MONTGOMERY COUNTY FIRE AND RESCUE SERVICE
DRIVER/OPERATOR TRAINING PROGRAM

Practical **A**pplication **G**uide **S**heet

Engine: Initial Attack with Foam Solution

Candidate Performance Competency: The candidate will complete a multi-task evolution to simulate first due engine company operations for a structure fire. Actions and procedures shall be in accordance with Fire Chief's General Order 17-14 (CAFS Use and Compressor Operation).

- The candidate shall complete a forward lay of supply line.
- The candidate shall place in service a small diameter 200' Class A Foam Solution attack line with a minimum flow of 150gpm using tank water.
- The candidate will transition to an external water supply obtained through an MIV.
- The candidate will place in service a preconnected 2" Class A Foam Solution backup line with a minimum flow of 200gpm.
- The candidate will transition foam proportioning from attack to non-CAFS overhaul.
- The candidate will ready the apparatus for service.

Task	Value	Score
1. Position Engine past hydrant for forward lay of a supply line.	1	
2. Stop Engine and apply parking brake. **(CFP)**	1	
3. Dismount from the cab and secure supply line for forward lay.	1	
4. Complete the forward lay to designated location in a safe and efficient manner.	1	
5. Park the apparatus at the appropriate location. **(CFP)**	1	
6. Engage pump. Look and listen for signs of successful pump engagement.	1	
7. Place wheel chock on downhill side of front or rear tire. **(CFP)**	1	
8. At the pump panel, confirm the pump is engaged. If applicable, place CAFS Air Compressor in "Off" mode. **(CFP)**	3	
9. Engage onboard foam pump using default "Attack" setting.	2	
10. Crew deploys a 200' crosslay. Candidate confirms clear hosebed and assists hose deployment as necessary. **(CFP)**	2	
11. Open TPM to appropriate pressure. **(CFP)**	2	
12. Ensure pump is primed using auto or manual primer.	1	
13. Open the proper discharge valve on pump panel. **(CFP)**	1	
14. Allow foam solution to fill attack line at default setting percentage. **(CFP)**	1	

Task	Value	Score
15. Adjust throttle to proper discharge pressure for deployed attack line. **(CFP)** Discharge Pressure:_____ psi	5	
16. Adjust TPM to appropriate pressure. **(CFP)**	2	
17. Check attack line to ensure charging, freedom from obstructions, and remove all kinks missed by crew.	2	
18. Monitor pump panel, pump, and gauges and radio.	2	
19. Disconnect supply hose from hose bed and connect to intake.	2	
20. Communicate to Supply Engine to "charge the supply line" when ready to receive water.	1	
21. Open and close applicable bleeder valve to evacuate air from the intake line. Open MIV and adjust throttle to account for positive intake pressure. Candidate must note the intake pressure with one line flowing. **(CFP)** Intake Pressure:_____psi	5	
22. Adjust TPM as necessary. **(CFP)**	2	
23. Crew deploys a preconnected 2" attack line. Follow all procedures for 1st attack line for the backup line. Charge backup line and adjust throttle as appropriate. **(CFP)** Discharge Pressure:_____ psi	16	
24. Operator must note intake pressure with 2 lines flowing. Intake pressure:_____psi	4	
25. Adjust discharge valves to manage individual attack line pressures as needed.	5	
26. Adjust TPM to appropriate pressure. **(CFP)**	2	
27. Monitor pump panel, pump, engine compartment gauges, and radio.	2	
28. Close Tank to Pump and replenish water tank as water supply allows. **(CFP)**	5	
29. 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 not activate. **(CFP)**	5	
30. Maintain appropriate flow in both the attack line and back up line. **(CFP)**	1	
Transition to Overhaul Operation:		
31. Confirm with officer that overhaul solution concentration is desired.	1	
32. Adjust foam injection setting to overhaul proportion using the controller. • 0.5% injection rate	1	

Task	Value	Score
Return to Service:		
33. Adjust throttle to idle.	1	
34. Disengage foam system and flush fresh water through both hoselines until clear water flows.	3	
35. Close discharges and take pump out of gear.	1	
36. Candidate will describe or demonstrate the procedures for replenishing the onboard Class A foam concentrate.	10	
37. CAFS Engine - Clean heat exchanger strainer.	2	
38. Ready the Engine and its equipment for service.	1	
Total Points	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) Charging the attack hose without clearing the hose bed or charging an incorrect discharge

c) Improperly setting or failure to manage pressures using the TPM at any stage of the evolution; including discharge pressure variations in excess of 30psi

d) Loss of water/pressure in hoselines or main pump

e) Intake pressure drops below 20psi or pump cavitates through failure to manage water supply versus discharge demands

f) Failure to generate proper pressures to achieve desired flow

g) Failure to manage the CAFS compressor prior to increasing engine throttle

h) Failure to use wheel chock, engage parking brake, or safely park the vehicle

i) Activation of TRV

j) Failure to Close Tank to Pump and refill water tank.

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

____ PASS ____ FAIL – Overall Points ___ FAIL – Critical Failure Point

_____ _____

Evaluator Name **Date**

Evaluator Signature