



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

Practical Application Guide Sheet

Engine: Aerial Master Stream

Candidate Performance Competency: The driver candidate shall complete a forward lay from a hydrant. The driver candidate will establish a water supply and supply an aerial master stream. Evaluator will provide the candidate the tip size and base pressure for the waterway.

Task	Value	Score
1. Position Engine past hydrant for forward lay of a supply line.	2	
2. Stop Engine and apply parking brake.	2	
3. Dismount from the cab, wrap supply line and layout strap around hydrant.	2	
4. Enter the cab, complete layout to designated location at speed no greater than 10 MPH.	3	
5. Stop Engine and apply parking brake.	3	
6. Engage pump. Listen for pump and air compressor to engage. See speedometer reading approximately 10-15 MPH. See green "Ok To Pump When Lit" indicator light in cab illuminated.	3	
7. Place wheel chock on downhill side of front or rear tire. (CFP)	3	
8. Operator confirms the following: a) Pump panel gauges are illuminated, b) FoamLogix Pump is on, c) Air Compressor is on, d) positive discharge pressure on the Master Discharge Gauge, and e) "Tank To Pump" valve is open.	3	
9. Turn off CAFS air compressor and FoamLogix pump. (CFP)	3	
10. Disconnect supply hose from hose bed and connect to intake.	2	
11. Communicate to Supply Engine to "charge the supply line" when ready to receive water. Open and close bleeder valve to evacuate air.	2	
12. Connect "Officers High Flow Discharge" to gated wye using 4" supply line. Ensure both gates on appliance are closed.	1	
13. Candidate will verbalize the flow capacity of both high flow discharges. (Officers No.1 = 2,400 GPM / Officers No.2 = 1,500 GPM)	1	

Task	Value	Score
14. Candidate must know the Outboard Relief Valves settings. (Unit specific, should be around 210 PSI, candidate must test their Engine prior to taking test, if sufficient pressure can't be achieved without relief valve opening candidate must use another discharge and CMF must be notified.) Outboard Relief Valve Pressure: _____ psi	1	
15. Candidate will request the base pressure and master stream tip size from the Evaluator.	1	
16. Adjust the TPM to the appropriate pressure. (CFP)	1	
17. Close "Tank to Pump" valve.	1	
18. Open appropriate MIV and note intake pressure. Static Intake Pressure: _____ psi	1	
19. Operate Primer until water discharges.	1	
20. At the request of the Evaluator/Truck Driver, charge the supply to the waterway. (CFP)	1	
21. Adjust throttle to desired discharge pressure, accounting for base pressure, elevation, appliance, and friction loss. (CFP) Discharge Pressure: _____ psi	1	
22. At the request of the Evaluator/Truck Driver, assist with opening additional valves on the waterway and/or appliances.	1	
23. Adjust throttle once water is flowing.	1	
24. Adjust TPM as needed. (CFP)	1	
25. With water flowing, candidate will note intake pressure. Residual Intake Pressure: _____ psi	1	
26. Candidate will verbalize the approximate amount of additional water supply available based upon percentage drop. (static – residual) ÷ static = % drop 10% drop ≈ 2x additional available 25% drop ≈ 1x additional available ≥50% drop ≈ no additional water is available Additional Water Available: _____	1	
27. Monitor pump panel, pump, engine compartment gauges and radio. Be prepared to shut down in an emergency. (CFP)	2	
28. Ensure that there is a means for water to be constantly circulating through the pump for cooling in the event that master stream operations shut down. TRV should not activate. (CFP)	5	
29. Connect second "Officers High Flow Discharge" to gated wye using 4" supply line. Charge the line and open gate on appliance.	1	
Return to Service:		

Task	Value	Score
30. Throttle down to idle. Close discharges and intake(s). Disengage pump.	1	
31. Reset TPM to zero. (CFP)	1	
32. Ensure that Engine is ready 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) Improper setting of the TPM at any stage of the evolution
- c) Improper discharge pressure
- d) Delivering water to Truck before Truck driver requests it
- e) Failure to turn OFF CAFS Air Compressor and FoamLogix pump
- f) Loss of water/pressure in the Truck's supply line
- g) Failure to use wheel chock
- h) 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