



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

## Practical Application Guide Sheet

### Aerial Tower – Elevated Stokes Basket Rescue

**Candidate Name:** \_\_\_\_\_

**Candidate Performance Competency:** The candidate will evaluate and assemble a rope system in conjunction with an aerial tower to facilitate lowering a victim from an elevated location in a stokes basket. Candidate will position the apparatus and aerial device with the goal of eliminating or minimizing aerial movement with a loaded stokes basket. Assistants may assist during system assembly, however the Candidate must demonstrate to the Evaluator's satisfaction proficiency with the application and use of system components.

Task	Value	Score
1. Identify the victim location and removal route. Candidate will position and stabilize the apparatus for aerial use. <b>(CFP)</b> a. Optimal position places the aerial in line with or at a 90° angle to the body of the apparatus to align the rope system with the typical anchor points on the apparatus	10	
2. Candidate will describe tip loads and safe operating conditions for the individual aerial device performing the evolution	3	
3. Locate and identify all equipment needed to perform the evolution.	3	
4. Candidate will describe anchor options at the platform end of the aerial device and install change of direction pulleys for main and belay line. <b>(CFP)</b> a. Lifting eyes – fixed and focused with webbing b. Leveler bracket – basket hitch with rated straps or wrap-three/pull-two with webbing c. Identify load capacities of anchor points	8	
5. Candidate will describe and construct the anchors to be used for ground level belay device and change of direction for the main line. <b>(CFP)</b>	6	
6. Candidate will manage preparation of the stokes basket for hoisting. a. Attach a tag line rope. <b>(CFP)</b> b. Attach and adjust the bridle with gates out and locked. c. Load any lashing or immobilization equipment necessary for patient packaging	4	
7. Candidate will install the main and belay ropes in the changes of direction at the platform and ground level anchors and attach to the prepared stokes basket. <b>(CFP)</b> a. Candidate will tie double long-tailed bowline knot	4	

Task	Value	Score
8. Candidate will describe the safety check process while conducting a check of the system prior to hoisting. a. Explain the “three sets of eyes” concept <b>(CFP)</b>	3	
9. Candidate will operate the aerial device to deliver the stokes basket to the victim location. Aerial placement must ultimately eliminate or minimize the need to move the aerial once the stokes is loaded. Assistants will manage the main, belay, and tag lines as necessary. a. Main line will be managed through a Munter hitch or other friction method at the ground level change of direction anchor; belay line remains free from friction devices b. Once the aerial ladder is set and in place as a high directional all aerial movements should cease unless absolutely necessary <b>(CFP)</b>	5	
10. Candidate will explain the management of torsional load forces on the aerial device and assess the need for change of direction pulleys at the bed section of the aerial. If necessary, candidate will install change of direction pulleys to the bed section of the aerial. <b>(CFP)</b> a. If aerial construction causes rigging equipment to be installed where it will interact with moving parts of the aerial device, i.e. pulleys, cables, or cylinders these change of direction pulleys must not be installed and reeved until the aerial is in its final position. <b>(CFP)</b>	6	
11. With the stokes basket landed and aerial in final position, Candidate will install a change of direction device and rappel rack on the main line at the ground level anchor. a. Weave at least six bars of the rack <b>(CFP)</b> b. Lock off the rappel rack <b>(CFP)</b>	4	
12. Candidate will manage assembly of a dynamic hauling system on the main line. <b>(CFP)</b> a. Load end of the hauling system connected to the rappel rack on the main line b. Candidate selects an appropriate anchor	10	
13. Candidate will manage assembly of the belay system using tandem prusiks or mechanical belay device. <b>(CFP)</b>	5	
14. Candidate will describe the safety check process while conducting a check of the system prior to hoisting.	3	
15. Candidate will manage the removal of slack from the system and ensure the stokes basket is leveled as necessary.	3	
16. Candidate will manage raising the stokes basket above an obstacle. a. Candidate will lead the exercise using standard rope rescue commands b. When adequate clearance is reached, the Candidate will lock the hauling system to secure the main line <b>(CFP)</b>	10	
17. Candidate will manage lowering the stokes basket to the designated landing area. a. Rappel rack using at least four bars <b>(CFP)</b> b. Standard rope rescue commands	10	

Task	Value	Score
18. Candidate and assistants will relieve any load on the rope system, disassemble and make all equipment ready for service. a. Equipment checked for damage b. Equipment returned to storage locations	3	
<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) **Excessive repositioning of the aerial with a loaded stokes basket**
- b) **Incorrect knot application or construction**
- c) **Incorrect hardware application or assembly**
- d) **Improper anchor point**
- e) **Incorrect or ineffective tag line – does not control the basket**
- f) **Incorrect or ineffective main line**
- g) **Incorrect or ineffective belay system**
- h) **Incorrect or ineffective dynamic hauling system**
- i) **Failure to coordinate or implement main and belay lines**
- j) **Failure to lower victim to the ground using rappel rack or using prohibited functions of the aerial**
- k) **Failure to complete safety check prior to loading the system**
- l) **Loss of control of the stokes basket or impact with an obstacle**
- m) **Shock load applied to any part of the system**
- n) **Rope system configuration that fails to address torsional stress on the aerial or exposes rope system components to damage beyond normal wear**
- o) **Failure to lock the haul system prior to lowering**
- p) **Failure to lock the rappel rack as needed**

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

\_\_\_ **PASS**    \_\_\_ **FAIL – Points (<70%)**    \_\_\_ **FAIL – Critical Failure Point**

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

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

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