TRAINING BULLETIN NUMBER 10
DATE OF ISSUE 8/83
REVISED 6/90

LITTER BASKET (Stokes type)

I. DISCRIPTION OF EQUIPMENT

A. Hose Roller

B. Miller Board

II. BASIC OPERATIONS

A. Hillside Problems

B. Upper Levels of Structures

C. Excavations

Litter Basket (Stokes Type)

I. DESCRIPTION OF EQUIPMENT -

A. The-Stokes type litter basket is an all metal, rigid stretcher equipped with a metal "slideplate" attached to the bottom to facilitate sliding over rough terrain. -

The primary use of litter baskets is to remove injured or trapped persons from locations where other methods of rescue would be impractical. They may be used effectively in conjunction with aerial ladder trucks, heavy utility companies, or helicopters.

Litter baskets are carried on all truck companies and on helicopters when designated as an air ambulance.

B. Bridle

The bridle, provided with each litter basket, consists of four lengths of 1/8 inch steel cable each approximately 4 1/2 feet in length. One end of each cable is attached to a common steel ring. The other four ends are equipped with special safety snaps to permit a quick hook-up to the litter basket.

When used during a hoist operation by a helicopter, a special bridle is provided by the helicopter unit. This bridle can be used in conjunction with all litter baskets.

In use, the safety snaps are either snapped to rings that are permanently attached to the tubular top rail of the basket, or snapped to the top rail itself. Safety snaps must be attached with due consideration given to the security and stability of the basket when hanging free.

C. Lines

Except during helicopter operations, equipment lines, drop lines, or the combination of the two should be connected to the basket, one at each end, to provide stability and a means to control the litter basket. Proper use of guidelines will reduce rocking and swinging of the basket and also serve to guide the basket around obstructions.

The Helicopter Unit uses one 200' "Tagline" to be attached to the head of the litter basket. The tagline has a breakaway segment of velcro which will separate under 80 pounds of pressure.

NOTE: Refer to Training Bulletin #43, page 9, "Lifeline/Rescue Kit", for proper use of the lifeline when used with the aerial ladder and litter basket.

D. Hose Roller

when used in conjunction with aerial ladders, the hose roller shall be attached to the ladder in a secure manner (placing the hose roller over a supported rung and securing it with ladder straps to the next rung back). The end rung shall be avoided to preclude a slack rope slipping over the end of the aerial.

E. Miller Board

The Miller Board is a combination backboard and restraint device used in conjunction with the litter basket. With the use of velcro restraint straps, the Miller Board immobilizes the patient for a safe horizontal or vertical movement.

II. BASIC OPERATIONS

The need for rescue by means of the litter basket may be considered under three general operating conditions:

A. Hillside Problems
B. Upper levels of Structures
C. Excavations

A. Hillside Problems

Objective: To remove injured or trapped persons from canyons, cliffsides, or other sloped areas (generally an aerial ladder truck is not required).

1. Carry or lower litter basket to location of patient.

2. Secure patient to miller board.

3. Load patient and fasten safety straps to secure patient in basket.

4. Connect all four bridle snaps to the head, or foot, of the basket. The nature of injury to patient will determine whether the basket will be pulled head or foot first.

5. Attach lifeline from pulling source to the metal ring of the bridle. Pulling source may be by members or by winch if available.

6. Haul up, or lower, as conditions require.

7. If possible, assist pulling source by having two members on each side, and one member at the foot or head of the basket to guide and assist over obstructions.

8. If the hill is too steep for the above, guide lines should be attached.

B. Upper Levels of Structures

Objective: To remove injured or trapped persons from roofs, towers, balconies, and other elevations using lifeline and hose roller.

1. Spot aerial truck. The most stable spot of the truck is the straight in-line position to the objective so that the ladder may be operated directly over the cab or trailer. If this is not possible, spot with the preferred jackknife for maximum stability for the conditions.

2. Prepare the ladder to accept the hose roller. Attach the hose roller securely to proper rung (reinforced ring of the fly section).

3. Secure end of lifeline to ring of bridle with carabiner and extend line over hose roller to base of ladder.

4. Attach guide line to each end of basket.

5. Operate aerial ladder as conditions require to place basket at desired locations.

6. Lower basket to desired location.

7. Secure patient to miller board.

8. Place patient in basket and secure safety straps.

9. Raise loaded basket until basket is in position to clear obstructions. Hold basket securely in raised position.

10. Reverse aerial operations to return ladder to starting position.

C. Excavations

Objective: To remove injured or trapped persons from excavations, pits, river beds, and other lower elevations.

1. Spot aerial ladder truck for maximum stability.

2. Attach hose roller securely to the proper rung.

3. Secure end of working line to ring of bridle and extend rope over hose roller to the base of ladder.

4. Attach a guide line to each end of the basket.

5. Operate aerial as conditions require to place basket over desired location. Use guide lines to stabilize basket.

6. Lower basket by means of working line from base of ladder

7. Secure patient to miller board.

8. Place patient in basket and secure straps.

9. Raise loaded basket by pulling lifeline over hose roller until basket is clear of pit or excavation.

10. Operate aerial to swing basket to safe area. Lower basket to the ground.

D. Communication

If available, consideration should be given to using a "handi-talkie" at the patient's location. This will permit close cooperation between the aerial operator and person in charge at basket site. Communications should be brief and given directly to receiving unit. If this is not possible, members at the patient's location should indicate by arm signals how the ladder or line is to be moved.

E. Actual Practice (Simulated Rescue)

Perform evolutions in each of the .three types of rescue problems. Load rolls of hose in basket to simulate patient (three sections of 2 1/2" hose weighs approximately 180 pounds).

F. Conclusion

It is evident that some of these operations may make demands on the power supply and the stabilizing devices of the aerial ladder beyond that which has been considered normal in the past.

It is imperative that each Company Commander and Apparatus Operator review the safety factors with regard to the use of ground jacks, spring locks, spotting, extension and other factors affecting stability.

It is important that the Company Commander and other personnel be completely familiar with the limitations and potential of the aerial ladder truck.

The above procedures are recommendations and are not meant to be restrictive. Possibilities for improved operation under, any given condition should always be considered.