turn the electrical power on. o Step on and off the brake pedal to reduce air tank pressure. o Low air pressure warning signal should come on before the pressure drops to less than 60 psi in the air tank with lowest pressure. • Check that the spring brakes come on automatically. o Chock the wheels. o Release the parking brakes when enough air pressure is built up. o Shut the engine off. o Step on and off the brake pedal to reduce the air tank pressure. o "Parking brake" knob should pop out when the air pressure falls to the manufacturer's specification. • Check rate of air pressure buildup o Refer to manufacturer's recommendation for average buildup time. o If not within recommended time, the air pressure may drop too low during driving operations. • Test air leakage rate. o With a fully-charged air system (typically 125 psi). o Turn-off the engine. o Release the service brake and time the air pressure drop. o The loss rate should be less than 2 psi in one minute for single vehicles. o Not less than 3 psi in 1 minute for combination vehicles. • Then apply 90 psi or more with the brake pedal. o After the initial pressure drop, if the air pressure falls more than 3 psi in 1 minute for single vehicles. o Not more than 4 psi for combination vehicles. • Check air compressor governor cut-in and cut-out pressures.

	o Air compressor should start at about 100 psi and stop at about 125 psi. o Run the engine at a fast idle. o Air governor should cut-out the air compressor at about the manufacturer's specified pressure. o Engine idling, step on and off brake to reduce air tank pressure. o Compressor should cut-in at manufacturer's specified cut-in pressure. o Test parking brake: Stop the vehicle; put the parking brake on; gently pull against it in low gear to determine if parking brake will hold. ▪ Test service brakes. ▪ Wait for normal air pressure. • Release the parking brake. • Move the vehicle forward slowly (about 5 mph). • Apply the brakes firmly using the brake pedal. • Note any vehicle "pulling" to one side, unusual feel, or delayed stopping action.

Attachment 4

Driver's Training Qualification Form

Vehicle Type: Rescue/HAZMAT Apparatus

Trainee's Name:_____ Trainer's Name: _____

Pre Operations Station							
Required Training	Hours	In each block, enter date of training, number of hours, training initials.					
Manufacture Data Self-Study	**4**						
Pre-operation Daily Checkout (Includes, Vehicle Gauges and Auxiliary Systems)	**4**						
Operations Station							
Apparatus Maneuvering / Positioning (Must include 1 hour of night operations)	**4**						
Vehicle Backing	**1**						
Predetermined Driving Course (Installation Familiarization, Obstacle)	**4**						

Note: The hours specified above are recommended and may be increased or decreased depending on how quickly a trainee learns new tasks and demonstrates competency.

Note: Once all training requirements are completed, the Trainee and Supervisor must sign.

Trainee Signature: Supervisor's Signature:

Attachment 5

Rescue & HAZMAT Vehicle Performance Test Supplement

Table of Contents

Performance Test Information

General Guidance

These performance tests are based on the 2014 Edition of NFPA 1002; *Standard for Fire Apparatus Driver/Operator Professional Qualification* and provides the detailed performance test checklist items required for candidate testing. It is strongly encouraged that this document be used during the normal course of study. Candidates should practice the performance tests during study and up until testing is conducted. Practice is highly encouraged.

This particular course uses several skills tests. Within each skills test there are one or more tasks meeting the test objectives (NFPA line items). A "Task Summary" precedes each skills test checklist identifying all the evaluated task associated with the test. This sheet lists the NFPA line items evaluated, the setting and tools/equipment needed for the listed tasks, and any evaluator guidance necessary for the task(s). Evaluators should review the checklist paying specific attention to any "Evaluator Guidance".

Evaluator Orientation

You should read and understand the following orientation information before entering the specific skill station you will be evaluating. If there is any information within this orientation that you do not understand, you should contact the examination coordinator for clarification. We would like to thank you for donating your valuable time to assist with the evaluation of candidates in the practical examination. Your role as a skill station evaluator is critically important. You are to serve as an observer and recorder of the candidate's actions based on the criteria listed on the score sheet. There are a number of ways to successfully perform a skill. You should always remember that the way you were taught to perform a skill is not the only correct way to perform the skill. The ultimate criterion for successful completion of a skill is: "Did the final outcome meet the parameters set?"

This is a formal examination and not a teaching situation. Excessive dialogue between the evaluator and the candidate is discourage. Peripheral or "nice to know" areas of should not be discussed. Situations or questions that require you to demonstrate a procedure should be avoided. You should not ask leading questions. Do not condemn or condone a candidate's actions by expression, gesture, tone of voice, or attitude. Pay special attention to verbal and non-verbal language. Often, candidates interpret a word or action delivered in jest as being indicative of pass or fail, a value judgment, or a non-caring attitude.

You were asked to be an evaluator because your expertise adds credibility to the examination. Your knowledge on the subject allows you to ask the candidate(s) related questions to substantiate or define an action. If qualifying questions are necessary, they should be asked at the end of the station. At no time should you discuss any phase of the candidate's performance with the candidate.

Candidates are allowed to perform each skill once. If they appear overly nervous when first starting the exam, you may stop them and allow them to collect themselves before starting again. However, once a candidate initiates a course of action the candidate must be evaluated on the merits of that singular performance, as would happen in the field. You must provide qualifying information in the comments section of the score sheet for any performance that is identified as a mandatory failure item.

Visitors are not allowed in the testing area while testing is being conducted. The examination coordinator may be in the testing area if they are not obstructive to the testing.

You must document in the comments section the reason you marked a mandatory failure item. Additional comments are welcome, but remember to be specific. Instead of writing "He did a poor job", write exactly what the candidate did right or wrong. At no time should you discuss the performance with the candidate. You should never condemn or condone the candidate's actions by verbal or nonverbal means.

If the candidate reaches the time limit indicated on the score sheet before completing the procedure, you must stop the candidate and direct him/her to return to the staging area and wait for instructions to report to the next station. All tasks not completed should be scored a zero in the "points awarded" column.

Be very aware of the importance of consistency in giving instructions, setting up scenarios, and making and recording observations. Every effort should be made to ensure that all details of the examination scenario are identical for each candidate. Be aware of your own fatigue and if necessary take a break after notifying the examination coordinator.

You should have received individual written instructions concerning the specific skill and/or skill station you will be evaluating. If you do not understand any part of these instructions, do not start the evaluation process. Contact the examination coordinator for clarification.

It is also important to understand the grading process used during the evaluation. Additional information on grading the skills test is provided on the next page.

Performance Test Information

Grading Information

The following grading criteria will be used to evaluate and determine the pass/fail status of a candidate.

Each of the performance test checklists contains an attainment standard. In this particular course the attainment standards are set at approximately 80% using an "X out of X" format while also containing a time limit. For example, an attainment standard may read, "Successful completion of at least 15 out of 18 items within 90 minutes."

If for some reason a particular element/step or standard cannot be completed and the candidate's installation cannot simulate or create the item, then the evaluator may mark the item "Not Applicable" (N/A). The evaluator must then re-adjust the score by multiplying the remaining checklist items by .80 to determine the number correct required. For example, a performance test requires that 12 out of 15 items be successfully completed and 2 of the 15 items are marked N/A then the evaluator must multiply the remaining 13 items by .80 (13 x .80 = 10.4 or 11). The new required minimum passing score is now 11 out 13 items.

There are a total of three (3) skills test encompassing 15 separate tasks. Candidates must successfully complete **ALL** task within the skills test.

--AND--

Where the Standard/Element/Step on the Skills Test checklist is given a rating, the following criteria will be also be used to determine the pass/fail status of a candidate.

Critical (C) - This rating has been assigned to items, which, if omitted or performed incorrectly, would result in severe injury to, or death of, an individual. Should a firefighter fail to perform any one item rated as Critical **(C)**, the firefighter would be unsuccessful in demonstrating the required proficiency level for that standard.

Major (M) - This rating refers to any item that is very important to the general safety of personnel and the successful completion of the evolution. Should a firefighter fail to perform any **three** items rated as Major **(M)**, the firefighter would be unsuccessful in demonstrating the required proficiency level for that standard.

General - This rating although there is not symbol, has been given to all remaining items that in combination are relevant to the successful completion of the evolution. Should a firefighter fail to perform any **fou**r items rated as General, the firefighter would be unsuccessful in demonstrating the required proficiency level for that standard.

Should a firefighter fail to perform any combination of Major or General rated items resulting in a sum total of **four**, the firefighter would be unsuccessful in demonstrating the required proficiency level for that standard.

Skill Test Summary Sheet

Skills Test #1 – Inspection, Maintenance and Servicing

NFPA Standard 1002, Paragraphs 4.2.1, 4.2.2, 4.3.7

Task #1. Conduct and document routine tests, inspections, and servicing functions. (4.2.1, 4.2.2, 4.3.7)

Task #2. Identify and explain the use of the apparatus' automotive gauges and potential performance problems based upon gauge readings. (4.2.1)

Skills Test #2 – Vehicle and Equipment Operations

NFPA Standard 1002, Paragraphs 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.7

Task #3. Explain in common measurements the basic dimensions and turning radius of the apparatus. (4.3.1, 4.3.2, 4.3.4, 4.3.5, 4.3.6)

Task #4. Drive a fire department apparatus on a public road/highway. (4.3.1, 4.3.6, 4.3.7)

Task #5. Perform unique or technical vehicle maneuvers. (4.3.2, 4.3.3, 4.3.4, 4.3.5)

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Skills Test #1 Inspection, Maintenance and Servicing

Task #1 Specific Instructions and Information

Tasks:	Task #1. Conduct and document routine tests, inspections, and servicing functions. (4.2.1, 4.2.2, 4.3.7)
Setting:	Fire department classroom, training ground or suitable exercise area as determined by the specific task.
Tools/ Equipment:	Fire department apparatus, personal protective equipment, and AHJ's maintenance and inspection forms.
Attainment Standard:	Completed task with 52 of 64 steps correct in 60 minutes.
Evaluator's Guidance:	The evaluator will select one discrepancy from each of the inspection items listed in elements B - G. The discrepancy selected must be at a level a driver/operator would be expected to perform based on local policies governing driver/operator responsibilities.

TASK	STANDARDS / ELEMENTS / STEPS	YES	NO
1. Conduct and document routine tests, inspections, and servicing functions. (4.2.1, 4.2.2 4.3.7)	1. In accordance with NFPA 1002 *Standard for Fire Apparatus Driver/Operator Professional Qualification,* manufacturer's recommendations, and local policies/procedures, the candidate		
	A. Identified and explained use of fire apparatus:	_____	_____
	(1) Historical test records	_____	_____
	(2) Maintenance forms	_____	_____
	(3) Inspection forms	_____	_____
	B. Inspected and/or performed operational checks inside driver compartment	_____	_____
	(1) All controls and gauges	_____	_____
	(2) Fuel levels (filled as needed)	_____	_____
	(3) All interior lights	_____	_____
	(4) Horn	_____	_____
	(5) Mirrors	_____	_____
	(6) Public address system	_____	_____
	(7) Audible/visual warning devices	_____	_____
	(8) Brake pedal pressure	_____	_____
	(9) Windshield wipers	_____	_____
	(10) Maps and map case	_____	_____
	(11) Seats and seatbelts	_____	_____
	(12) Emergency and parking brakes	_____	_____
	(13) Circuit breakers and/or fuses	_____	_____
	(14) Steering wheel adjustment and reaction	_____	_____
	(15) Heater/air conditioner	_____	_____
	(16) Clutch pedal (if applicable)	_____	_____

Competencies

Skills Test #1 (continued)

TASK	STANDARDS / ELEMENTS / STEPS	YES	NO
1. Continued.	(18) **(M)** Communication systems	_____	_____
	(19) Documented all discrepancies noted	_____	_____
	C. Inspected and/or performed operational checks on apparatus exterior	_____	_____
	(1) Body panels for rust, dents, or exposed areas	_____	_____
	(2) Tires for proper inflation	_____	_____
	(3) Wheel lugs for tightness	_____	_____
	(4) Exterior lights	_____	_____
	(5) Circuit breakers and/or fuses	_____	_____
	(6) Weather seals around cab and compartment doors	_____	_____
	(7) Windows	_____	_____
	(8) Battery terminals	_____	_____
	(9) Battery cables	_____	_____
	(10) Battery electrolyte level	_____	_____
	(11) Fuel or oil leaks	_____	_____
	(12) Documented all discrepancies noted	_____	_____
	D. Inspected engine compartment, checking:	_____	_____
	(1) Drive belts for wear/defects	_____	_____
	(2) Overflow reservoir for leaks	_____	_____
	(3) Cooling fan	_____	_____
	(4) Cooling system hoses	_____	_____
	(5) Radiator for leaks and damage	_____	_____
	(6) Coolant level, color and cleanliness	_____	_____
	(7) Oil levels	_____	_____
	(8) Hydraulic fluid levels	_____	_____
	(9) Brake/master cylinder fluid level	_____	_____
	(10) Power steering reservoir	_____	_____
	(11) Transmission fluid level (cold/hot)	_____	_____
	(12) Fluid or air leaks	_____	_____
	(13) Air filter restriction gauge	_____	_____
	(14) Windshield washer fluid level	_____	_____
	(15) Wiring for breaks, loose connections, and insulation frays	_____	_____
	(16) Emergency shutdown operation	_____	_____
	(17) Exhaust system for leaks and damage	_____	_____
	(18) Air system for leaks and damage	_____	_____
	(19) Fuel filter for leaks and damage	_____	_____
	(20) Filled all fluids as necessary	_____	_____
	(21) Documented all discrepancies noted	_____	_____

Skills Test #1 (continued)

TASK	STANDARDS / ELEMENTS / STEPS	YES	NO
1. Continued.	E. Inspected and/or performed operational checks on other apparatus fixed systems and equipment	_____	_____
	(1) Hand and power tools/equipment	_____	_____
	(2) Portable Fire Extinguishers	_____	_____
	(3) Other installed systems	_____	_____
	(4) Documented all discrepancies noted	_____	_____
	F. **(C)** Performed all inspections and maintenance in a safe manner	_____	_____
	G. Completed task with 52 of 64 steps correct in 60 minutes	_____	_____

Competencies

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Task #2 Specific Instructions and Information

Tasks:	Task #2. Identify and explain the use of the apparatus' automotive gauges and potential performance problems based upon gauge readings.(4.2.1)
Setting:	Fire department vehicle stalls, training ground or suitable area as determined by the task.
Tools/ Equipment:	Fire department apparatus, personal protective equipment, and AHJ's maintenance and inspection forms.
Attainment Standard:	Completed task without 12 of 14 steps correct in 20 minutes.
Evaluator's Guidance:	For Step B, Evaluator will select 3 items listed in Step A and provide information which would indicate a performance problem or issue.

TASK	STANDARDS / ELEMENTS / STEPS	YES	NO
2. Identify and explain the use of the apparatus' automotive gauges and potential performance problems based upon gauge readings.(4.2.1)	2. In accordance with NFPA 1002 *Standard for Fire Apparatus Driver/Operator Professional Qualification*, manufacturer's recommendations, and local policies/procedures, the candidate:		
	A. Explained the purpose of automotive gauges	_____	_____
	(1) Speedometer	_____	_____
	(2) Tachometer	_____	_____
	(3) Oil pressure gauge	_____	_____
	(4) Ammeter	_____	_____
	(5) Voltmeter	_____	_____
	(6) Air pressure gauge	_____	_____
	(7) Temperature gauge	_____	_____
	(8) Fuel gauge	_____	_____
	(9) Other gauges not listed above	_____	_____
	B. Identified potential performance problem based upon gauge readings	_____	_____
	C.		
	(1) Evaluator Option #1 _____	_____	_____
	(2) Evaluator Option #2 _____	_____	_____
	(3) Evaluator Option #3 _____	_____	_____
	D. Completed task with 12 of 14 steps correct in 20 minutes	_____	_____

Competencies

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Skills Test #2 Vehicle and Equipment Operations

Task #3 Specific Instructions and Information

Tasks:	Task #3. Explain in common measurements the basic dimensions and turning radius of the apparatus. (4.3.1, 4.3.2, 4.3.4, 4.3.5, 4.3.6)
Setting:	Fire department vehicle stalls, training ground or suitable area as determined by the task.
Tools/ Equipment:	Fire department apparatus, personal protective equipment,
Attainment Standard:	Completed task without 8 of 10 steps correct in 10 minutes.
Evaluator's Guidance:	Measurements shall be for the apparatus to be used in throughout Skills Test #2, Vehicle Operations.

TASK	STANDARDS / ELEMENTS / STEPS	YES	NO
5. Explain in common measurements the basic dimensions and turning radius of the apparatus. (4.3.1, 4.3.2, 4.3.4, 4.3.5, 4.3.6)	5. In accordance with NFPA 1002 *Standard for Fire Apparatus Driver/Operator Professional Qualification*, manufacturer's recommendations, and local policies/procedures, the candidate: A. Identified the apparatus': (1) Height (2) Weight (3) Width (4) Length (5) Ground clearance (6) Turning radius B. Completed task with 6 of 7 steps correct in 10 minutes	_____ _____ _____ _____ _____ _____ _____ _____	_____ _____ _____ _____ _____ _____ _____ _____

Competencies

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Skills Test #2 Vehicle and Equipment Operations

Task #4 Specific Instructions and Information

Task:	Task #4. Drive a fire department apparatus on a public road/highway. (4.3.1, 4.3.6, 4.3.7)
Setting:	Public road/highway, fire department training ground or other suitable area for driving fire apparatus.
Tools/ Equipment:	Fire department apparatus, personal protective equipment, cones, ruler, scorecard, and a public road and highway.
Attainment Standard:	Completed task with 58 of 72 steps correct in 60 minutes.
Evaluator's Guidance:	Task #4 should be tested on a public road/highway based within the local jurisdiction.

TASK	STANDARDS / ELEMENTS / STEPS	YES	NO
6. Drive a Fire Department Apparatus on a public road/highway.(4.3.1, 4.3.6, 4.3.7)	6. In accordance with NFPA 1002, *Standard for Fire Apparatus Driver/Operator Professional Qualification* and local laws/policies, and procedures, the candidate		
	A. Verified passenger and vehicle safety	_____	_____
	(1) Occupants seat belts fastened	_____	_____
	(2) All mirrors properly set	_____	_____
	(3) Verbalized liquid surge precautions	_____	_____
	B. Drove a straight section of road or highway	_____	_____
	(1) Maintained vehicle speed	_____	_____
	(2) Checked for oncoming traffic	_____	_____
	(3) Checked side and rear view mirrors	_____	_____
	(4) Checked side streets or roads	_____	_____
	C. Made four (4) left and four (4) right turns	_____	_____
	(1) Activated appropriate signal turn	_____	_____
	(2) Checked side and rear view mirrors	_____	_____
	(3) Verified side street or road was clear	_____	_____
	(4) Safely completed turns	_____	_____
	D. Passed through one intersection	_____	_____
	(1) Approached intersection with caution	_____	_____
	(2) Checked traffic (left, right, left again)	_____	_____
	(3) Safely proceeded through intersection	_____	_____

Competencies

Skills Test #2 (continued)

TASK	STANDARDS / ELEMENTS / STEPS	YES	NO
6. Continued.	E. Passed through two intersections with a stop	_____	_____
	(1) Approached intersection with caution	_____	_____
	(2) Brought the vehicle to a complete stop	_____	_____
	(3) Checked traffic – left, right, and left again	_____	_____
	(4) Safely proceeded through the intersection	_____	_____
	F. Negotiated a railroad crossing	_____	_____
	(1) Approached crossing with caution	_____	_____
	(2) Checked tracks – left and right	_____	_____
	(3) Stopped when necessary	_____	_____
	(4) Proceeded across tracks when safe	_____	_____
	G. Negotiated a curve (right or left)	_____	_____
	(1) Slowed vehicle before entering curve	_____	_____
	(2) Adjusted speed as required	_____	_____
	(3) Maintained safe control of vehicle	_____	_____
	H. Entered a limited access highway	_____	_____
	(1) Adjusted speed of vehicle to match traffic	_____	_____
	(2) Activated turn signal	_____	_____
	(3) Checked side and rear view mirrors	_____	_____
	(4) Moved vehicle onto highway safely	_____	_____
	I. Changed lanes on a limited access highway	_____	_____
	(1) Activated turn signal	_____	_____
	(2) Checked side and rear view mirrors	_____	_____
	(3) Safely completed lane change	_____	_____
	J. Exited a limited access highway	_____	_____
	(1) Activated turn signal	_____	_____
	(2) Checked side and rear view mirrors	_____	_____
	(3) Moved vehicle into deceleration lane	_____	_____
	(4) Slowed vehicle and exited safely	_____	_____
	K. Negotiated a downgrade	_____	_____
	(1) Downshifted before entering grade	_____	_____
	(2) Made sure vehicle remained in gear	_____	_____
	(3) Used brakes and lower gears	_____	_____
	(4) Limited engine rpm – below redline	_____	_____

Skills Test #2 (continued)

TASK	STANDARDS / ELEMENTS / STEPS	YES	NO
6. Continued.	L. Negotiated an upgrade	____	____
	(1) Engine rpm did not drop below minimum	____	____
	(2) Allowed transmission to downshift automatically (if applicable)	____	____
	(3) Manually downshifted standard transmission to maintain engine rpm and speed (if applicable)	____	____
	M. Negotiated an underpass (low clearance)	____	____
	(1) Approached with caution	____	____
	(2) Checked underpass height marking	____	____
	(3) Used spotter if height not marked	____	____
	(4) Proceeded only when sure it was safe	____	____
	N. Demonstrated defensive driving techniques while performing elements A - M	____	____
	(1) **(C)** Ensured seatbelt use prior to vehicle movement	____	____
	(2) Adhered to all traffic regulations	____	____
	(3) Demonstrated responsibility and concern for safety of apparatus and personnel while driving apparatus	____	____
	(4) **(C)** Used all applicable warning devices	____	____
	(5) **(M)** Ensured safety at intersections	____	____
	(6) Properly followed the right of way laws	____	____
	(7) **(C)** Performed all elements in a controlled and safe manner	____	____
	(8) **(M)** Adjusted speed and stopping distances for road/weather conditions	____	____
	(9) Accounted for liquid surges	____	____
	(10) Slowed gradually by pumping brakes	____	____
	(11) Used spotters (as applicable)	____	____
	O. Completed task with 58 of 72 steps correct in 60 minutes	____	____

Competencies

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Skills Test #2 Vehicle and Equipment Operations

Task #5 Specific Instructions and Information

Task:	Task #5. Perform unique or technical vehicle maneuvers. (4.3.2, 4.3.3, 4.3.4, 4.3.5)
Setting:	Predetermined driving course, fire department training ground or other suitable area for driving course set up.
Tools/ Equipment:	Fire department apparatus, personal protective equipment, cones, ruler, scorecard, vehicle spotters, and closed driving course (see attachment 1).
Attainment Standard:	Completed task with no task failures and a minimum score of 400 points (after penalties) on the Driving Course Scorecard in 30 minutes.
Evaluator's Guidance:	Task #5 shall be tested on a closed course as outlined in the Driving Course setup (attachment 1). Score card shall be used to validate results to determine overall score.

TASK	STANDARDS / ELEMENTS / STEPS	YES	NO
7. Perform unique or technical vehicle maneuvers. (4.3.2, 4.3.3, 4.3.4, 4.3.5)	7. In accordance with NFPA 1002, *Standard for Fire Apparatus Driver/Operator Professional Qualification* and local laws/policies, and procedures, the candidate		
Alley Dock Exercise	A. Backed vehicle into a restricted space	_____	_____
	(1) Assessed size of space as related to vehicle dimensions	_____	_____
	(2) Passed the "barricades" marking the loading dock on the left	_____	_____
	(3) Backed apparatus by a left turn into the marked loading dock	_____	_____
	(4) Stopped where and when directed	_____	_____
	(5) Used spotters when backing	_____	_____
	(6) Completed without pulling forward	_____	_____
	(7) Completed exercise without striking obstructions	_____	_____
	(8) Repeated steps 2 through 7 with the dock on the right	_____	_____
Serpentine Exercise	B. Maneuvered around obstacles	_____	_____
	(1) Drove apparatus along left side of markers in a straight line	_____	_____
	(2) Stopped beyond the last barrel/cone	_____	_____
	(3) Backed the apparatus between the markers by passing left of #1, right of #2, and left of #3	_____	_____
	(4) Stopped beyond the last barrel/cone using spotters	_____	_____
	(5) Drove vehicle forward and right of #3, left of #2, and right of #1	_____	_____

Competencies

Skills Test #2 (continued)

TASK	STANDARDS / ELEMENTS / STEPS	YES	NO
7. Continued.	C. Negotiated a diminishing horizontal and vertical clearance	_____	_____
	(1) Proceeded from wide to narrow end	_____	_____
	(2) Did not touch markers	_____	_____
	(3) Stopped with front bumper on the finish line (Rear bumper for driving in reverse)	_____	_____
	(4) Came to a complete stop in a safe manner	_____	_____
	(5) Stopped when and where directed	_____	_____
	(6) Stopped vehicle before striking crossbar	_____	_____
	(7) Repeated steps A through F in reverse with spotters	_____	_____
Confined Space Turn-around	D. Turn vehicle 180 degrees	_____	_____
	(1) Pulled into a designated area through opening	_____	_____
	(2) Made a U-turn by maneuvering vehicle	_____	_____
	(3) Backed up at least once using spotters		
	(4) Exited area through same opening	_____	_____
	E. Lane changes	_____	_____
	(1) 1. Approached the first lane at a safe speed	_____	_____
	(2) 2. Followed flash card directions	_____	_____
	(3) 3. Drove in the designated lane	_____	_____
	F. Straight line vehicle positioning	_____	_____
	(1) Traveled in a forward direction without weaving	_____	_____
	(2) Accelerated through gears without stopping	_____	_____
	(3) Did not touch markers	_____	_____
	(4) Came to a complete stop in a smooth and safe manner	_____	_____
	(5) Stopped with the front bumper on the finish line (Rear bumper for driving in reverse)	_____	_____
	(6) Stopped when and where directed	_____	_____
	(7) Repeated steps 1 through 6 in reverse with spotters	_____	_____

Skills Test #2 (continued)

TASK	STANDARDS / ELEMENTS / STEPS	YES	NO
7. Continued.	G. Demonstrated defensive driving techniques while performing A - F	_____	
	(1) **(C)** Ensured seatbelt use prior to vehicle movement	_____	
	(2) Adhered to all traffic regulations	_____	
	(3) Demonstrated responsibility and concern for safety of apparatus and personnel while driving apparatus	_____	
	(4) **(M)** Used all applicable warning devices	_____	
	(5) **(M)** Ensured safety at intersections	_____	
	(6) Properly followed the right of way laws	_____	
	(7) **(C)** Performed all elements in a controlled and safe manner	_____	
	(8) **(M)** Adjusted speed and stopping distances for road/weather conditions	_____	
	(9) Accounted for liquid surges	_____	
	(10) Slowed gradually by pumping brakes	_____	
	(11) **(M)** Used spotters	_____	
	H. Completed task with no task failures and a minimum score of 400 points (after penalties) on the Driving Course Scorecard in 30 minutes	_____	

Competencies

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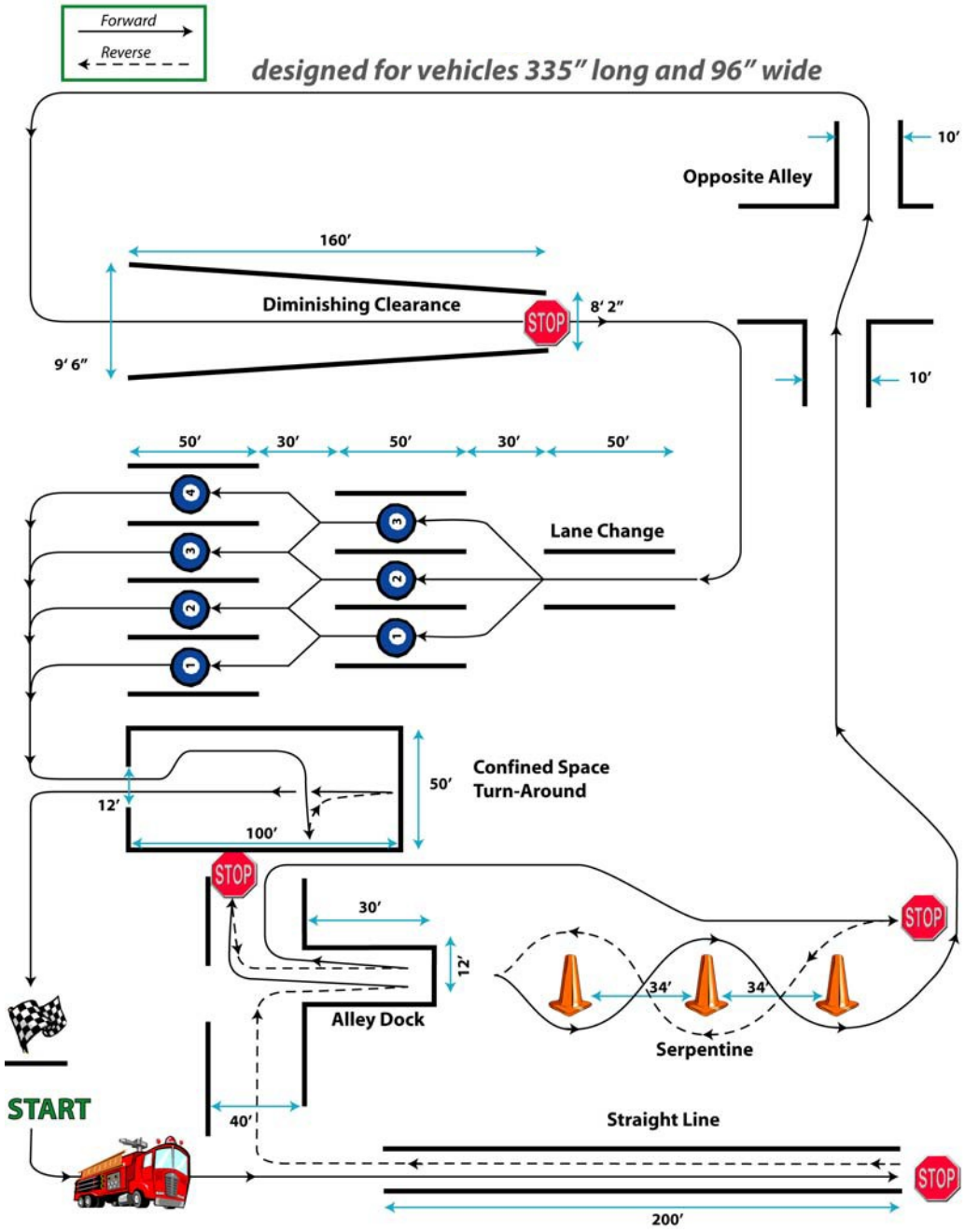
Driving Course Specifications



Driving Course Information

Utilize this sheet to design your driving course in relation to the vehicles you have assigned. Please set up your course per calculations outlined below.

Exercise	Dimensions	Max Points	Min Points	Penalty Points
Alley Dock	Depth: VL plus **3** ft. Width: VW plus **2** ft. Wall distance from entrance: VL multiplied by **1.48**	**100**	**80**	Distance from rear bumper to wall: 6 - 9 inches 5 9 - 12 inches 10 12 - 15 inches 15 15 - 18 inches 20 18 or more inches 25 Beyond finish line 50
Serpentine	Distance between cones: VL multiplied by **1.25**	**50**	**40**	Passing course markers on the wrong side 5 Each time vehicle stops during the exercise 5
Confined Space Turnaround	Entrance Width: VW plus **4** ft. Space Width: VL multiplied by **1.85** Space Length: VL multiplied by **3.7**	**50**	**40**	Failure to maintain constant motion 5
Diminishing Clearance	Wide Entrance: VW plus **1.5** ft. Narrow Point: VW plus **2** inches	**100**	**80**	Distance from front bumper to finish line: 6 - 9 inches 5 9 - 12 inches 10 12 - 15 inches 15 15 - 18 inches 20 18 or more inches 25 Beyond finish line 25 Vertical bar struck 50
Lane Change	Lanes Width: VW plus **2** ft. Lanes Length: VL multiplied by **1.85** Distance between lanes: VL multiplied by **1.11**	**100**	**80**	Failure to maintain a safe operating speed 10 Each time the apparatus stops during the exercise 25 Failure to take the lane marked by judges 25 Failure to maintain control of apparatus 50
Straight Line Positioning	Width of Lane: VW plus **4** ft. Length of Lane: VL multiplied by **7.4** (e.g. VL is 47 ft.; 47 X 7.4 = 348 ft.)	**100**	**80**	Distance from front or rear bumper to finish line: 6 - 9 inches 5 9 - 12 inches 10 12 - 15 inches 15 15 - 18 inches 20 18 or more inches 25 Beyond finish line 50
Legend:	VW = Vehicle Width VL = Vehicle Length	**Point Totals**: **500**	**400**	**All Exercises:** Each cone brushed, moved or overturned 5

Candidate Scorecards

Candidates:					
Exercise	**Penalty Points Accrued**	**Penalty Points Accrued**	**Penalty Points Accrued**	**Penalty Points Accrued**	**Penalty Points Accrued**
Alley Dock					
Serpentine					
Confined Space Turnaround					
Diminishing Clearance					
Lane Change					
Straight Line					
Total Possible Points	**500**	**500**	**500**	**500**	**500**
Total Penalty Points					
Candidate Score					
Minimum Passing Score	**400**	**400**	**400**	**400**	**400**
Pass (P) /Fail (F)					

This scorecard may be used to track multiple candidates being evaluated performing the driving course

Driving Course Information

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Rescue/HAZMAT Vehicle Performance Test Record

NFPA 1002, 2014 Edition

INSTRUCTIONS: This form must be completed and kept on file. A copy of this form is also required to be submitted with the candidate's certification package.

Date of Evaluation

Candidate's Name_____SSN _____

Evaluator's Name_____SSN _____

The candidate has PASSED/FAILED the performance tests criterion for the skills test marked below:

SKILLS TEST		PASSED	FAILED
1 – Inspection, Maintenance and Servicing		☐	☐
2 – Vehicle and Equipment Operations	Task #5 Score: _____	☐	☐

If candidate has failed the performance evaluation, provide the following information: (Use additional sheets, if necessary)

Objective(s):

Reason(s) for failure:

Candidate's Signature _____

Evaluator's Signature _____