# LOWER MEMBER USING LIFE SAVING ROPE AND PERSONAL HARNESS

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## 1. EQUIPMENT:

1.1 One nylon life saving rope with attached anti-chafing device in the carrying case. The pre-tied bowline-on-a-bight is not necessary for this operation. However the life saving rope must have this knot attached, therefore it must be untied at the start of this operation.

1.2 Two personal harnesses.

## 2. OBJECTIVE:

2.1 To lower a firefighter from a roof or upper floor to a position of safety.

2.2 To lower a firefighter from a roof or upper floor, in order to enable the firefighter to remove another person from an untenable position to one of safety.
3. PREPARATION FOR LOWERING:

This section applies to operations on roofs WITH and WITHOUT parapets.

3.1 Both members adjust their harness leg straps for proper fit. Both members open bottom snap of coat for access hook support strap. Member #1 (Lowering Member) release hook from support strap.

**Member #1 (Lowering Member)***

3.2 Facing the point of descent, place the carrying case on the roof with the back of the case facing the roof's edge. The case must be placed midway between the point of descent and a substantial object.

3.3 Facing the front of the case, open the top flap. Hand member #2 the rope's snap hook. Allow the anti-chafing device to slide along the rope.

**Note:** If there is a bowline-on-a-bight knot, it must be untied.

3.4 With both hands, grasp the sides of the case, holding the flap against the back of the case with the fingers.

3.5 Invert the carrying case and lift the case clear of the rope, using care not to disrupt the coil of the rope. Place the empty case to the side, clear of the operation.

3.6 Grasp the snap hook at the top of the coil and place it on the roof, to the left, adjacent to the coiled rope. (Figure 1)
Member #1 (Lowering Member)

3.7 Maintain position of the hook adjacent to the coiled rope by placing one foot on the snap hook, as member #1 pays out additional rope to the substantial object. (Figure 2)

Member #2 (Member to be Lowered)

3.8 Pay out rope from the top of the coil to the substantial object. Pull the rope taut and take a turn around the substantial object. Tie a clove hitch and binder on the taut part of the rope. (Figures 2 and 3)
Member #1 (Lowering Member)

3.9 Pull the harness handle from beneath your bunker coat and attach the snap hook of the rope to the harness handle as shown in Figure 4 keeping the hook secured. This is the end of the rope with the anti-chafing device on it. Hold the anti-chafing device in your left hand.

3.10 Return to the coiled rope and pick up the snap hook that was maintained by member #2 and attach it to the bottom part of the hook of your harness. (Figure 5) This is the end of the rope that is tied to a substantial object. (Figure 2) The snap hook should face down.

3.11 Make sure that the snap hook is attached in the prescribed manner to member #2 and slide the anti-chafing device up to the snap hook.

3.12 Walk toward the point of descent to remove all slack in the rope between the substantial object and you.

Member #2 (Member to be Lowered)

3.9 Pull the harness handle from beneath your bunker coat and attach the snap hook of the rope to the harness handle as shown in Figure 4 keeping the hook secured. This is the end of the rope with the anti-chafing device on it. Hold the anti-chafing device in your left hand.

Figure 4

Figure 5
**Member #1 (Lowering Member)**

3.13 Facing member #2, grasp the section of rope leading to the anti-chafing device with your right hand and bring this hand back along the rope to your right hip.

3.14 Using this point on the rope, bring the rope forward and lay the solid part of the harness hook (gate to the left) on top of the rope. Grasp both the rope and the hook in the right hand.

3.15 With left hand, pull down gate and take a ¼ turn to the left. Gate is now able to open freely.

3.16 With left hand, push gate over to solid side of hook. As gate reaches solid part of hook, grab hook, rope and gate together with right hand. (Figure 6)

3.17 With your left hand, make four turns, under and over the harness hook with the rope leading to member #2. (Figures 7A and 7B)

3.18 To close and lock gate, release from right hand. To ensure that the gate is closed and locked, apply lateral pressure with left hand.

3.19 Slide your right hand back along the rope to your right buttock. Allow enough rope to pay out through the hook to permit member #2 to approach the point of descent.
4.  LOWERING OPERATION FROM A BUILDING WITH A PARAPET

Member #1 (Lowering Member)  

4.1  Holding the anti-chafing device in the left hand, turn to the right and straddle the parapet with the right leg to the outside.

4.2  Allow enough slack in the rope to place the anti-chafing device flat on the parapet with approximately 5" of the device draped over the outer edge. (Figure 8)

4.3  Still holding the harness hook with the left hand, PALM DOWN, firmly grasp the rope in the right hand positioned at your right buttock. Give the command "DISMOUNT" to Member #2 to dismount the parapet.

4.4  Both gloved hands, grip the inner edge of the parapet, with a hand on either side of the anti-chafing device. (Figure 8)

Note:  To maintain the position of the antichafing device, place the thumb of the right hand on top of the device while the fingers grasp the inner edge of the parapet.

4.5  Slide your buttocks to the outer edge of the parapet until your left knee is at the inner edge of the parapet, and make sure that the rope is in the channel of the antichafing device.

4.6  Roll off the parapet into a vertical position and place feet approximately 12" apart against the wall, toes up and give the command "DOWN" to be lowered.

Note:  Both hands remain on parapet until you are in a vertical position.

4.7  At the command "DOWN," lower member #2. Control the rope as it slides through your gloved right hand.

Note:  If a third member is available he should be at the roof's edge for control and to relay commands.

5.  LOWERING OPERATION FROM A BUILDING WITHOUT A PARAPET
Member #1 (Lowering Member)
Note: The instructions in Section 3 apply here, instructions in Section 4 are for parapet operations and do not apply here.

Member #2 (Member to be Lowered)
5.1 Holding the anti-chafing device in the left hand, walk to point of descent and sit with your legs over the roof’s edge, the rope and anti-chafing device to your left. (Figure 9)

Note: Under smoky or unsure conditions it may be better to crawl to the roof’s edge.

5.2 Allow enough slack in the rope to place the anti-chafing device flat on the roof's edge with approximately 5" of the device draped over the edge of the roof. (Figure 10)

Note: Harness hook is at the end of the anti-chafing device and must clear the edge of the roof.
Member #1 (Lowering Member)

5.3 Still holding the harness hook with the left hand, PALM DOWN, firmly grasp the rope in the right hand positioned at your right buttock. Give the command "DISMOUNT" to Member #2 to dismount the roof.

5.4 Place the left hand between the antichafing device and your left leg. Using the hand as a pivot, roll the body to the left, into a pushup position and make sure the rope is in the channel of the anti-chafing device. (Figure 11)

5.5 Lower the body into a vertical position (Figure 12)

**Note:** As the vertical position is attained, the slack in the rope between the harness handle and the anti-chafing device will cause the member to drop slightly until the slack is eliminated.

Member #2 (Member to be Lowered)

5.6 Place feet approximately 12" apart against the wall, toes up, and give the command "DOWN" to be lowered.

5.7 At the command "DOWN," lower member #2. Control the rope as it slides through your gloved right hand.

**Note:** If a third member is available that member should be at the roof's edge for control and to relay commands.
6. MEMBER BEING LOWERED RESCUES A VICTIM AT LOWER LEVEL

**Member #1 (Lowering Member)**

6.1 Continue being lowered until you reach the proper level to rescue the victim. Give the command "STOP" to halt the lowering. A Guide Member at roof level can relay the command if necessary.

**Member #2 (Member to be Lowered)**

6.1 Continue being lowered until you reach the proper level to rescue the victim. Give the command "STOP" to halt the lowering. A Guide Member at roof level can relay the command if necessary.

**Note:** Descent should not be in line with windows.

6.2 In order for the Guide Member or Member #1 to hear your verbal commands, it will be necessary for you to look up toward the roof when giving them.

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**Figure 13**

6.3 On the command "Stop," halt lowering operation by closing the right hand firmly on the rope. Await the completion of the pick-up.

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6.4 Instruct the victim to place both arms around your neck, both legs around your waist, and maintain a firm hold (Figure 13).

6.5 Place your arms around the victim's upper torso, under the armpits, and lock your hands behind the victim's back. (Figure 14)

**Note:** Signal to lower must be given verbally by the member being lowered. Member must look up in order to be heard by the Guide Member or Member #1.

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6.6 Continue descent until an area of safety is reached.
**NOTES**

1. The nylon life saving rope shall be used for life saving purposes only. It shall not be used for any other purpose.

2. Communication is essential in all rope rescue operations. The Incident Commander shall be notified when any rope rescue operation is to be undertaken. This will enable the IC to arrange for any assistance needed at the location of the operation, e.g.; Guide Member at roof level and/or a member in the street for safety.

3. Before a rope rescue operation begins, check that there are no obstructions in line with the planned descent, such as signs, wire, etc.

4. Every effort shall be made to lower an individual between the line of windows. This will provide a smoother, easier descent and reduce exposure of the rope in case fire should show at a window.

5. Members must be alert to look for a reliable substantial object on the roof, such as bulkhead, aerial ladder, around a chimney or cut a hole, and tie the rope around an exposed beam. Plumbing vent pipes, sheet metal housings for roof vents, T.V. masts, newel posts or banisters are not reliable substantial objects.

6. To increase the safety of any lowering operation, whether a parapet is present or not, will require that the lowering point be midway between the roof's edge and the substantial object. This is to prevent the Lowering Member being drawn beyond the roof's edge, after hooking up onto "O" ring.

7. When performing any lowering operation, the life saving rope must be as perpendicular as possible to the roof's edge at the point where the member descends.

   7.1 If the angle of the rope from the substantial object to the roof's edge is too acute, the weight of the person being lowered will cause the rope to slide along the roof edge. This should be avoided.

   7.2 Additionally, if the angle of the rope is too acute the Lowering Member will be pulled uncontrollably by the rope, and the line of descent will also be drastically affected. This should be avoided.

8. When members are being lowered to perform a rescue pick-up, they must:

   8.1 Give the command "STOP" to halt the lowering operation while out of reach of the victim. This is to alert the guide member and/or the lowering member that the member being lowered is approaching the victim.

   8.2 Before this operation is completed in the safest possible manner, victims tend to jump onto their rescuers. In this situation a victim could easily fall to the ground.
8.3 The rescuer will give instructions to the victim at this point in the strongest and most forceful language necessary in order to complete the operation successfully.

8.4 Next, give the commands "DOWN, STOP, DOWN, STOP," as necessary, until member being lowered is shoulder to shoulder with the victim. Regardless of the victim’s position in the window the rescuer will be in the best position to make the pick up.

8.5 Rescuer pulls himself/herself to the victim by using the window frame. Never use the victim to help.

9. When a Guide Member is at roof level and visibility is good, hand signals can be used to control a lowering operation.

9.1 Signals shall be as follows:
   - LOWER -------------- Point downward with index fingers
   - STOP------------------ Clenched fists

10. The fact that a member has been lowered to a window does not commit them to rope rescue. If conditions do not demand the removal of the victim, good judgment dictates that the member enter the area and take the necessary action to reassure, protect, and confine the victim until the danger has passed.

10.1 If conditions demand removal, the member shall remain connected to the rope, which would serve as lifeline. However, before continuing a lowering operation, it is essential to remove all slack from the rope at roof level.

11. If a rope rescue is necessary, the goal is to reach a point of safety. A descent of one story may be all that is necessary.

12. When an unconscious victim is encountered and removing the victim requires the use of the rope, the bowline-on-a-bight and slippery hitch must be tied on the victim.

13. Members should be aware that the actual length of our life saving rope might be less than the nominal length of 150 feet due to natural shrinkage after several years in the field. Over a period of time some ropes have shrunk as much as 8 to 10 feet. This fact should be considered when planning to use the life saving rope.