# FAUQUIER COUNTY DEPARTMENT OF FIRE-RESCUE & VOLUNTEER FIRE-RESCUE ASSOCIATION



# EMERGENCY APPARATUS DRIVER / OPERATOR ASSESSMENT PROGRAM

(REVISED January 15, 2019)

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#### **OVERVIEW**

The Emergency Apparatus Driver/Operator Assessment Program standardizes the process for how individuals are released to operate independently as driver /operators across the department. The intent is for personnel to progress at their own pace, from smaller apparatus to larger, heavier apparatus.

#### I. REQUIREMENTS

- For ambulances, brush, utility and support units, individuals are evaluated and released by station officers or a Battalion Chief.
- Individuals will be evaluated and released by a Battalion Chief or other officer as designated by the Chief of the Department for all other apparatus,

Individuals must complete the following requirements to be eligible for release as a driver/operator:

#### All-Terrain Vehicles/Trailered units

- > Released Ambulance-Utility vehicle driver/ operator for a minimum of six months
- Complete a minimum 5 hours of supervised driving (Supervised by a released operator)
- Complete a minimum 3 hours driving and pump familiarization (if equipped) with ATV.
- Satisfactorily complete practical and /or written knowledge test on the functions for the support vehicle
- > Perform a weekly check out in accordance with station policies.

#### Ambulance, Brush & Utility Vehicle

- Complete a minimum 5 hours of supervised driving (Supervised by a released operator)
- > Perform a weekly check out in accordance with station policies.
- Respond a minimum of 5 times to emergency incidents.
- > Pass with a minimum of 90% the Hospital Running Route Quiz
- > Pass with a minimum of 90% the Operational Quiz

#### Engine

- > At least 21 years of age
- Released ambulance, brush, utility vehicle driver/ operator for a minimum of six months. Personnel hired as Technician II may petition the Assistant Chief to waive this criteria.
- Complete a minimum 10 hours of supervised driving (Supervised by a released operator.)
- > Respond a minimum of 5 times to emergency incidents.

- > Pass with a minimum of 90% the County Thoroughfares Quiz.
- > Pass with a minimum of 90% the Engine Driver/Operator Quiz
- Satisfactorily complete Test Operational Scenarios
- > Perform a weekly check out in accordance with station policies.
- Certification in VDFP Basic Pump Operator / Driver Pump Operator

#### <u>Tanker</u>

- Be a released engine driver
- > Complete a minimum 10 hours of supervised driving (Supervised by a released operator.)
- > 1 hour of supervised drive time should be conducted with an empty water tank
- > Perform a weekly check out in accordance with station policies.
- > Pass with a minimum of 90% the County Thoroughfares Quiz.
- Satisfactorily complete Test Operational Scenarios
- Certification in VDFP Basic Pump Operator / Driver Pump Operator
- Certification in VDFP Rural Water Supply

#### Rescue Squad – Hazmat Unit

- Not been at fault in any accidents while operating county vehicles for minimum 12 months.
- > Be a released engine driver / operator for a minimum of 6 months
- Sign off on Policy and Procedures page
- Complete a minimum 5 hours of supervised driving (Supervised by designated evaluator – released driver or chiefs designee)
- > Perform a weekly check out in accordance with station policies.
- Satisfactorily complete Test Operational Scenarios
- Complete VDFP and or NFPA / VAVRS Vehicle Rescue Level 1, HTR Module 1 and 2 or approved equivalent certification.

#### Aerial Apparatus

- Not been at fault in any accidents while operating county vehicles for minimum 12 months
- Be a released engine driver / operator for a minimum of two years
- Complete a minimum 10 hours of supervised driving (Supervised by designated evaluator – Technician or higher)
- > Perform a weekly check out in accordance with station policies.
- > Pass with a minimum of 90% the County Thoroughfares Quiz.
- Satisfactorily complete Test Operational Scenarios
- Complete VDFP Aerial Operator Course, HTR Module 1 and 2, VDFP and or NFPA /VAVRS Rope Rescue Level 1

#### **II. DEFINITIONS**

- A. <u>Designated Evaluator-</u> Individual that is approved by either a station officer or Battalion Chief to evaluate individual's performance. They must hold the rank of or be equivalent to Technician or higher.
- B. Proper Safety Gear Helmet, gloves, and safety vest (minimum).
- C. <u>All-Terrain Vehicle</u> Vehicles designed to be used off- road and not licensed to operate on public roads.
- D. Tanker Tandem or single axle vehicles carrying over 1250 gallons of water.
- E. <u>Engages Pump Properly</u> Follows the vehicle manufacture's procedures for engaging pump. With most vehicles, the procedure is vehicle stopped, transmission in neutral, and the parking brake engaged, the candidate moves road-to-pump selector to the "pump" position, and shifts the transmission into the appropriate gear.
- F. <u>Checks Pump Engagement</u> Candidate checks the in-cab "OK to pump" indicator, checks speedometer, and taps the accelerator pedal.
- G. <u>Disengages Pump Properly</u> Follows the vehicle manufacture's procedures for disengaging pump. With most vehicles the procedure is shifts transmission to neutral, ensures that the speedometer is at zero (and/or allows adequate time for gear rotations to stop), and moves the road-to-pump selector to the "road" position.
- H. <u>Charges/Shuts Down Lines Properly</u> Candidate opens and closes gates slowly; if possible, idles down before shutting down lines.

#### **III. PROCEDURE**

Only two forms will be used to document information throughout the process:

#### Form 938 - Driver / Operator Release Authorization Form 939 - Driving Evaluation

- A. Employees will document all non-emergency driving using the Driving Evaluation Form until the minimum required hours are completed.
- B. Supervisors will utilize the Driver / Operator Release Authorization form to track progress and document completion of the program. Each step will be documented utilizing this form. When the form is complete the process is complete

- C. <u>Candidate should show proficiency in all assigned skills prior to becoming released.</u> The exercises are included as a tool the station officer may utilize to prepare the candidate for the operational scenarios and practical application.
- D. The operational scenarios are a requirement that the Battalion Chiefs/or their designee will sign off on.
- E. Supervisors will administer the in-station written quizzes. These consist of the driver/ operator, county thorough-fare and hospital running route quizzes. The driver/operator quiz consists primarily of NOVA manual, fire ground hydraulic questions and E.V.O.C. questions. All information has been taken directly from these manuals.
- F. A supervisor may schedule an evaluation by a Battalion Chief at any time during the process. The Battalion Chiefs will be responsible for signing off their acceptance for the candidate's completion of the operational scenarios. The Battalion Chief may choose to have the station officer evaluate the candidate's performance during the operational scenarios but is ultimately responsible for signing the scenario portion of the drivers release form. The Station officers will sign off for the candidate's completion for Ambulances-Support Vehicles.
- G. Supervisors must ensure that candidates are prepared to fulfill requirements of the operational test scenarios.
- H. The same Driver-Operator Release Form may be used to document all requirements for Ambulance–Support vehicles, Engine and Tanker processes. By completing the vehicle specific portion of this form, the candidate's supervisor is stating the candidate has met the requirements to be released as an operator.
- I. <u>Note</u>: Any "Improper" action(s) require an explanation in the comments section of the Driver's evaluation form.
- J. Candidates may begin drivers training on the next piece of apparatus upon completion of the previous unit but may not be released until designated period for that unit. (6 months after ambulance/support, 6 months after engine)

#### **IV.DOCUMENTATION**

**Form 938 Drivers Release Authorization**, shall be maintained in the employee's SharePoint Personnel File.

#### Ambulance – Brush & Utility Vehicle

#### DRIVER/OPERATOR ASSESSMENT PROGRAM

Candidates must review all department policies that pertain to the operating of vehicles prior to beginning the driving evaluation. Complete a minimum of 5 hours of supervised driving while covering varied road conditions that must include primary, secondary and gravel road surfaces. Candidate must also demonstrate proficiency at backing and negotiating limited access areas. The supervisor may require additional driving hours should performance indicate. The candidate must demonstrate proficiency driving the apparatus while negotiating all situations on the drivers evaluation form. A Driving Evaluation Form must be completed by the evaluator after each non-emergency driving session until the required number of hours are met.

Supervisors are encouraged to have candidates aquire their needed hours using multiple units.

Candidates must satisfactorily perform a weekly check out in accordance with station policies.

Candidates must pass the following quizes with a minimum of 90%:

- Hospital Running Route Quiz
- County Thoroughfares Quiz
- Operational Quiz

<b>Driver Evaluation</b>
DRIVER/OPERATOR
ASSESSMENT PROGRAM
FRF 939

Name:	Date:	_/	_/
Unit: Total Time:			
Types of Roads / Conditions Traveled:			
Gravel Road: # of miles			
$\Box$ Highway (> 45mph): # of miles			
□ Secondary Roads (< 45mph): # of miles			
□ Merging into traffic			
Narrow Streets / Access Roads / Parking Lots			
Backing / Sharp Turns			

PERFORMANCE CRITERIA	1st ATTEMPT	2nd ATTEMPT	NOTES
Properly uses seatbelt & Ensures seatbelt usage by passenger prior to moving			
Adjusts mirrors as needed and uses frequently			
Operates vehicle with both hands on wheel while in motion			
Maintains control of the apparatus while accelerating, braking, and negotiating turns			
Maintains safe following distances			
Maintains a reasonable speed for the road, and traffic conditions			
Utilizes turn signals appropriately			
Maintains vehicle within driving lane at all times			
Brings vehicle to a stop in a controlled manner			
Operates the vehicle in compliance with all applicable state and local laws and departmental guidelines			
Monitors gauges and indicator panel			

## **Policy and Procedure Familiarity**

- □ **O.P. 112** Vehicle Accidents
- □ **O.P. 201** Minimum Staffing
- □ **O.P. 210** NOVA Engine Company Operations
- □ **O.P. 701** Vehicle Response and Operation
- □ **O.P. 702** Vehicle Accident Investigation
- □ **O.P. 703** Accident, Injury and Property Loss Reporting
- □ **O.P. 704** Occupational Health and Safety Committee

I have reviewed and understand the above policies and procedures.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## Fauquier County Fire and Rescue Area Hospital Running Route Quiz

In the space provided, give the running route to each hospital listed from the given starting locations.

- Run route to Fauquier Hospital from Station 1108.
- Run route to Mary Washington from Station 1102.
- Run route to Prince William Hospital from Station 1103.
- Run route to Winchester Medical Center from Station 1105.
- Run route to Stone Springs Hospital from Station 1104.
- Run route to Culpeper Regional Hospital from Station 1113.

- Run route to Heathcoat Medical Center from Station 1110.
- Run route to Stafford Hospital from Station 1108.
- Run route to Warren Memorial Hospital from Station 1111.

## Ambulance, Brush, Utility Vehicle Operational Quiz:

- 1. Describe proper vehicle positioning for an E.M.S. unit arriving at a structure fire.
- 2. Describe two primary assignments for individuals assigned to an E.M.S. unit operating at a structure fire without victims.
- 3. Describe proper vehicle positioning for an E.M.S. unit arriving after the engine company at an auto accident on a two-lane highway.
- 4. What precautions would be appropriate for an E.M.S. unit operating at a medical emergency on a two-lane highway to protect personnel from oncoming traffic?
- 5. If not otherwise specified, where should the E.M.S. unit's passport be delivered when arriving at an incident when command has been established?
- 6. What must an operator do prior to backing if a spotter is not available?
- 7. Do family members riding in the rear of an ambulance need to wear seatbelts?
- 8. How far back must apparatus position from a ladder truck to allow for removal of ground ladders from the rear?
- 9. When an E.M.S. unit responds to a structure fire in a high rise building where should personnel stage there equipment?
- 10. True or False? Although Va. State law permits emergency vehicles to exceed the posted speed limit, an operator may be criminally prosecuted for reckless disregard of safety of persons and property.



# **Thoroughfares Answer Sheet**

# Road Names and Route Numbers

- 1.
- 2.
  - .
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

Engine	
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Candidates must be a at least 21 years of age.

Candidates must have been released as driver/operater at the ambulance, brush, and utility level for a minimum of 6 months prior to being released at the Engine level. Candidates are permitted to start the evaluation process prior to that 6 month period being met.

Candidates must review all department policies that pertain to the operating of vehicles prior to beginning the driving evaluation. Complete a minimum of 5 hours of supervised driving while covering varied road conditions that must include primary, secondary and gravel road surfaces. Candidate must also demonstrate proficiency at backing and negotiating limited access areas. The supervisor may require additional driving hours should performance indicate. The candidate must demonstrate proficiency driving the apparatus while negotiating all situations on the drivers evaluation form. A Driving Evaluation Form must be completed by the evaluator after each non-emergency driving session until the required number of hours are met.

Supervisors are encouraged to have candidates aquire their needed hours using multiple units.

Candidates must satisfactorily perform a weekly check out in accordance with station policies.

Candidates must pass the following quizes with a minimum of 90%:

- County Thoroughfares Quiz
- Engine Driver/Operator Quiz

Candidates must satisfactorily complete each of the Engine Test Scenarios

## **Engine Operator Quiz**

Station Officer: Fill in the blanks on questions 1-7 for the D/O.

- 1. Describe the correct positioning and crew responsibilities for the \_\_\_\_\_ due engine Company dispatched to a single-family residential fire.
- 2. Describe the correct positioning and crew responsibilities for the \_\_\_\_\_ due engine Company Dispatched to a Strip Shopping Center fire.
- 3. Describe the correct positioning and crew responsibilities for the \_\_\_\_\_ due engine Company dispatched to a high-rise fire.
- 4. Describe the correct positioning and crew responsibilities for the \_\_\_\_\_ due engine Company to a garden apartment fire.
- 5. Describe the correct positioning and crew responsibilities for the \_\_\_\_\_ due engine Company dispatched to a town house fire.
- 6. Describe the correct positioning and crew responsibilities for the \_\_\_\_\_ due engine Company dispatched to a rural water assignment.
- 7. Describe the correct positioning and responsibilities for the \_\_\_\_\_ due tanker dispatched on a rural water assignment.
- 8. Describe the positioning for an engine company operating on a two-lane highway.
- 9. Nozzle pressure for hand lines with smooth bore nozzles is \_\_\_\_\_ p.s.i. The pressure can be increased to \_\_\_\_\_ achieve a higher flow.
- 10. Nozzle pressure for master streams with smooth bore nozzles is \_\_\_\_\_ p.s.i. The pressure can be increased to \_\_\_\_\_ to achieve a higher flow.
- 11. Nozzle pressure for fog nozzles is \_\_\_\_\_ unless otherwise indicated.
- 12. Utilizing fire ground flow rates, a 2 <sup>1</sup>/<sub>2</sub>" hand line with a 1 1/8 tip will flow \_\_\_\_\_\_ gallons a minute.
- 13. A standard 1 <sup>3</sup>/<sub>4</sub>" fog nozzle will flow \_\_\_\_\_ gallons a minute.

- 14. The maximum dependable lift when drafting is \_\_\_\_\_ to \_\_\_\_\_ feet.
- 15. What is the initial startup pressure for supplying a Fire Department Connection?
- 16. When engaged in a pumping relay what is the recommended starting pressure when utilizing 4-inch hose?
- 17. What is the most common reason a pumper will fail to achieve a draft?
- 18. What pump discharge pressure is an operator recommended not to exceed?
- 19. While drafting, at what R.P.M. should an engine be brought to prior to engaging the primer?
- 20. What is the preferred intake to utilize when drafting.
- 21. Define the following abbreviations.

Attack Engine - FL + NP + EL + AL

Supply Engine -FL + RP + EL + AL

- 22. How much pressure loss due to elevation should be considered for an attack line operating on the fourth floor?
- 23. When utilizing an "in-line" foam proportioning system, what P.S.I. is required at the inductor?
- 24. What is the maximum hose length from the inductor to the nozzle when utilizing 1- 3/4 diameter hose?
- 25. If the supply engine has correctly calculated there friction loss in the supply line, what will the intake gauge of the attack engine read?

#### ENGINE TEST SCENARIO 1: FIRST DUE ATTACK (NON-HYDRANT AREA)

Candidate Name: \_\_\_\_\_ Date: \_\_\_\_\_

Scenario: You are the first arriving engine on a structure fire in a non-hydrant area. The structure is 300' up a driveway, you are to lay out supply line from the end of the driveway and secure supply line to the pump. The officer will instruct which line to place in service while operating off your tank. The first due tanker will be tying into your pump while you are waiting for the water supply to be established at the end of the driveway. When the nurse tanker has supplied the engine, a second attack line will be placed in service. Once the water supply is established, at the end of the driveway, complete a changeover with fluctuation not to exceed 20 psi. Candidate should smoothly transition from their tank water, to the tankers water, and then to the supply line. The candidate should operate in a proficient and competent manner while transitioning from water sources.

PERFORMANCE CRITERIA	1st ATTEMPT	2nd ATTEMPT	NOTES
Candidate establishes water supply securing supply line to pump intake as soon as possible			
Candidate completes changeovers, sets relief valve/pressure governor and fills tanks of their engine and tanker when water is available			
Candidate informs supply engine of GPM			
Candidate flows all lines at proper pressures (within 5 psi of coefficient formula)			

COMMENTS

Evaluator's Name

Evaluator's Signature

#### ENGINE TEST SCENARIO 2: SECOND DUE SUPPLY (NON-HYDRANT AREA)

Candidate Name: \_\_\_\_\_ Date: \_\_\_\_\_

Scenario: You are the second arriving engine on a rural water assignment. You find a 4 inch line with manifold laying at the end of the drive way that has been laid by the 1<sup>st</sup> due company . The first due tanker has also left their dump tanks and hard sleeves containing jet siphon equipment. This supply line is 300 to 500 feet long and the 1<sup>st</sup> due engine is attempting to flow approximately 300 to 500 GPM. (This can be accomplished by laying 4 inch to a blitz fire if necessary) Establish a dumpsite with one tank initially, than expand to two tanks and utilize a jet siphon to move water between tanks. The candidate should operate in a proficient and competent manner while establishing the dumpsite.

Instructions - Driver should work independently for approx. the first two minutes before being assisted by the second due tanker crew

PERFORMANCE CRITERIA	1st ATTEMPT	2nd ATTEMPT	NOTES
Candidate secures supply line to pump discharge and			
would direct incoming tankers to send water into supply			
line through manifold while dump site is being established			
Candidate chooses appropriate site for dump tanks taking			
into account tanker access and driveway access for			
incoming specialty pieces.			
Candidate obtains a draft from initial tank and sends water into the supply line flowing 300 to 500 GPM.			
Candidate sets second tank and builds the system in			
manner that would support moving water between tanks utilizing jet siphon system			
Candidate flows supply line at proper pressure ( within 5 psi of coefficient formula)			

#### COMMENTS

## ENGINE TEST SCENARIO 3: IMPROVISED ATTACK LINE

Candidate Name: \_\_\_\_\_ Date: \_\_\_\_\_

Scenario: You're an engine that is stretching a line to side Charlie or any hard to access area. The officer will request a line be pieced together from the available hose to achieve this goal. (Note: line should not exceed 600' in length and will not exceed test pressures of hose or appliances.) Candidate should operate in a proficient and competent manner utilizing street hydraulics to figure discharge pressure. (Should be within 5 psi of coefficient formula)

PROCEDURE	1st ATTEMPT	2nd ATTEMPT	NOTES
Candidate initiates water supply from tank and then switches to hydrant or tanker			
Candidate assists crew in forming line and assures type of nozzle used and any appliances in system			
Candidate flows attack line at proper pressure (within 5 psi of coefficient formula)			
Candidate correctly notes GPM			

COMMENTS

Evaluator's Name

Evaluator's Signature

Tanker	
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Candidates must have been released as driver/operater at the engine level. Candidates are permitted to start the evaluation process prior to that 6 month period being met.

Candidates must review all department policies that pertain to the operating of vehicles prior to beginning the driving evaluation. Complete a minimum of 5 hours of supervised driving while covering varied road conditions that must include primary, secondary and gravel road surfaces. Candidate must also demonstrate proficiency at backing and negotiating limited access areas. The supervisor may require additional driving hours should performance indicate. The candidate must demonstrate proficiency driving the apparatus while negotiating all situations on the drivers evaluation form. A Driving Evaluation Form must be completed by the evaluator after each non-emergency driving session until the required number of hours are met.

Supervisors are encouraged to have candidates aquire their needed hours using multiple units.

Candidates must satisfactorily perform a weekly check out in accordance with station policies.

Candidates must pass the County Thoroughfares Quiz with a minimum of 90%

Candidates must satisfactorily complete each Tanker Test Scenarios

## TANKER **TEST SCENARIO 1:** NURSE TANKER OPERATIONS

Candidate Name: \_\_\_\_\_ Date: \_\_\_\_\_

Scenario: You are the first arriving tanker and will set up a nurse operation in a rural water setting.

PROCEDURE	1st ATTEMPT	2nd ATTEMPT	NOTES
Candidate stops at layout point and removes all necessary equipment for dumpsite			
Candidate positions tanker in close proximity to attack engine making sure access is available for other arriving apparatus			
Candidate supplies attack engine utilizing either 3" or 4" supply line			
Once supply has been established, the candidate will deploy a 3" line from the attack engine back to the tanker so that the attack engine can refill the tanker with the supply from the dumpsite			

COMMENTS

Evaluator's Name

Evaluator's Signature

## TANKER **TEST SCENARIO 2:** SECOND ARRIVING TANKER OPERATIONS

Candidate Name: \_\_\_\_\_ Date: \_\_\_\_\_

Scenario: You are the second due tanker responding on an incident. Typically, the dumpsite should already have been established by the time the second due tanker arrives. However, for this scenario the second due tanker arrives at the dumpsite location and finds it has not been established.

PROCEDURE	1st ATTEMPT	2nd ATTEMPT	NOTES
Candidate stops apparatus at the dumpsite location in a position that allows supplying the 4" manifold and repositioning can be avoided in order to dump water into initial tank.			
Candidate deploys appropriate length 4" LDH to supply the Siamese or LDH manifold.			
Candidate charges and supplies attack engine with proper pressure			
Candidate then removes all necessary rural water supply equipment			
Candidate can assist, if necessary, dumpsite driver/ operator with setup of initial tank			
Candidate will dump remaining water, if any, into first tank once it is established and dumpsite driver/operator is ready			
Candidate will verify that all hose has been disconnected from his or her tanker and then proceed to fill site once operation is completed.			

COMMENTS

Evaluator's Name

## DRIVER/OPERATOR RELEASE AUTHORIZATION

Form 938

Name: \_\_\_\_\_

Ambulance / Brush / Utility	Supervisor Name	Signature	Date
Perform a weekly check out in			
accordance with station policies.			
Ambulance, Brush, Utility			
Driver-Operator Quiz			
County Thoroughfares quiz			
Policy and Procedure Reviewed			
Hospital location quiz			
5 hours of supervised driving			

ENGINE	Battalion Chief	Signature	Date
Perform a weekly check out in			
accordance with station policies.			
Engine / Pumper			
Driver-Operator Quiz			
County Thoroughfare Quiz			
Policy and Procedure Reviewed			
5 hours of supervised driving			
Engine Test Scenario #1			
Engine Test Scenario#2			
Engine Test Scenario#3			

TANKER	Battalion Chief	Signature	Date
Perform a weekly check out in			
accordance with station policies.			
County Thoroughfare Quiz			
Policy and Procedures Reviewed			
5 hours of supervised driving			
Tanker Test Scenario #1			
Tanker Test Scenario #2			

Rescue Squad / Hazmat unit	Battalion Chief	Signature	Date
Perform a weekly check out in			
accordance with station policies.			
Engine / Pumper			
Driver-Operator Quiz			
County Thoroughfare Quiz			
Policy and Procedure Reviewed			
5 hours of supervised driving			
Test Scenario #1			
Test Scenario#2			
Test Scenario#3			

Aerial Apparatus	Battalion Chief	Signature	Date
Perform a weekly check out in accordance with station policies.			
County Thoroughfare Quiz			
Policy and Procedures Reviewed			
10 hours of supervised driving			
Test Scenario #1			
Test Scenario#2			

#### HYDRAULICS CHEAT SHEET

P.S.I., F.L. per 100 ft. of line flowing at near <u>capacity</u>. To be used for street application without completing calculations. Keep in mind that these pressures are for near <u>maximum</u> flow. Common sense should dictate that we would back these pressures off to meet flow and situation.

<b>Diameter</b>	<u>G.P.M</u>	<b>P.S.I</b> per 100ft
1-3/4	150	34.8 round to <u>35</u>
2	200	32 round to <u>30</u>
2-1/2	250	12.5 round to <u>15</u>
	300	18 round to <u>20</u>
3	400	12.8 round to <u>15</u>
	500	<u>20</u>
4	1000	20
	800	12.8 round to <u>15</u>
	500	5
	200	.8 round to <u>1</u>

## PRACTICE EXERCISE 1: 1 <sup>3</sup>⁄<sub>4</sub>" ATTACK LINE

## **Objective:**

Flow a single 1 <sup>3</sup>/<sub>4</sub>" attack line at proper pressure using only tank water. Meets *NFPA 1002. Standard for Apparatus Driver/Operator Professional Qualifications.* 

PERFORMANCE CRITERIA	1st ATTEMPT	2nd ATTEMPT	NOTES
Positions engine appropriately (short, in front of, or past the structure)			
Stops engine, transmission in neutral, sets parking brake			
Dons proper safety gear			
Acknowledges that an 1 <sup>3</sup> / <sub>4</sub> " hand line will be used			
Places wheel chock in position			
Engages pump properly			
Checks pump engagement			
Opens tank to pump if not already open			
Clears hose bed of attack line or ensures it has been cleared			
Charges attack line when advised to do so			
Pumps line at correct pressure			
Sets relief valve/pressure governor, as applicable			
Advises OIC when there is half a tank of water left			
Shuts down line when out of water or advised to do so			
Disengages pump properly			
Refills booster tank from a hydrant			

## PRACTICE EXERCISE 2: MULTIPLE ATTACK LINES

## **Objective:**

Lay a supply line and flow two 1 <sup>3</sup>/<sub>4</sub>" and one 2 <sup>1</sup>/<sub>2</sub>" hose line. Meets *NFPA 1002. Standard for Apparatus Driver/Operator Professional Qualifications.* 

PERFORMANCE CRITERIA	1st ATTEMPT	2nd ATTEMPT	NOTES
Stops engine with rear step at hydrant, transmission in neutral, sets parking brake			
Dons proper safety gear			
Wraps hydrant with supply line leaving 10-15 ft. of hose at the hydrant			
Lays out hose at a safe, reasonable speed (< 15mph)			
Keeps hose to one side of the street, same side as hydrant			
Positions engine properly			
Acknowledges order to put a 1 <sup>3</sup> / <sub>4</sub> " hand line in service			
Engages pump properly			
Checks pump engagement			
Places wheel chock in position			
Opens tank to pump if not already open			
Checks OK to pump light on pump panel			
Clears hose bed of attack line or ensures it has been cleared			
Charges line when advised to do so			
Pumps attack line at correct pressure			
Sets relief valve/pressure governor, as applicable			
Disconnects supply line from hose bed and connects to appropriate intake			

PERFORMANCE CRITERIA	1st ATTEMPT	2nd ATTEMPT	NOTES
Opens bleeder on appropriate intake valve			
Advises supply engine to charge the supply line (should also relay length and diameter of hose and GPM flowing)			
Refills tank			
Closes tank fill when tank is full			
Acknowledges order to flow a second 1 <sup>3</sup> / <sub>4</sub> " attack line			
Clears hose bed of attack line or ensures it has been cleared			
Charges hose line when advised to do so			
Pumps line at correct pressure			
Advises supply engine of change in flow			
Acknowledges order to put a 2 <sup>1</sup> / <sub>2</sub> " attack line in service			
Clears hose bed of attack line or ensures it has been cleared			
Charges hose line when advised to do so			
Pumps line at correct pressure			
Modifies relief valve/ pressure governor, if necessary			
Advises supply engine of change in flow			
Flows water from all three lines			
When advised to do so, shuts down all three lines properly			
Assures tank is full			
Advises supply engine to shut down			
Assures engine is ready for service			

## **PRACTICE EXERCISE 3: DECK GUN**

## **Objective:**

Flow a remote deck gun. Meets NFPA 1002. Standard for Apparatus Driver/Operator Professional Qualifications.

PERFORMANCE CRITERIA	1st ATTEMPT	2nd ATTEMPT	NOTES
Stops engine at hydrant, transmission in neutral, sets parking brake			
Dons proper safety gear			
Wraps hydrant with supply line (10-15 feet of hose at the hydrant)			
Lays out hose at a safe, reasonable speed (< 15mph)			
Keeps hose to one side of the street, same side as hydrant			
Positions engine properly			
Stops engine, transmission in neutral, sets parking brake			
Acknowledges order to flow the remote deck gun at 500 GPM			
Places wheel chock in position			
Removes deck gun; pulls correct supply lines			
Engages pump properly			
Checks pump engagement			
Opens tank to pump if not already open			
Checks OK to pump light on pump panel			
Charges pre-piped master stream when advised to do so			
Pumps at correct pressure			
Disconnects supply line from hose bed and connects it to appropriate intake			
Opens bleeder on appropriate intake valve			

Advises supply engine to charge the supply line (relay length, diameter, and GPM flowing)	
Refills tank	
Closes tank fill when tank is full	
When advised to do so, shuts down line(s) properly	
Advises supply engine to shut down	
Assures engine is ready for service	

## PRACTICE EXERCISE 4: FOAM

## **Objective:**

Flow foam through a 1 <sup>3</sup>/<sub>4</sub>" attack line.

Meets NFPA 1002. Standard for Apparatus Driver/Operator Professional Qualifications.

PERFORMANCE CRITERIA	1st ATTEMPT	2nd ATTEMPT	NOTES
Stops engine at hydrant, transmission in neutral, sets parking brake			
Dons proper safety gear			
Wraps hydrant with supply line leaving 10-15 feet of hose at the hydrant			
Lays out hose at a safe, reasonable speed (< 15mph)			
Keeps hose to one side of the street, same side as hydrant			
Positions engine properly			
Stops engine, transmission in neutral, sets parking brake			
Acknowledges type of foam system on engine			
Acknowledges order to place an 1 <sup>3</sup> / <sub>4</sub> " hose line in service and flow 3% foam			
Places wheel chock in position			
Performs appropriate procedures to flow foam (this will vary).			
Engages pump properly			
Checks pump engagement			
Opens tank to pump if not already open			
Checks OK to pump light on pump panel			
Charges line when advised to do so			
Pumps at correct pressure			
Flows foam for several minutes			

Disconnects supply line from hose bed and connects it to appropriate intake		
Opens bleeder on appropriate intake valve		
Advises supply engine to charge the supply line (relay length, diameter, & GPM)		
Refills tank		
Closes tank fill when tank is full		
When advised to do so, shuts down line(s) properly		
Flushes engine properly		
Advises supply engine to shut down		
Assures engine is ready for service		

## **PRACTICE EXERCISE 5: SUPPLY PUMPING**

## **Objective:**

Complete a split lay to a hydrant. Meets NFPA 1002. Standard for Apparatus Driver/Operator Professional Qualifications.

PERFORMANCE CRITERIA	1st ATTEMPT	2nd ATTEMPT	NOTES
Stops engine at hydrant, transmission in neutral, sets parking brake			
Dons proper safety gear			
Pulls appropriate supply line and connects to supply line already laid.			
Lays out hose at a safe, reasonable speed (< 15mph)			
Keeps hose to one side of the street, same side as hydrant			
Positions engine properly			
Stops engine, transmission in neutral, sets parking brake			
Places wheel chock in position			
Engages pump properly			
Checks pump engagement			
Flushes hydrant			
Connects intake hose to hydrant			
Opens bleeder (if available) for front intake			
Opens hydrant completely			
Opens valve to allow water to pump			
Places chafing block under hose			
Closes tank to pump			
Checks OK to pump light on pump panel			

Disconnects supply hose from hose bed and connects to appropriate discharge		
Notes static pressure before line is charged		
Charges supply line when advised by attack engine		
Pumps supply line at the proper pressure		
Notes residual pressure and calculates remaining water		
Shuts down the supply line when advised by attack pumper		
Assures engine is ready for service		

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## PRACTICE EXERCISE 7A: DRAFTING-PORTABLE TANK

Objective: To demonstrate the candidate's ability to successfully draft from a portable water tank by supplying two 3" lines to a portable deck gun. Meets *NFPA 1002. Standard for Apparatus Driver/Operator Professional Qualifications.* 

TASKS	1st ATTEMPT	2nd ATTEMPT	NOTES
Positions engine to draft from portable tank			
Stops engine, transmission in neutral, sets parking brake			
Dons proper safety gear			
Places wheel chock in proper position			
Removes both sections of hard sleeve from the engine			
Connects the hard sleeves together (using rubber mallet and lubricant)			
Attaches hard sleeve to the appropriate intake			
Places strainer end of hose in portable tank and ties it off			
Pulls two 3" lines to supply a portable deck gun			
Works with crew to set up portable deck gun			
Closes/caps all intakes, discharges, and drains on engine			
Engages pump properly			
Checks pump engagement			
Checks OK to pump light on the pump panel			
Opens intake valve (if necessary)			
Sets engine RPM to approximately 1200-1500			
Operates priming device			

Obtains prime, opens discharge to first supply line		
Pumps line at correct pressure		
Opens discharge to second supply line and pumps line at the correct pressure.		
Places recirculation line in service		
Shuts down when advised to do so		
Assures tank is full and engine is ready for service		

#### PRACTICE EXERCISE 7B: DRAFTING-STATIC WATER SOURCE

Objective: To demonstrate the candidate's ability to successfully draft from a static water source, by supplying the fixed deck gun. After drafting, the candidate must back flush the pump properly. Meets *NFPA 1002. Standard for Apparatus Driver/Operator Professional Qualifications.* 

TASKS	1st ATTEMPT	2nd ATTEMPT	NOTES
Positions engine at water source			
Stops engine, transmission in neutral, sets parking brake			
Dons proper safety gear			
Places wheel chock in proper position			
Removes both sections of hard sleeve from the engine			
Connects the hard sleeves together (using rubber mallet and lubricant)			
Lowers strainer end into the water (uses roof ladder as necessary)			
Attaches hard sleeve to the appropriate intake			
Connects hard suction hose to intake of pumper			
Closes tank to pump valve, assures all discharge valves are closed			
Closes/caps all intakes, discharges, and drains on engine			
Engages pump properly			
Checks pump engagement			
Checks OK to pump light on the pump panel			
Opens intake valve (if necessary)			
Sets engine RPM to approximately 1200-1500			
Operates priming device			

Obtains prime, opens discharge valve to deck gun		
Pumps line at correct pressure		
Places recirculation line in service		
Shuts down when advised to do so		
Assures tank is full and engine is ready for service		
Back flushes pump properly		

#### PRACTICE EXERCISE 8A: RURAL WATER SUPPLY-FILL SITE

Objective: To demonstrate the ability to participate in a rural water supply operation at a fill site. Meets *NFPA 1002. Standard for Apparatus Driver/Operator Professional Qualifications.* 

TASKS	1st ATTEMPT	2nd ATTEMPT	NOTES
Positions engine for water supply, either hydrant or static source			
Stops engine, transmission in neutral, sets parking brake			
Dons proper safety gear			
Places wheel chock in proper position			
Performs appropriate connections and setup procedures			
Works with crew to ensure fill site is set up properly ( <i>see</i> <i>Exercise 3 under Tanker Preparation</i> )			
Engages pump properly			
Checks pump engagement			
Sets pump discharge pressure to 150psi			
Checks OK to pump light on the pump panel			
Opens gated wye to charge and shut down fill lines, or operates discharge gate on pump panel to charge appropriate fill lines.			
Fills at least two engines and/ or tankers			
Shuts down when advised to do so			
Assures tank is full and engine is ready for service			

#### PRACTICE EXERCISE 8B: RURAL WATER SUPPLY-DUMP SITE

Objective: To demonstrate the ability to participate in a rural water supply operation at a dumpsite. Meets NFPA 1002. Standard for Apparatus Driver/Operator Professional Qualifications.

TASKS	1st ATTEMPT	2nd ATTEMPT	NOTES
Positions engine to act as the supply pumper at the dump site			
Stops engine, transmission in neutral, sets parking brake			
Dons proper safety gear			
Places wheel chock in proper position			
Performs appropriate connection and setup procedures to draft from a portable tank			
Pulls appropriate line to supply attack engine			
Works with crew to ensure fill site is set up properly ( <i>see</i> Exercise 2 under Tanker preparation)			
Obtains draft in accordance with Exercise 7A (see above)			
Charges supply line and pump line at proper pressures			
Shuts down when advised to do so			
Assures tank is full and engine is ready for service			

#### EXERCISE 9: ESTABLISHING THE INITIAL WATER SUPPLY

Objective: To operate as the first-due tanker and establish an initial water supply to support a 500 GPM master stream. Meets *NFPA 1002. Standard for Apparatus Driver/Operator Professional Qualifications.* 

TASKS	1st ATTEMPT	2nd ATTEMPT	NOTES
Stops at dumpsite location and drop equipment as outlined in Loudoun County Procedure for Rural Water Supply Operations			
Proceeds to position in close proximity to the first-due engine without hindering other responding apparatus			
Stops tanker, transmission in neutral, sets parking brake			
Dons proper safety gear			
Place wheel chocks into position			
Engages pump properly			
Checks pump engagement			
Opens tank to pump if not already open			
Opens tank fill/re-circulating valve			
Deploys appropriate length of 4" LDH			
Connects one end of 4" LDH to large diameter intake on attack engine			
Connects other end of the 4" LDH to large diameter discharge on the passenger side pump panel of the tanker			
Checks to ensure line is clear of kinks and/or obstructions			
Checks OK to pump light on pump panel			
Places the pressure governor into "RPM" mode			
Charges supply line to attack engine			
Sets the pump discharge pressure to correct pressure			
Places the pressure governor into "pressure" mode			

Establishes a refill line from a discharge on the attack engine to a tanker intake	
When the primary water supply has been established to the attack engine, and fire flow demand permits, opens correct intake valve to refill tank	
When advised to do so, shuts down pump	
Disengages pump properly	
Replaces equipment and ensure the apparatus is ready for service	

#### PRACTICE EXERCISE 10: DUMP SITE OPERATIONS

Objective: To operate as the second-due tanker by establishing a dumpsite (even though this should typically be established). The candidate will be required to supply the main supply line to the attack engine through a LDH Siamese or LDH manifold or to directly supply the dumpsite engine until the dumpsite engine is ready to draft from the portable tanks. The candidate should then transition to dumping water into the portable tanks. This exercise is not designed to establish a complete dumpsite; once the first portable tank has been established and the dumpsite engine obtains a draft, the candidate should dump their water and proceed into shuttle operations. See the NOVA Manual Procedure for Rural Water Supply Operations for further information. Meets *NFPA 1002. Standard for Apparatus Driver/Operator Professional Qualifications.* 

PERFORMANCE CRITERIA	1st ATTEMPT	2nd ATTEMPT	NOTES
Stops at dumpsite location in close proximity to the dumpsite engine so that minimal supply line is needed. Avoids positioning the apparatus to hinder others			
Stops tanker, transmission in neutral, sets parking brake			
Dons proper safety gear			
Please wheel chocks into position			
Engages pump properly			
Checks pump engagement			
Opens tank to pump if not already open			
Opens tank fill/re-circulating valve			
Deploys appropriate length of 4" LDH to supply the clappered Siamese or LDH manifold or dump site engine			

PERFORMANCE CRITERIA	1st ATTEMPT	2nd ATTEMPT	NOTES
Connects one end of 4" LDH to the Siamese or LDH manifold or to large diameter intake on dumpsite engine			
Connects other end of the 4" LDH to large diameter discharge on the passenger side pump panel of the tanker			
Checks to ensure line is clear of kinks and/or obstructions			
Checks OK to pump light on pump panel			
Places the pressure governor into "RPM" mode			
Charges supply line to dumpsite engine			
Sets the pump discharge pressure to correct pressure			
Places the pressure governor into "Pressure" mode			
Lowers the portable tank racks			
With the assistance of the dump site operator, deploys the portable tanks			
Ensures ground covers are in place prior to positioning the portable tanks			
Positions the first portable tank in a "diamond" shape in relation to the dumpsite engine and ensures the drain is placed on the lowest side			
Assists the dumpsite engine driver with connecting the low- level strainer and placing the hard suction hose into the main drafting tank			
Tanker driver ensures the dumpsite engine has a full tank or has established a draft.			
Shuts down supply line			

PERFORMANCE CRITERIA	1st ATTEMPT	2nd ATTEMPT	NOTES
Disconnects supply line from the large diameter discharge			
Disengages pump properly			
Picks up wheel chocks			
Repositions tanker to utilize dump valve (rear or side) to dump water into main drafting tank			
Operates correct dump valve switch from inside the cab or at the rear of the apparatus to open the dump valve until there is approximately 12" of water in the main drafting tank and then promptly closes the dump valve			
Once it is confirmed that the dump site engine has established a draft, reopens the dump valve and continues to dump water until the main drafting tank is full			
If the main drafting tank is full, and the tanker still has greater than 20% of tank capacity, repositions tanker to utilize dump valve (rear or side) to dump water into the second portable tan			
Once approximately 80% of the tank capacity has been depleted, closes dump valve			
Confirms location of the fill site			
Ensures any personnel and equipment are clear prior to exiting the fill site			
Safely exits the dump site			

#### PRACTICE EXERCISE 11: FILL SITE OPERATIONS

Objective: To simulate operating at a fill site from a hydrant by refilling apparatus unassisted during reduced staffing situations. In the time it takes to fill the tanker as much of the fill site as possible should be set-up. Once the tanker is full, the candidate should promptly leave the fill site and return to the dumpsite. Personnel should be encouraged to experiment with different layout arrangements and appliances. If a hydrant is unavailable, utilize an engine operating at a static source to simulate. Meets *NFPA 1002. Standard for Apparatus Driver/Operator Professional Qualifications.* 

PERFORMANCE CRITERIA	1st ATTEMPT	2nd ATTEMPT	NOTES
Arrives safely at the fill site location			
Stops tanker, transmission in neutral, sets parking brake			
Dons proper safety gear			
Please wheel chocks into position			
Opens hydrant to ensure operation and no obstructions			
Closes hydrant			
Attaches 2 <sup>1</sup> / <sub>2</sub> " hydrant gate valves to each 2 <sup>1</sup> / <sub>2</sub> " outlet on the hydrant. Ensures gate valves are in the closed position.			
Fully opens the hydrant			
Deploys two 50' sections of 3" line and connects each section to the direct tank fills on the tanker			
Fully opens the direct tank fill valves			
Opens the corresponding bleeder valves attached to the direct tank fill valves			
Connects first section of 3" line to the first hydrant gate- valve and fully opens			
Connects second section or 3" line to the first hydrant gate- valve and fully opens			
Closes the bleeder valves attached to the direct tank fill valves			
Once the tank is full, slowly closes the direct tank fill valves			
Opens the bleeder valves attached to the direct tank fill valves			

Slowly closes both hydrant gate valves		
Disconnects tank fill line(s)		
Picks up wheel chocks		
Enters the cab and securely fastens seat belt		
Ensures any personnel and equipment are clear prior to exiting the fill site		
Safely exits the fill site		

## PRACTICE EXERCISE 12: TANKER SHUTTLE OPERATIONS

Objective: To operate in a tanker shuttle operation. Preferably, and if resources allow, this exercise will require an engine with operator to assume the role of dumpsite engine, an officer at the dumpsite to assume the role of the Water Supply Supervisor, an engine with crew to assume the role of the fill site engine, and at least two additional tankers. A predefined shuttle route will be established between the dump and fill sites. Meets *NFPA 1002. Standard for Apparatus Driver/Operator Professional Qualifications.* 

PERFORMANCE CRITERIA	1st ATTEMPT	2nd ATTEMPT	NOTES
Arrives safely at the dump site and positions as directed to utilize rear and/or side dump to dump water into portable tank			
Stops tanker, transmission in neutral, sets parking brake			
When directed, operates correct dump valve switch from inside the cab and dumps water into portable tank			
Confirms location of the fill site, if needed			
Once approximately 80% of the tank capacity has been depleted, or as directed by the water supply officer, closes dump valve			
Ensures all personnel operating around the dumpsite are clear and then safely exits the dumpsite.			
Safely drives the apparatus from the dumpsite to the fill site. Obeys all traffic laws, maintains awareness of other tankers traveling in the shuttle route, stays alert for pedestrian traffic, and travels at a safe and responsible speed			
Arrives safely at the fill site location and positions as directed by the fill site crew			
Stops tanker, transmission in neutral, sets parking brake			
Stays in cab while the fill site crew connects appropriate fill line(s) to the rear direct tank fills			

Once the apparatus tank is full, waits for the fill site crew to disconnect fill lines and signal that it is okay to exit the fill site.		
Returns to the dump site and completes another dump/fill site cycle		
Successfully completes three (3) evolutions		

Candidates must be at least 21 years of age.

Candidates must have been released as driver/operator at the ambulance, brush, utility and Engine level for a minimum of 6 months prior to being released at the Truck level. Candidates are permitted to start the evaluation process prior to that 6 month period being met.

Candidates must review all department policies that pertain to the operating of vehicles prior to beginning the driving evaluation. Complete a minimum of 10 hours of supervised driving while covering varied road conditions that must include primary, secondary and gravel road surfaces. Candidate must also demonstrate proficiency at backing and negotiating limited access areas. The supervisor may require additional driving hours should performance indicate. The candidate must demonstrate proficiency driving the apparatus while negotiating all situations on the drivers evaluation form. A Driving Evaluation Form must be completed by the evaluator after each non-emergency driving session until the required number of hours are met.

Supervisors are encouraged to have candidates acquire their needed hours using multiple units.

Candidates must satisfactorily perform a weekly check out in accordance with station policies.

Candidates must pass the following quizzes with a minimum of 90%:

- County Thoroughfares Quiz
- Truck Driver/Operator Quiz

Candidates must complete each of the Truck Test Scenarios

Truck Operator Quiz

Station Officer: Fill in the blanks on questions 1-7 for the Aerial Operator.

1. Describe the correct positioning and crew responsibilities for the first due Truck Company dispatched to a single-family and multi-family House fire.

2. Describe the correct positioning and crew responsibilities for the first due Truck Company Dispatched to a Strip Shopping Center fire.

3. Describe the correct positioning and crew responsibilities for the \_\_\_\_\_ due Truck Company dispatched to a high-rise fire.

4. Describe the correct positioning and crew responsibilities for the \_\_\_\_\_ due Truck Company to a garden apartment fire.

5. Describe the correct positioning and crew responsibilities for the \_\_\_\_\_ due Truck Company dispatched to a town house fire.

6. Describe the correct way to use the emergency bypass to bed the ladder.

7. Describe the correct angle to flow water using the ladder pipe and why.

8. Describe the positioning for "short jacking" the truck and pros and cons for using this type of stabilization.

9. Nozzle pressure for ladder pipe with a smooth bore nozzles is \_\_\_\_\_ p.s.i.

10. Why is the working tip load for the aerial important?

11. What is the working tip load for the aerial you are training on currently?

#### PRACTICE EXERCISE 1: FIRST DUE TRUCK OPERATIONS

Truck TEST SCENARIO 1: FIRST DUE TRUCK

Candidate Name: \_\_\_\_\_ Date: \_\_\_\_\_

Scenario: You are the first arriving truck on a structure fire in a hydrant area. The incident commander has directed you to position the truck so you can prepare for rescue. The structure is a middle of the row townhouse.

PERFORMANCE CRITERIA Candidate positions the truck and stabilization properly. Candidate positions the aerial for rescue mode. Candidate scrubs at least two sides of the building.

COMMENTS

Evaluator's Name

Evaluator's Signature

#### PRACTICE EXERCISE 2: TRUCK STOKES BASKET OPERATIONS

TRUCK TEST SCENARIO 2: STOKES BASKET

Candidate Name:	Date	:
		-

Scenario: You have been dispatched to I-66 for a traffic crash. The Truck has been dispatched, per special request, for use of a stokes basket to remove the patient from a ravine.

#### PERFORMANCE CRITERIA

Candidate positions the truck and properly stabilize.

Candidate chooses appropriate equipment needed to setup the stokes basket and hoist equipment. Candidate properly with assistance sets up stokes and hoist equipment.

Candidate properly moves stokes from predetermined area to desired area and back. (Evaluators can and should determine the desired area with a traffic cone.)

COMMENTS

Evaluator's Name

Evaluator's Signature

Candidates must be at least 21 years of age.

Candidates must have been released as driver/operator at the ambulance, brush, utility and Engine level for a minimum of 6 months prior to being released at the Rescue level. Candidates are permitted to start the evaluation process prior to that 6 month period being met.

Candidates must review all department policies that pertain to the operating of vehicles prior to beginning the driving evaluation. Complete a minimum of 5 hours of supervised driving while covering varied road conditions that must include primary, secondary and gravel road surfaces. Candidate must also demonstrate proficiency at backing and negotiating limited access areas. The supervisor may require additional driving hours should performance indicate. The candidate must demonstrate proficiency driving the apparatus while negotiating all situations on the drivers evaluation form. A Driving Evaluation Form must be completed by the evaluator after each non-emergency driving session until the required number of hours are met.

Supervisors are encouraged to have candidates acquire their needed hours using multiple units.

Candidates must satisfactorily perform a weekly check out in accordance with station policies.

Candidates must pass the following quizzes with a minimum of 90%:

- County Thoroughfares Quiz
- Rescue Driver/Operator Quiz

Candidates must complete each of the Rescue Test Scenarios

Rescue Operator Quiz

1. Describe the correct positioning and crew responsibilities for the first due Rescue Company dispatched to a single-family and multi-family House fire.

2. Describe the correct positioning and crew responsibilities for the first due Rescue Company Dispatched to a Strip Shopping Center fire.

3. Describe the correct positioning and crew responsibility for the first due Rescue Company on a MVC with Entrapment.

4. Describe the correct positioning and crew responsibility for the first due Rescue Company involved with a low-angle rope operation.

5. Describe the correct positioning and crew responsibility for the first due Rescue Company arriving at Inside Gas Leak in a single family dwelling.

6. Describe and demonstrate different methods of utilizing cribbing for stabilization and discuss different weight ratings for 4x4 vs 6x6 cribbing. 2 points of contact vs 3 points of contact.

7. Describe and demonstrate proper establishment of an anchor system utilizing pickets. Describe the different weight ratings for multiple picket systems.

8. Describe and demonstrate proper use of airbags for lifting an object. Pros and cons for using on-board air compressor vs SCBA cylinder?

Identify and discuss the following,

- 1. All cab controls.
- 2. Generator controls.
- 3. Breaker box.
- 4. Extrication System. (Hurst, Amkus, TNT)
- 5. Cascade System.
- 6. Winch operations.
- 7. Light tower operations.
- 8. Pneumatic tool operation

Perform a weekly check of apparatus in accordance with specific station policy.

## **ROPE RESCUE KSA**

	Date	Initials
Show proficiency in the following knots and hitches.		
Figure 8, Figure 8 on a bight, Figure 8 follow thru, double Figure 8,		
Inline 8, Bowline, Clove hitch, Water knot, Munter Hitch, Truckers		
Hitch, Half Hitch, Overhand knot, Butterfly Knot, Stopper Knot,		
Modified Mariners, Hokie Hitch, Double Fisherman's, Girth Hitch		
Show proficiency in the following anchor systems.		
Wrap 3 pull 2, Tensionless Wrap, Three Bight, Two point self-		
equalizing, multi-point static anchor, three point self-equalizing,		
Portuguese Bowline		
Show proficiency in the following lowering systems.		
Figure 8 descender, MPD, Munter Hitch		
Show proficiency in the use of mechanical advantage systems.		
1:1, 2:1, 3:1, 5:1, During the creation of the systems, Trainees should		
discuss pros and cons of piggy back systems, backing up anchors,		
adding MA vs requesting manpower.		
Show proficiency in the use of picket systems.		
1:1, 2:1, 3:2:1 Trainees should show proficiency in both windless		
systems and the use of ratchet straps and discuss pros and cons to each.		
Trainees should be knowledgeable in the different rate weightings for		
each system and how they can fluctuate depending on grade of soil		
being utilized.		
Show proficiency in Stokes Basket/Patient Packaging Operations		
MLF w/Miller Board, MLF w/ Backboard, Lashing with webbing.		
Show proficiency in the following.		
Rope equipment ratings and inventory. Voice commands associated		
with MA operations, Swift water and safety checks.		

## SHORING AND STABILIZING KSA

	Date	Initials
Proficient in the knowledge and use of box cribbing (1, 2, 3, 4 points of contact)		
Proficient in the knowledge and use of sloped box crib		
Proficient in the knowledge and use of step chocks, wedges, and shims		
Proficient in the knowledge and use of the pneumatic/mechanical struts (sizes, capacities, accessories)		
Demonstrate proficiency in use of high/low pressure airbags (sizes, weight ratings, operating pressures)		
Proficient in the knowledge and use of the cable come-along (capacity, useable length, first component designed to fail, method of operation, lowering method of operation)		
Proficient in the knowledge and use of a front mount winch (rated pull first layer single line, rated pull fourth layer single line, winch rope diameter and WLL, rope length, rope extension length, diameter and WLL)		
Proficient in the knowledge and use of a portable winch (rated pull first layer single line, rated pull fifth layer single line, rope length, diameter, and WLL)		
Proficient in the knowledge of the operational principles for all winches (terminology, definitions, vehicle position, angle of pull, COD, brake set, wheels chocked, high idle on, load calculations, pull type and rigging, clutch disengagement, free spool, attachment to objects, clutch engagement, remote control hook up, tension rope and connection check, pull object as required, secure object after pull)		
Proficient in the knowledge and use of the ratchet straps (capacity, lengths, attachments, quantities, deployment and storage)		
Proficient in the knowledge and use of the shackles (rigging and capacities)		
Demonstrate proficiency in the use of chains, chain bridles, chain binder and chain hoist. (Weight ratings and uses for different grades and sizes)		
Proficient in the knowledge and use of the snatch blocks		

\*\*Once KSA are complete, the trainee shall then discuss different techniques used for stabilizing vehicles of different sizes and weights. To include: Vehicles in different positions (on its roof, on its side, etc.). The equipment's weight limitations when stabilizing heavier vehicles and techniques to overcome it. Hands on scenarios should be utilized as much as possible.

## HAZMAT KSA

	Date	Initials
Proficient in the knowledge of common vapor densities, UELs, and LELs		
Proficient in the knowledge and use of the MSA Altair 5x (operations, five gases monitored, alarm/action levels, zeroing/calibrating)		
Proficient in the knowledge and use of the combustible gas meter (powering on, manufacturer operational sequence)		
Use of Thermal Imaging Camera (TIC) in gas related emergencies.		
Proficient in different damning and diking techniques used for spill containment. (V-dikes, underflow damn, etc.)		
Proficient in containment and stopping leaks in saddle tanks.		
Candidates should be able to recognize when they have met their apparatuses and crews limitations and request additional resources when needed.		
Proficient in establishing a decontamination area to include initial gross decontamination and progressing to Ten Step decontamination.		

## MISCELLANEOUS TOOLS KSA

	Date	Initials
Proficient in use of a Reciprocating saw to include maintenance,		
specific blade uses and blade changes.		
Proficient in use of a Circular saw to include maintenance,		
specific blade uses and blade changes.		
Proficient in use of an angle grinder to include maintenance,		
specific blade uses and blade changes.		
Proficient in use of a drill/hammer drill to include maintenance,		
specific bit uses and bit changes.		
Demonstrate proficiency in the use of the Man VS Machinery kit		
Demonstrate proficiency in the use of PPV fans to include gas		
operated and blow hard fans. (proper set up for ventilation and		
how PPV is utilized and performed)		
Demonstrate proficiency in the use of pry bars to gain mechanical		
advantage.		

## TECHNICAL RESCUE KSA

	Date	Initials
Demonstrate proficient knowledge in basic confined space		
events. (Atmospheric Monitoring, Ventilation, Lockout/Tagout)		
Demonstrate proficient knowledge in basic trench rescue events.		
(Establishing hot and warms zones, basic knowledge in		
equipment used for stabilization, atmospheric monitoring, classes		
of soil)		
Demonstrate proficient knowledge in Water/Ice related		
emergencies. (Hot/Warm zones, common terminology, injuries		
and illnesses associated with these emergencies, basic knowledge		
in equipment and rope systems used)		
Candidates should know the limitations of their apparatus and		
crews. They should be able to list the mutual aid companies and		
resources we use for these situations and where they are located.		

\*\*All Candidates are encouraged to take classes associated with these events to further their education in unique emergencies we will be called to assist with in Fauquier County.

#### RESCUE OPERATOR PRACTICE EXERCISE 1: FIRST DUE EXTRICAITON OPERATIONS

Rescue Operator Scenario 1: Extrication Operations

Candidate Name: \_\_\_\_\_ Date: \_\_\_\_\_

Simulated Scenario: You have been dispatched to Catlett Rd (Route 28) for a single vehicle on its side in the roadway. Properly position your apparatus upon arrival and select and stage all equipment needed to stabilize the vehicle and perform a roof removal and dash roll.

#### PERFORMANCE CRITERIA

Candidate positions the Rescue appropriately for use of the winch and tool access. Candidate chooses appropriate equipment needed to setup same side opposing forces or to execute a controlled lowering of the vehicle.

Candidate properly stages all necessary extrication equipment need to execute safe extrication of the victim.

COMMENTS

Evaluator's Name

Evaluator's Signature

#### **RESCUE OPERATOR PRACTICE EXERCISE 2: ROPE OPERATIONS AND PICKETT SYSTEM.**

Rescue Operator Scenario 2: Rope Operations and Pickett System

Candidate Name: _	Date:	
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Simulated Scenario: You have been dispatched to I-66 for a traffic crash. The Rescue has been dispatched per special request for use of the stokes basket and rope operation to remove the patient from a ravine approximately 50 feet off the roadway.

#### PERFORMANCE CRITERIA

Candidate positions the Rescue appropriately.

Candidate chooses appropriate equipment needed to set up a picket system to use an anchor. Candidate chooses appropriate rope and hardware needed to setup up a lowering system attached to the stokes basket and sets it up in a timely fashion.

Candidate properly converts lowering system into a haul system, no less than a 3:1 MA, and demonstrates proper use of a haul team.

Candidate properly demonstrates how to add MA using a compound system.

Candidate properly inspects and returns the rope to service after use.

COMMENTS

Evaluator's Name

Evaluator's Signature





EMPLOYEE DEMOGRAPHICS				
Employee Name				
Station Assignment				
DOB		AGE		
Station Officer Name		Signature		

PRIMARY APPARATUS DESIGNATION					
Ambulance, Brush, Utility	Engine/Tanker	Rescue			

#### EMPLOYEE SIGNATURE DATE

ASSESSMENT PROCTOR (3)						
NAME	LEAD/ASSIST	RANK				
	□Lead □Assist					
	□Lead □Assist					
	□Lead □Assist					
APPENDIX COMPLETION						
Appendix (A)	Serpentine Course	□Success □Unsuccessful				
Appendix (B)	Diminishing Clearance	□Success □Unsuccessful				
Appendix (C)	Alley Dock	□Success □Unsuccessful				
Employee must successfully	Employee must show positive	Unsuccessful Candidates will				
complete each skill listed in	attitude toward driving and	be considered for a same day				
Appendix A-C	exhibit adequate basic	re-test of skills. If not				
	knowledge of apparatus to	successful, candidates will				
	include in-cab switches and	wait 30 days and then become				
	controls, dimensions,	eligible for an additional				
	applicable policies and	attempt.				
	standards.	-				

#### LEAD PROCTOR\_\_\_\_\_DATE:\_\_\_\_\_

#### BATTALION CHIEF\_\_\_\_\_DATE:\_\_\_\_\_

















