



CASUALTY LOWERING SYSTEM

Action: Rig a vertical hauling system

<u>Conditions:</u> In a field environment given all necessary equipment.

Standard: successfully construct and haul equipment







Prep Time: 10mins- single/double back stack rope, tie aussie seats, Conduct Site Layout.

Execute: 20mins-must fully assemble A-frame system and haul up one rucksack.







Uniform: Full Rappeller's uniform to include ACH, Gloves, Eye Pro.

<u>Positions:</u> Lashing team, Spreader team, Apex team, Anchor team, Continuous loop team, Mule team, Safety team

Equipment Required:

- 2- A-frame poles
- 3- Squad Rope (120' 11mm or 13mm)
- 3-51 KN steel locking Carabineer
- 4- 15' Sling rope
- 1- Ruck
- 1- Trash bag







Lashing Team

Properly tie reverse clove hitch on left pole.









Lashing team

Secure the right pole, make sure bottoms of poles are even, wrap 5 complete wraps down to base of the poles, first one does not count. Attach second sling rope with safety square knot.







Redirect ropes between the poles, wrap 4-6 horizontal wraps, wraps counted are the bottom wraps. Once there is 4 on top 5 on bottom stop, lay right pole down and to the right, redirect rope again under bottom of the top pole. Secure a safety square knot from first standing end rope to second standing end rope, tie inline safeties to the ends after square knot







Spreader Team

Attached two, 15' sling ropes to the base of the poles, Start with right shoulder into pole looking away from the system. Tie end of the rope clove hitch, diagonal locking bar should go top left to bottom right, Adjust knot to be 6" from base of poles. Safety knot with two half hitches, minimum 4" pig tail. Measure with one rope from knot to bottom of the wraps/fraps. Tie safety square knot to as close to middle in line with the apex using apex as a reference point, Rope management with excess standing end of rope.









Apex Team

Measure 14" bight and lay over top of A-frame system, bight measurement should be at the bottom of the apex. Tie middle of the rope clove hitch to top of each pole 6" from wraps/fraps, diagonal locking bars should the inside of poles(right is wrong, left is right). Measure from top of apex 6" and adjust knots to measurement, Secure 51 KN steel locking carabineer to bight, sky to ground wrap around opening gate facing you and unlocked







Anchor Team

Once A-frame is centered and to safety line, measure double arm from anchor point back. pull all slack and twists out, From measurement tie double figure eight slip, check for more than 4" deviation (slack) and twists, if twist just rotate knot, safety figure eight slip with double half hitch



Wrap rope around anchor point, secure one, 51 KN steel locking carabineer, hook up rope and lock carabineer, wrap back around under first two strands and pinch against anchor point









Continuous Loop Team

Tie figure of eight bend to each end, minimum 4" pigtail, Measure 18" on one strand and tie double figure of eight knot. Secure trash bag and double back stack rope into trash bag from one of the double figure of eights, single back stack rope into trash bag from second figure or eight till only knot is left outside bag. Place bag next to safety line, Safety team will secure continuous rope into carabineer on A-frame and lock it.











Mule Team

Mule team secures rucksack and moves to bottom of cliff, Once rope has been tossed down team finds double figure of eight knot, untie and trash rope to base of cliff, measure from base of cliff double arm, retie double figure of eight.

Attach one, 51KN steel locking carabineer to ruck sack, frame facing you rotate sky to ground wrap around, secure continuous loop into carabineer and lock. Conduct weight test, 1/3 body weight, 2/3 body weight, full body weight.







Hauling Load

Squad up top looks to see if A-frame exceeds 45 degree angle when under tension of a load and no knots come undone. Squad pulls a-frame back from over cliff edge, Safety team hooks in usable side of rope, usable side is no knots between both double figure of eights. A-frame is extended back out and mule team begins to haul up load, Once to top safety team unhooks carabineer and rucksack from rope and hands over safety line. Extend a-frame back out and check for 45 degree and no knots undone. Once squad determines everything is good set ruck down to complete.









