



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

## Practical Application Guide Sheet

Engine: CAFS for Overhaul

**Candidate Performance Competency:** The Candidate will place in service a 200' 1 3/4" CAFS attack line with a 120 gallon per minute flow rate for the purpose of overhaul. In the absence of a functioning CAFS apparatus, the Evaluator will conduct the testing in a format that verifies the Candidate's knowledge to the extent possible. As available, a modified test will include use of a CAFS apparatus as a prop for the Candidate to simulate use of the CAFS.

Task	Value	Score
1. Park the apparatus at the designated location. <b>(CFP)</b>	1	
2. Engage pump. Look and listen for signs of successful pump engagement.	1	
3. Place wheel chock on downhill side of front or rear tire. <b>(CFP)</b>	1	
4. Presuming an attack line has already been in operation, the Candidate verifies the following to initiate CAF operation: a) FoamLogix Pump is on, b) Air Compressor switched to ON from STANDBY or OFF, c) "Tank To Pump" valve is open, and d) Previously deployed foam-capable discharges are shut down or prepared to receive foam. <ul style="list-style-type: none"> <li>• Candidate will describe or demonstrate the conditions that must exist prior to changing the status of the air compressor. <b>(CFP)</b></li> </ul>	10	
5. Assistant will deploy a 200' 1 3/4" crosslay. Operator confirms clear hosebed and assists hose deployment as necessary.	3	
6. Evaluator will advise candidate what type of CAFS (wet, fluid, or dry) is desired. Candidate will adjust the air/water ratio accordingly. <b>(CFP)</b> <ul style="list-style-type: none"> <li>• Wet = 0.5 to 1.5; Fluid = 2.0 to 3.0; Dry = 11</li> </ul>	5	
7. Ensure pump is primed using auto or manual primer.	1	
8. Adjust TPM to appropriate pressure. <b>(CFP)</b>	1	
9. Adjust throttle to proper discharge pressure <u>before</u> opening discharge. <b>(CFP)</b> <ul style="list-style-type: none"> <li>• Discharge pressure of 120psi</li> <li>• Maintain at least 1000rpm for compressor</li> </ul> <p align="right">Discharge Pressure: _____ psi</p>	5	
10. Open the proper discharge valve on pump panel.	3	

Task	Value	Score
11. Allow compressed air foam to fill the hoseline.	3	
12. Adjust TPM to appropriate pressure. <b>(CFP)</b>	3	
13. Check hoseline to ensure charging, freedom from obstructions, and remove all kinks missed by crew. <b>(CFP)</b>	3	
14. Ensure that there is a means for water to be constantly circulating through the pump for cooling in the event that both lines are shut down. TRV should <u>not</u> activate. <b>(CFP)</b>	5	
15. Monitor pump panel, pump, engine compartment gauges and radio.	3	
16. Candidate will demonstrate or describe the method for establishing an external pressurized water supply to support CAFS operations. <b>(CFP)</b> <ul style="list-style-type: none"> <li>• Use of Auto Fill equipped intake.</li> <li>• Transition from use of MIV to Auto Fill</li> </ul>	10	
17. Monitor water tank level to ensure auto fill valve is operating properly. Candidate will verbalize the pertinent tank levels monitored by the Auto Fill system.	5	
18. Monitor pump panel, pump, engine compartment gauges, and radio.	3	
<b>Return to Service</b>		
19. Throttle down to idle.	5	
20. Turn Foam Pump off and flush fresh water through effected hoselines until clear water flows.	5	
21. Close discharges and auto fill valve. Take pump out of gear.	5	
22. Ensure onboard water tank is completely filled using the rear MIV and Tank Fill or use Auto Fill in manual mode.	1	
23. Return TPM to zero.	1	
24. Candidate will describe the procedures for replenishing the onboard Class A foam concentrate using EZ-Fill system and perform the refill if available.	10	
25. Clean heat exchanger strainer after every CAFS use.	5	
26. Ensure that Engine is ready for service.	2	
<b>Total Points</b>	100	

## **Critical Fail Points**

*Failure to successfully perform any of the following components will result in an automatic failure of this evolution regardless of total score.*

- a) Not delivering the requested product
- b) Improper setting of the TPM at any stage of the evolution
- c) Inappropriate throttle setting effecting CAFS Air Compressor operation
- d) Loss of CAFS/pressure in the hoseline
- e) Failure to use Auto Fill during CAFS operation
- f) Opening an MIV or other pressurized intake source; except at the conclusion of the evolution for the sole purpose of filling the water tank
- g) Opening CAFS discharge prior to throttling up to proper discharge pressure
- h) Incorrect CAFS hoseline discharge pressure
- i) Incorrect CAFS type (air/water ratio) in response to Evaluator's request.
- j) Failure to use wheel chock
- k) Activation of TRV

**Evaluator: Initial beside the final outcome of the exam below.**

\_\_\_\_ **PASS**    \_\_\_\_ **FAIL – Overall Points**    \_\_\_\_ **FAIL – Critical Failure Point**

\_\_\_\_\_  
**Evaluator Name**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Evaluator Signature**