



**Combined Agency Response Team**  
**2015 Minimum Mandatory Training Standards**

**MECHANICAL ADVANTAGE SYSTEMS**

- Objective:** Demonstrate the use of a mechanical advantage hauling system, in a horizontal position, re-setting the system three (3) times.
- Condition:** Given rope and necessary ancillary equipment.
- Behavior:** Construct the following haul systems, using an approved load release hitch and change the system to a lowering system.
- Standard:** With 100% Accuracy.

Skill	Time	1st Attempt		2nd Attempt	
		Pass	Fail	Pass	Fail
<b>3:1 (Z-rig)</b> Using a 3 point self-equalizing anchor Anchor 1 use a tensionless Anchor 2 use a basket wrap Anchor 3 use a loop wrap Belay of choice Change to a lowering system	15 min				
<b>3:1 Piggyback</b> Using a 2 point self equalizing anchor Anchor 1 use a loop Anchor 2 use a basket Munter hitch as a belay Change to a lowering system	12 min				
<b>4:1 (Double J) Piggyback</b> Using a basket wrap anchor Tandem prussik as a belay Change to a lowering system	10 min				
<b>Haul system attached to a tripod</b>	10 min				