



**MONTGOMERY COUNTY FIRE AND RESCUE SERVICE
DRIVER/OPERATOR TRAINING PROGRAM**

**APPARATUS TRAINING COMPETENCIES
Rescue Engine 709 (7/20/15)**

Trainee Name: _____ **ID#:** _____
Station/Shift or Dept: _____ **Start Date:** _____
Trainer Name: _____ **ID#:** _____
Station OIC Name: _____ **ID#:** _____

- Familiarization Operational Check-out:**
- Drivers with the following pre-existing Driver Operator credentials:
 1. Crimson Engine,
 2. Tandem Axle Apparatus (i.e. Tanker, Tower), and
 3. Rescue Squad or Rescue Truck (i.e. Pierce TDA).
 - Complete all below competencies, in-station written exam, and practical skills validation.
- Performance Operational Check-out:**
- Drivers with the following pre-existing Driver Operator credentials:
 1. Crimson Engine,
 2. Tandem Axle Apparatus (i.e. Tanker, Tower),
 3. Not Yet Certified on any Rescue Tool Equipped Apparatus.
 - Complete all below competencies. Attend PSTA Rescue Tool written exam and Practical Skill Evaluation.

Unit ID: RE709 Stock #: 07-5889 Make:Spartan/4Guys Year: 2007

Section	Competency	Trainer Signature	Date
1.0	Pre-Requisites		
1.1	Valid Maryland Class "B" License or out-or-state equivalent. by FRC Policy 23-07AMII. <i>Expiration Date:</i> _____		
1.2	One Year as a MCFRS Certified aeCAFS Engine Driver		
1.3	MCFRTA Rescue Technician Course, Practical Rescue or equivalency.		
1.4	Class "B" Driver Course or equivalent/exemption		
1.5	Tandem Axle Driver Unit: _____		



Apparatus Training Competencies

Trainee Name: Enter Name

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Section	Competency	Trainer Signature	Date
2.0	Vehicle Inspection and Driving Preparation (NFPA 1002)		
2.1	Trainee will explain how to perform a complete emergency vehicle inspection, make minor adjustments, schedule routine maintenance, and complete required documentation.		
2.2	Trainee will successfully identify major motor vehicle components.		
2.3	Trainee will successfully explain precautions to take before moving the vehicle.		
2.4	Trainee will successfully conduct an inspection at the station using the inspection checklist.		
2.5	Trainee will explain the apparatus and equipment defect reporting procedure for assigned station.		
2.6	Trainee will identify the vehicle height, weight, length and width of the vehicle.		
3.0	Overhead Door Operation		
3.1	The trainee will demonstrate knowledge of how the overhead doors at Station 9 operate.		
3.2	Explain the use of the remote control for the overhead doors.		
3.3	Explain the use of the traffic light controller.		
3.4	Identify door sizes, restrictions		
4.0	Fueling Procedures		
4.1	The trainee will demonstrate knowledge of the proper procedure for fueling the unit at Station 9 and document use.		
4.2	The trainee will demonstrate knowledge of the proper fueling procedure at a County Fuel Depot.		



Apparatus Training Competencies

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Section	Competency	Trainer Signature	Date
5.0	Ground Ladders		
5.1	Trainee will be able to identify and be familiar with all ground ladders carried on the apparatus.		
	a) General defects		
	b) Damage		
	c) Halyards condition		
	d) Heat Sensor condition		
6.0	Electrical Systems & Components		
6.2	Trainee will demonstrate proficiency in the knowledge and use of the following electrical components (as applicable):		
	Onboard Generator		
	a) Capacity		
	b) Operation		
	All Portable Generators		
	a) Capacity		
	b) Operation		
	c) Fuel		
	Flood Lights		
	Portable Lights		
	Fans		
	Electric Cord Reels		
	a) Length of Fixed Reels		
	b) Length of Portable Reels		
	Reciprocating Saws		
	a) Type of Blades		
	b) Operation		
6.3	Trainee will demonstrate the knowledge and location of the electrical panel box.		
7.0	Apparatus Inventory		
	Demonstrate knowledge of apparatus inventory.		
8.0	Technical Rescue Equipment		
8.1	Trainee will demonstrate the proper lashing technique for the stokes basket		
8.2	Trainee will demonstrate 2 different anchoring types for systems		
8.3	Trainee will demonstrate how to do 2 different hauling systems		



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Section	Competency	Trainer Signature	Date
8.4	Trainee will demonstrate how to set a belay system		
8.5	Trainee will demonstrate how to ascend on rope		
8.6	Trainee will demonstrate the use of the stokes bridle system on the stokes and rescuer		
8.7	<p style="text-align: center;"><i>Performance Checkoff Candidates Only</i></p> <p>Complete Rescue Tool Practical Evaluation at the Public Safety Training Academy:</p> <ul style="list-style-type: none"> • Hydraulic Tools, • Pneumatic Tools, • Air Bags, • Chains, • Rope and Steep Slope Evacuation, • Shoring and Stabilization. 		
8.7	<p style="text-align: center;"><i>Familiarization Checkoff Candidates Only</i></p> <p>Complete In-Station Familiarization of the following procedures using tools carried on RE709:</p> <ul style="list-style-type: none"> • Hydraulic Tool Use, • Pneumatic Tool Use, • Air Bags Use, • Chain Use, • Rope and Steep Slope Evacuation, and • Shoring and Stabilization. 		
9.0	Gas Powered Equipment Operation And Maintenance		
9.1	Trainee will demonstrate proficiency in the operation and maintenance of all gas powered equipment		
	a) Cutters Edge saw/ Chain Saw		
	b) PPV Fan		
	c) Honda Generator and Gen Light		
	d) Partner Saw		



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Section	Competency	Trainer Signature	Date
	1. Operation of saw utilizing all safety procedures		
	2. Type of fuel used in saw		
	3. Different blades used on saws and there use		
	4. Demonstrate how to change saw blade		
	e) Portable Gas Winch		
10.0	Hydraulic Tools and Equipment		
10.1	Trainee will demonstrate proficiency in knowledge and use of the hydraulic rescue power tools including capacities/capabilities.		
10.2	On board power plants - electric		
	a) Hydraulic fluid access and proper levels and types of fluid used		
	b) Lengths of hose and coils carried on units and limitations when running in series		
	c) Proper technique to connect hoses to plants and in line		
	d) Maintenance procedures electric powered plants		
11.0	CAFS Operation and Maintenance Procedure		
11.1	Controls and Indicators		
	a) Trainee will explain and identify the Master Duplex Gauge and how it operates		
	b) Trainee will identify and explain master suction gauge		
	c) Explain the operation and use of the Foam Logix Control Push Button Display and what it does		
	d) Explain the operation and use of the Hale CAFSPro Display		
	e) Identify the Audible alarm and explain the warnings it indicates		



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Section	Competency	Trainer Signature	Date
	f) Explain differences in black and red needles and what happens to the water pressure and air pressure when discharges are closed		
11.2	Basic Operations of Hale CafsPro System		
	a) Demonstrate the procedure how to turn off the CAFSPRO and Foamlogix		
	b) Give a basic description of the basic parts and components of the CAFSPRO Pump		
	c) Demonstrate how the CafsPro and FoamLogix Push Button display work		
	d) Explain how to get the different types of foam solutions		
	e) Describe how the compressor works and what the precautions are when idling		
11.3	Describe the Safety precautions the operator needs to be aware of when using CAFSPRO		
11.4	CAFSPRO Operating Procedures		
	a) Describe the operation of the pump when operating from different types of sources		
11.5	Demonstrate the procedures for operating the CAFSPRO Pump		
11.6	Demonstrate the proper procedure for system shutdown of the CAFSPRO Pump		
11.7	Routine Maintenance Procedures		
	a) Demonstrate how to drain moisture from the oil reservoir separator		
	b) Describe how to inspect the oil and oil filter reservoir on the air compressor and separator		
	c) Describe indicators that the compressor belt is wearing or broken		
	d) Demonstrate routine checks and indicators of potential pump problems		



Apparatus Training Competencies

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Section	Competency	Trainer Signature	Date
12.0	Vehicle Stabilization		
12.1	Rescue 42 Struts		
	a) Trainee will demonstrate the use of the Rescue 42 struts to stabilize a vehicle in the following scenarios:		
	1) vehicle on its side		
	2) vehicle on its roof		
	3) vehicle on vehicle or object		
12.2	Tie backs for vehicle on its side on roof or vehicle on vehicle		
	a) chain usage & capacities		
	b) Come a-longs use & capacities		
12.3	Cribbing		
	a) Demonstrate use the use of cribbing in various situations to stabilize vehicles safely		
12.3	Demonstrate the use of the air bags and controllers		
	a) Demonstrate the proper technique to use airbags while maintaining vehicle stability		
12.4	Trainee will demonstrate the use of the winch system		
	a) Trainee will specify winch capacities		
	b) Discuss winch maintenance procedures		
13.0	Plasma Cutter system		
	a) Demonstrate maintenance of system including proper tip usage		
	b) Demonstrate system set-up		
	c) Demonstrate technique of cutting		
14.0	Light Tower		
	a) Demonstrate safe and proper deployment & stowing of tower		
	b) Discuss maintenance procedures		



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Section	Competency	Trainer Signature	Date
13.0	Driving Proficiency.		
13.1	The trainee will successfully complete an in station cone course consisting of the following obstacles: <ul style="list-style-type: none"> Straight Line Diminishing Clearance, Two-Point Turn, Offset Alley (Forward and Reverse), Alley Dock, and Serpentine (Forward and Reverse). 		
13.2	The trainee will successfully complete a minimum of 10 mile of driving on public rural and urban roadways. (Attach the Driving Log to this form)		
14.0	LFRD Verification		
14.1	Upon completion of the drivers training package the LFRD Chief or designee should review and approve trainees drivers status on E709 and sign Page 1 of this document		
15.0	Driver Log. Enter date, time, and roads traveled.		

Competencies Completion Signatures

Trainee Signature: _____ **Date:** _____

Trainer Signature: _____ **Date:** _____

MC Driver Training Evaluator: _____ **Date:** _____

Station OIC Signature: _____ **Date:** _____

HVFD OIC Signature: _____ **Date:** _____

Distribution:

Original: Personnel File (HQ) or LFRD file

Hard Copies: Station Supervisor File; Employee; Battalion Chief; MCFRTA Driver Training Coordinator; Safety Section Chief



**MONTGOMERY COUNTY FIRE AND RESCUE SERVICE
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Practical Examination Guide Sheet

RE709 – Hydraulic Tools

Practical Examination: The driver candidate shall display proficiency in the proper use of Hydraulic Tools:

1. Explain principle of hydraulic tool operation. _____(9)
2. Identify the operating pressure of hydraulic rescue tool carried on the apparatus. _____(9)
3. Identify all the hydraulic tools carried on the apparatus and explain their operation and uses including hand operated tools. _____(9)
4. Identify the operational capacities of each individual hydraulic tool. _____(10)
5. Identify the operational capacities of each manual hydraulic tool. _____(9)
6. Identify tool attachments and their uses and operation i.e. chains, bases and extensions. _____(6)
7. Explain the operational length of all hydraulic hoses on the apparatus. _____(8)
8. Explain the operation of all hydraulic power plants in use on the apparatus and their respective fuel or electric requirements to run. _____(9)
9. Explain the after use, monthly and annual maintenance requirements of each hydraulic tool. _____(8)
10. Identify vehicle components and potential locations of safety devices i.e. seatbelt pre-tensioners & airbag inflators and why they should be avoided. _____(8)
11. Assemble a tool staging area for door pop and dash roll operation. _____(9)
12. Set up a portable hydraulic power plant for operation with two tools. _____(6)

PASS FAIL

Total Points _____

MCFTA Driver Training Evaluator

Date



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Practical Examination Guide Sheet

RE709 – Pneumatic Tools

Practical Examination: The driver candidate shall display proficiency in the proper use of Pneumatic Tools:

1. Identify all pneumatic tools carried on the apparatus and indicate their use. _____(9)
2. Identify all air sources for pneumatic tools. _____(9)
3. Identify all applicable adapters that allow for tools to be used from all previously identified air sources. _____(9)
4. Identify the proper working pressure for all air tools carried on the assigned apparatus. _____(9)
5. Identify the appropriate hose for the pneumatic tools and indicate its working pressure. _____(9)
6. Place in service an impact wrench with the appropriate type of socket. _____(9)
7. Place in service an air ratchet, indicate the differences between the ratchet and impact wrench. _____(9)
8. Place in service an air chisel; identify the types of different chisels, their uses, and how to change the chisels bits. _____(9)
9. Demonstrate the process of maintaining proper air pressure with on-board and portable air sources. _____(9)
10. Demonstrate and explain the maintenance required for all pneumatic tools after being used and on a daily, monthly, annual basis. _____(9)

TOTAL POINTS _____ PASS FAIL

MCFTA Driver Training Evaluator

Date



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Practical Examination Guide Sheet

TDA – Air Bags

Practical Examination: The driver candidate shall display proficiency in the proper use of Air Bags:

1. Identify all types and sizes of pneumatic lifting bags carried on the TDA. _____(4)
2. Explain the requirements of after use, monthly and annual maintenance of the pneumatic lifting bags. _____(2)
3. Identify the different characteristics of low, medium and high pressure pneumatic lifting bags. _____(4)
4. Identify the different working pressures of low, medium and high pressure pneumatic lifting bags. _____(4)
5. Explain the relationship of PSI to BARS. _____(2)
6. Explain how a user would know remaining lift capacity of air bag by looking at a deployed air bag and by readings on the controller. _____(4)
7. Determine the maximum amount of bags that can be stacked and the procedure to do so. _____(4)
8. Identify the working pressure of all hoses used with pneumatic lifting bags. _____(4)
9. Identify all the components necessary to use perform a pneumatic lifting bag exercise i.e. air source, controller, supply hose, bags, bag hoses, shut off valves, cribbing, base pads. (CFP) _____(4)
10. Identify the maximum lifting capacity of the pneumatic lifting bags carried on the TDA. _____(4)
11. Identify the maximum height a high pressure pneumatic lifting bag can lift at maximum capacity. _____(4)
12. Determine the maximum capacity of a high pressure pneumatic lifting bag by measurement. _____(2)

13. Determine the maximum lifting height of a high pressure pneumatic lifting bag by measurement. _____(4)
14. Setup for an object lift using high pressure bags, height should include at least one resetting of the bags. _____(4)
15. Assemble necessary equipment. _____(4)
16. Determine the weight of the target object. _____(4)
17. Determine any characteristics of the object that will affect the lift. _____(4)
18. Determine the proper lifting point to obtain the objective. _____(4)
19. Determine the proper stabilization points to obtain the objective. _____(4)
20. Effectively and safely stabilize the object. (CFP) _____(4)
21. Place the airbags on appropriate base (cribbing, protective mat, or none). _____(4)
22. Identify a single person to call the lift and only accept commands from that person. _____(10)
23. Crib appropriately as you lift. (CFP) _____(4)
24. Safely lift the object as to achieve the objective without unexpected load shift. (CFP) _____(4)
25. Lower the object safely, maintaining stability of the object. (CFP) _____(4)

TOTAL POINTS _____

PASS FAIL

MCFTA Driver Training Coordinator

Date

Critical Fail Points

- Inability to identify components necessary to use pneumatic lifting bags.
- Failure to effectively and safely stabilize the object at any point during the evolution.
- Inappropriate or ineffective cribbing.
- Failure to meet lifting objective as stated by the evaluator.
- Failure to lower the object safely while maintaining stability of target object.



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Practical Examination Guide Sheet

Rescue Squad – Chain Use

Practical Examination: The driver candidate shall display proficiency in the proper use of the Chains and Chain Slings:

1. Identify location where chains are carried on rescue squad. _____
2. Identify all types of chains and chain slings carried on rescue squad (ex. straight chain, 2-leg slings, types of hooks, etc.). _____
3. Identify the different types of hooks that are used with the chains/slugs on the rescue squad (ex. slip, grap, "J", mini-J, "R", T-locks, etc.) _____
4. Identify the length and WLL of all chains/slugs carried on rescue squad. _____
5. Identify the safety or design factor applied to chains/slugs. _____
6. Given a load to be lifted, stabilized or moved, select the proper chain/sling (capacity, length, type of chain, type of hook, etc.). _____
7. Properly inspect the sling prior to use (sling marked for capacity, not damaged, bent, cut, or have abrasions). _____
8. Properly rig chain/sling to anchor and/or load (do not drag chain or place chain under load, no knots tied in chain, appropriate sling angle $<120^\circ$, proper hook use). _____
9. Assure chain is protected from sharp edges and that links are not bent around objects or used inappropriately with hooks. _____
10. Assure sling is not subjected to heat from anchor or load ($>1000^\circ\text{F}$). _____

TOTAL POINTS _____

PASS FAIL

MCFTA Driver Training Coordinator

Date



MONTGOMERY COUNTY FIRE AND RESCUE SERVICE
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Practical Examination Guide Sheet

Rope and Steep Slope Stokes Basket

Practical Examination: The driver candidate shall display proficiency in the construction and use of a rope rescue system to perform a steep slope evacuation utilizing a rescue litter. Time to complete all system rigging inspection shall not exceed 15 minutes. Attendant rigging and outfitting is not included in the 15 minute time requirement. Candidates must complete this evolution without committing any Critical Fail Points (CFPs).

- 1. Explain the difference between marginal and bombproof anchors. (5)
2. Select appropriate anchor(s) (CFP). (10)
3. Properly rig connections to selected anchor(s) for main and belay lines (CFP). (10)
4. Properly construct a belay system using either tandem triple-wrapped prusiks or Rescue 540 belay device (CFP). (10)
5. Properly rig the main line to lower with an appropriate descent control device (CFP). (10)
6. Properly tie double long tail bowline (CFP). (10)
7. Properly affix main and belay lines to rescue litter for purpose of steep slope evacuation (CFP). (10)
8. Rigging of the system will take no more than 15 minutes from the start of the evolution. System rigging does not include attendant components (CFP). (10)
9. Identify the appropriate gear needed for attendants. (10)
10. Properly prepare attachments for attendant harnesses (CFP). (10)
11. Demonstrate how attendants will attach to the rescue litter and explain the purpose of this attachment (CFP). (10)
12. Explain the attendants' two points of contact and demonstrate how they will attach to their second point (CFP) (10)
13. Explain the process of completing a safety check of the system and the "three sets of eyes" rule. Complete safety check before loading system with attendants and patient (CFP). (10)
14. Explain verbal or whistle commands to be used during rescue evolution. (10)
15. Safely lower rescue litter to patient location (CFP). (10)
16. Demonstrate proper technique for lashing a patient into the rescue litter (CFP). (10)
17. Properly rig the main line to haul with a mechanical advantage system (CFP) (10)
18. Safely raise the rescue litter to a specified location (CFP). (10)

Student Score = /175 = %

PASS FAIL

MCFTA Driver Training Evaluator

Date



**MONTGOMERY COUNTY FIRE AND RESCUE SERVICE
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Practical Examination Guide Sheet

RE709 – Shoring and Stabilization

Practical Examination: The driver candidate shall display proficiency in the proper use of the Shoring and Stabilization:

1. Identify all types of stabilization equipment carried on the apparatus. _____(15)
2. Identify the capacities of each type of stabilization equipment . _____(14)
3. Identify the different types of chains and hook types carried. _____(8)
4. Assemble a box crib and determine its capacity. _____(14)
5. Assemble a sloped box crib. _____(14)
6. Perform a tensioned buttress system (tieback) on a passenger vehicle resting on its side. Explain the safety aspects of the system. _____(20)
7. Assemble the equipment necessary to “marry” a vehicle to another and stabilize them both. _____(15)

TOTAL POINTS _____

PASS FAIL

MCFTA Driver Training Coordinator

Date