5. FOURTH STEP:

PERFORM THE RESCUE

Climbers B & C pull hand over hand on the climbing rope until the two pulleys are no closer than about one foot apart, or until the victim is out of the crevasse. While hauling, mid-person (climber B) keeps an eye on the Bachmann knot to ensure it doesn't jam in the pulley. Anytime the hauling is paused the load is eased back onto the Bachmann knot by extending it away from the anchor. This should be done when Climber C needs to check the victim Climber A's proximity to the lip or the system needs to be re-set as the victim is not yet out of the crevasse. The backup figure-eight loop knot is retied and clipped back in before resetting the system. The system is reset by Climber C moving (resetting) the floating pulley prusik back toward the edge of the crevasse (while self belaying), checks the status of Climber A, then returning to Climber B to resume hauling. This process is repeated until the fallen Climber A is out of the crevasse.

Note: In any rescue scenario, monitor the progress of the victim (Climber A) to avoid pulling the victim into the crevasse lip, causing injury. As the victim approaches the crevasse lip, hauling should cease (pause) so the victim can remove the rope from his/her chest harness and negotiate crossing the lip safely with the assist of the rest of the rope team, if necessary. (There could be an overhanging lip which Climber A needs to chop away with the ice axe).

Note: Climber B will assist in pulling on the rope but his/her primary duty is guarding the anchor and tending the Bachmann.



C-PULLEY SYSTEM (SINGLE PULLEY) "DOUBLE ROPE" SET UP

2:1 Mechanical Advantage

This system is used if the fallen climber is conscious and able to help with the rescue and if additional help is on hand (a second rope team) to set the system up and help pull the climber out of the crevasse.

In the description below, rope team one with the fallen Climber A is assisted by a second rope team whose members are identified as 1, 2 & 3.

Rope Team one (A, B, C) completes setting the initial and main anchors as described in steps #1-3 of the crevasse rescue procedure on prior pages.

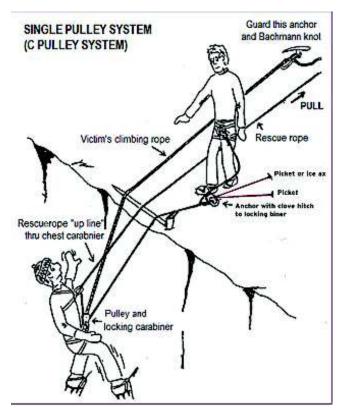
Depending on the depth of Climber A's fall, Climber 2 on the rescue rope team may need to retie closer to Climber 3 to allow enough rope to reach fallen Climber A.

Discuss when this would be suitable (victim's rope entrenched, victim able to assist and another rope team available) and walk students through the procedure. Then set up and practice the single pulley as many times as time allows. Set the initial and back up anchors as in above Z pulley procedure. Have mid-person on victim's rope (Climber B) guard the anchors and tend the Bachmann knot taking up slack so the victim's rope to the anchor is always taut. Likewise have the belayer keep the rope taut to victim as he/she is being raised.

This rescue exercise requires two rope teams. Lower the victim into the crevasse on belay. The victim is attached to initial and main anchors tended by Climber B, and also on the belay rope. The second rope team, Rescue rope team (Climbers 1, 2 & 3), practices set up and operation of Single Pulley (C Pulley) and performs the actual rescue.

- a) Rescue rope team belays lead climber (Climber 1) to lip of crevasse.
- b) Climber 1 sets up an equalized anchor, either using 1.) a picket and ice ax, 2.) two pickets, or 3.) picket and deadman (if snow conditions demand it). If an ice ax is used as part of the anchor, the sling must be girth-hitch around the shaft (NOT through the hole.) Pickets should be driven in at a 15-20 degree angle from the slope, away from the direction of pull, as near the lip of the crevasse as possible. Climber 1 attaches self to the anchor with a clove hitch on a locking biner. When tying the clove hitch, allow enough length to stand while tending the anchor.

- c) Climber 1 places an ice axe at the lip of crevasse and secures the ice to the anchor they just placed. (**Do not attempt to position the ice axe under the rope to the victim**).
- d) Climber 1 then places a pulley and locking carabiner on the bight of rope between his anchor and Climber 2. The pulley, carabiner, and rope are placed over the ice axe and carefully lowered to fallen Climber A. Climber 1 must guard the anchor at the lip from this point forward.
- e) Victim (Climber A) clips the locking carabiner attached to the pulley into the loop formed by the figure-8 tie-in knot on his/her seat harness. The victim then clips the "up" rope (the portion of the rope that will be pulled) through his/her chest harness carabiner. He/she signals readiness to be hauled out. Maintain the hauling rope over the ice axe at the lip.
- f) Climbers 2, 3 and C haul the rope hand-overhand at climber 1's direction. As slack becomes available in the rope between fallen Climber A and Climber B (tending the Main anchor), Climber B pulls the slack through the Bachmann knot. (The safety belayer also continually removes slack in the belay line). As climber A nears the top of the crevasse, Climber 1 stops climbers 2, 3 and C from pulling long enough for Climber A to unclip the rescue rope from the chest harness. (Otherwise he/she would be pulled into the lip of the crevasse). Climber A is then carefully hauled over the lip.



DIRECT PULL

1:1 (No) Mechanical Advantage

This procedure has no diagram. However, set up the anchors following steps 1 through 3 in the crevasse rescue procedure above. This method can be used if the rope to the victim (Climber A) is not entrenched and can be pulled over the lip of the crevasse.

- 1. Climbers pulling on the rope stand in back of Climber B's anchor and pull the rope in hand-over-hand (remember to untie Figure-8 knot) near the anchor pulley.
- 2. Climber B tends the Bachmann knot. This is quick if the people power is available to do it.