

LAST NAME: _____ C# _____

Skill Card 1 of 6

BALTIMORE COUNTY FIRE RESCUE ACADEMY
ENGINE FADO PRACTICAL EXAM

Drafting Operation Skill Card

Failure to complete all grey items and an overall of 11 total points will result in an incomplete for this skill.

SKILLS	PERFORMED	NOT PERFORMED	COMMENTS
Positions engine appropriately for drafting operation			
Sets parking brake & chocks wheel			
Ensure intakes, discharges & drains are closed, fittings are tightened			
Connect hard sleeve to pumper with strainer			
Place engine in pump gear			
Increase RPM's to about 1200			
Obtain Draft			
Flow water & maintain draft			
Shut line down & continue to circulate water			
Ask: <i>What is the maximum vertical lift?</i>			
Ask: <i>If you are drafting & you get no vacuum & no water what may be wrong?</i>			
Ask: <i>What is cavitation?</i>			
Ask: <i>What can be done to avoid cavitation?</i>			
13 Total possible points: 11 are required to pass **GREY ITEMS MUST BE PERFORMED**			TOTAL POINTS

Instructors and field personnel are only to intervene when issues of safety arise.

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Skill Card 2 of 6

**BALTIMORE COUNTY FIRE RESCUE ACADEMY
ENGINE FADO PRACTICAL EXAM**

Foam Operation Skill Card - Eductor

- Candidate will perform one operation and verbalize the other operation
- Failure to complete all grey items and an overall of 6 total points from each section will result in an incomplete for this skill.

SKILLS	PERFORMED	NOT PERFORMED	COMMENTS
Apply brakes, place in pump gear, chock wheels			
Uses compatible nozzle & eductor			
Put the eductor on discharge			
Put hose line on eductor			
Insert pick-up tube into foam container			
Set proper foam percentage			
Flow water, change to foam, change back to water			
Ask: <i>What is the longest line you can have between the eductor & the nozzle?</i>			
Ask: <i>What is the pressure at the eductor?</i>			
9 Total possible points: 6 required to pass from each section GREY ITEMS: CRITICAL POINTS & MUST BE PERFORMED			TOTAL POINTS

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Skill Card 3 of 6

**BALTIMORE COUNTY FIRE RESCUE ACADEMY ENGINE FADO
PRACTICAL EXAM**

FDC/Sprinkler Connection Skill Card

- Evaluator will inform candidate if scenario is FDC or Sprinkler prior to start of evaluation
- Failure to complete all grey items and an overall of 4 total points will result in an incomplete for this skill.

SKILLS	PERFORMED	NOT PERFORMED	COMMENTS
Position apparatus within 100ft of FDC			
Sets parking brake & chocks wheels			
Check the FDC/Sprinkler connection for obstructions			
Attach two 3" lines to FDC/sprinkler connection and apparatus			
Ask: <i>How much additional pressure is needed beyond the first floor?</i>			
Ask: <i>What pressure do you pump a standpipe?</i>			
Ask: <i>What pressure do you pump a Sprinkler system?</i>			
7 Total possible points: 4 are required to pass **GREY ITEMS MUST BE PERFORMED**			TOTAL POINTS

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Skill Card 4 of 6

**BALTIMORE COUNTY FIRE RESCUE ACADEMY
ENGINE FADO PRACTICAL EXAM**

Transition from Tank to Hydrant Operations Skill Card

- Failure to complete all grey items and an overall of 11 total points will result in an incomplete.
- Candidate will inform evaluator of tank size prior to start of evaluation.

SKILLS	PERFORMED	NOT PERFORMED	COMMENTS
Park engine 100-200ft from hydrant, use a 200 ft 1 3/4' hand line with nozzle set at: _95gpm/500gal tank@130psi _150gpm/750gal tank@170 psi _200gpm/1000gal tank@200psi			
Set parking brake & place engine in pump gear			
Set wheel chocks			
Place hand line in service @ designated pressure			
Set relief valve			
Hand jack LDH from engine to hydrant			
Connect LDH to engine & hydrant with Humat			
Connect ball valve to hydrant – 2 nd ball valve optional			
Charge LDH			
Change over from tank to hydrant without significant pressure change (increase or decrease)			
Fill tank while continuing to flow water			
Place a 2 nd handline in service and pump at appropriate pressure			
Ask: Which gauge do you use to set the relief valve?			
Ask: When do you set the relief valve?			
14 Total possible points: 10 are required to pass **GREY ITEMS MUST BE PERFORMED**		TOTAL POINTS	

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Skill Card 5 of 6

**BALTIMORE COUNTY FIRE RESCUE ACADEMY
ENGINE FADO PRACTICAL EXAM**

Heavy Water Hook Up Skill Card

- Upon engine arrival, Humat is already attached to uncharged hydrant with dry LDH leading to fireground.
- Failure to complete all grey items and will result in an incomplete for this skill.

SKILLS	PERFORMED	NOT PERFORMED	COMMENTS
Connect LDH from front Humat discharge to intake on engine			
Connect LDH from engine discharge to Humat intake			
Use 1 (or 2) ball valves on hydrant			
Connect hose from ball valve(s) to engine intake			
Ask: <i>What is the purpose of heavy water hookup?</i>			Answer: To maximize the hydrant, use less hose, quicker then buckets
Failure to complete all grey items will result in an incomplete GREY ITEMS: CRITICAL POINTS & MUST BE PERFORMED			TOTAL POINTS

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Skill 6 of 6

BALTIMORE COUNTY FIRE RESCUE ACADEMY

Engine FADO Calculation Questions

Ask the following questions	Correct	Incorrect
What is the nozzle pressure for a smooth bore hand line?		
What is the nozzle pressure for a constant flow hand line?		
What is the nozzle pressure for a master stream fog head?		
What is the nozzle pressure for a master stream smooth bore?		
Pump a 1 3/4 hand line, 200ft long at 125gpm with a constant flow.		
Pump a 1 3/4 hand line, 200ft long at 150gpm with a constant flow.		
Pump a 1 3/4 hand line, 200ft long at 200gpm with a constant flow.		
Pump a 2 1/2 hand line, 200ft long with constant flow at 250gpm.		
Pump a 2 1/2 hand line, 200ft long with smooth bore nozzle 1 1/8 inch tip.		
What is highest pressure you can pump LDH hose?		
Relay pump pressure is friction loss plus what pressure?		
Pump a 2 1/2 hand line, 200ft long with a smooth bore nozzle 1 1/2 tip.		
How Do you pump in tandem?		
Why use a tandem hook-up?		
What is the Pump Operator's Formula?		
14 Total possible points: 10 are required to pass	TOTAL POINTS	

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