CHAPTER VII

RESCUE FROM UPPER STORIES

Rescue from upper stories is one of the many skills rescue personnel must learn. They must be able to determine the proper method of lowering the casualty. The method used depends on the injuries of the casualty and on the equipment available. Some of the following methods can be used to raise the casualty, as well as to lower them.

A. VERTICAL LOWER

The vertical lower is used to lower a casualty who can be placed in a vertical position. It can be accomplished with the stokes basket. The stokes basket method is covered below.

1. The casualty is blanketed and lashed in the stokes.
2. The lowering rope is 1/2" static kernmantle. Tie a locking split clove hitch in the "D" near the shoulder area of the casualty. Pass the running end of the lowering rope under the stokes (between wire and runners), and tie a locking split clove in the "D" on the opposite side from the clove hitch. (See Figure 54 on page 61)
3. With the running end and the standing part of the lowering rope, tie bowline approximately 18" from the head of the stokes, and seize the running end to the standing part. (See Fig. 55 on page 61)
4. Tie tag line (1/2-inch rope) to the foot of the stokes, using a bowline.

(See Figures 56-A & 56-B on Page 62 for alternate method of attaching belay line.)
Vertical Lower With A Stokes Basket
Figure 53
Ladder Slide - Stokes Basket
Figure 57
Ladder Slide - Stokes Basket
Figure 58
B. LADDER SLIDE

The ladder slide can be employed when the ladder is of sufficient height. It is also used when manpower is limited. This method cannot be used when the casualty needs to be in a horizontal position.

Procedure for executing a ladder slide:

1. The ladder is placed at the proper climbing angle. Rescue personnel going up to the casualty will proceed up the ladder.

2. Once rescuers are in the upper stories, the ladder is repositioned by moving the base of the ladder out from the building until the tip of the ladder is about even with the window sill.

3. The casualty is blanketed and lashed in the stokes basket.

4. One rescuer will go up the ladder to receive the stretcher and guide it down the ladder. He should use a leg lock while waiting to receive the stretcher. (See Fig. 57 on page 63)

   One rescuer will heel the ladder, and one can support the ladder. (See Fig. 58 on page 64)

5. The stretcher is now carried to the ladder. Rescuers on the lowering lines should keep the weight off of the rescuer on the ladder. The person on the ladder should try to stay below the stretcher at all times. (See Fig. 58 on page 64)

6. Proceed to the ground with the stretcher.

C. THE LEANING LADDER

The leaning ladder method is used to lower casualties in a horizontal position or to lower using a life basket. This method is similar to the ladder-as-a-derrick method except the leaning ladder is placed against the building. (See Fig. 60 & 60-A on page 67)

Steps for the leaning ladder:

1. The ladder is laid on the ground with the fly extended several rungs. The base of the ladder is toward the building.

2. Snatch blocks are made fast to the top and bottom of the ladder by means of rope slings. The block at the top is placed on the fourth or fifth rung from the top. (This allows adequate room to lower the casualty without dragging against the building.) The bottom block is placed at the base of the ladder.

3. The sling is doubled and laid across the ladder. With one end of the sling, take one complete turn on one beam. With the other end of the sling, take one complete turn on the opposite beam. Bring both ends of the sling through the ladder to rest on the cross section of the sling and over the rung. The snatch blocks are hooked to the two loops of the sling. The hooks and locking device must be moused.

4. The ladder is raised to the vertical position and extended to the proper height. The ladder is then lowered against the wall above the opening where the casualty is to be rescued.

5. The top of the ladder should be made secure to prevent any side movement. The top can be tied off inside the building. (Note: When the ladder cannot be tied off on the inside, side guy lines can be used in the same fashion as with a ladder-as-a-derrick.)

   The base should be lashed to pickets or tied off in such a manner as to prevent movement.

6. Put tag lines on the stretcher to prevent twisting and turning of the stretcher during the lower.
7. The stretcher is now brought to the opening and the tag lines are dropped to the ground. The rescuers on the lowering rope take up slack, preparing to take the weight of the stretcher. The lowering rope should be held at an angle toward the building to pull the base of the ladder against the angle it's set.

**Note:** This method of rescue can be used with the double bowline or the life basket. If snatch blocks are not available, an alternative method is to weave the lowering rope in and out of the rungs of the ladder. This method causes considerable wear on the rope.
Ladder Hinge - Stokes Basket
Fig. 61
Ladder Hinge - Stokes Basket
Figure 62
D. LADDER HINGE METHOD

This method of rescue can be employed when there are casualties that may need to be lowered or raised in a horizontal position, or when there are several casualties. Steps for using a Ladder Hinge are listed below.

1. The ladder is placed vertically against the face of the wall or building from which the casualty will be lowered. The tip of the ladder should be extended approximately two rungs above the opening from which the casualty is to be lowered.

2. Using a 1/2" x 50' rope, secure a guy line to the top of each beam of the ladder with a split clove and safety knot, seizing running end to standing part, around the beam and top rung. These will be controlled from the ground.

3. The casualty is blanketed and lashed in the stokes.

4. The foot of the stokes is secured to the ladder with a rescuer's body cord. Double the body cord. With one end of the doubled cord, tie a split locking clove hitch to the beam of the ladder. Pass the other end of the cord through the end of the stokes, and tie off on the opposite beam with a split locking clove hitch. (See Fig. 63 on page 70) Enough slack must be left in the tie to allow the stokes to "hinge" on the ladder. The running end should be seized to the standing part on both clove hitches.

5. The lowering rope is attached to the head of the stokes with a 1/2" rope, using the same knots as for a vertical lower.

6. The casualty is now ready to be lowered.

7. The rescuers will man the guy lines. They should be spread out at approximately a 70-degree angle.

8. One or two rescuers will be at the base of the ladder. As the lower proceeds, these rescuers will walk backwards slowly, in a normal manner of lowering a ladder. These rescuers will assist in stabilizing the ladder during the lower. (Note: It is not always necessary for these two rescuers to walk the ladder down. (See Fig. 61 on page 68, Fig. 62 on page 69)

NOTE: A belay line should be used for safety reasons on all raises and lowers. (Fig 55 and 56 A & B on page 61 and 62)
E. LADDER ASSIST

The ladder assist is one of the fastest methods of rescue from upper stories. When casualties are in an area of immediate danger, such as smoke, fire or toxic gases, this is a very efficient method of rescue. This method is effective with a conscious or unconscious casualty. Steps for the ladder assist:

1. The ladder is placed in proper climbing position to get the rescuers to the casualty. The tip of the ladder should be almost level with the opening from which the casualty is to be rescued. If time does not permit the lowering of the fly section of the ladder, the base can be moved out from the building. (Note: If the fly section is extended above the opening, it will be difficult to place the casualty on the ladder.)

2. Using a leg lock, a rescuer will station himself on the ladder at a point where his eyes are about level with the tip of the ladder.

3. The two rescuers with the casualty will place the casualty on his stomach. They will grasp each other’s hand under the casualty’s chest with one hand. With the other, they will grasp the clothing behind the casualty’s knee. (If no clothing, their hands will be placed under the knee.) On the command to lift, the rescuers stand, pulling against each other slightly, and carry the casualty to the ladder. (See Fig. 64 on page 72)
4. The casualty is placed out the window feet first and face down.

5. The rescuer on the ladder will assist in getting the casualty out of the building.

6. The rescuer on the ladder will unlock from the ladder and allow the casualty to sit on his knee. The rescuer's arms are under the casualty's arms and holding on to the rungs of the ladder.

7. The rescuer will walk down the ladder, alternating the casualty from one knee to the other. They will protect the casualty's face and head by keeping their hands close together on the rungs.

8. The ladder must be heeled at all times when anyone is climbing.

F. LOWERING WITH A LIFE BASKET OR A DOUBLE BOWLINE

This method can be used to raise or lower a casualty or fellow rescuer. It can be used on a conscious or unconscious casualty. Steps for lowering with a life basket are:

1. Tie a life basket or double bowline.

2. Place the casualty in the life basket and secure a tag line on him to keep him off the wall and other obstructions.

3. Place him out of the building and lower to the ground.