

**Tempe Fire Department Policies and Procedures**  
**SKED Stretcher**  
**405.16**  
**Rev 7-31-95**

**PURPOSE**

Provide information to properly use the SKED Stretcher, which is a collapsible stretcher made of hard plastic material designed to provide for a variety of applications based on specific needs, while maintaining lightweight and portability (particularly well suited for use in confined spaces or mountain rescue).

**PROCEDURE**

General inventory of the SKED Stretcher package include:

- 1 Backpack Carrying Case
- 1 SKED with Straps
- 1 Chest Strap
- 4 Nylon Handle Straps
- 2 Nylon Webbing Horizontal Lifting Straps, 3800#
- 1 30' 7/16" Nylon Rope, 7000#
- 1 Tow Strap

**TO UNROLL THE SKED AND LAY IT FLAT**

- 1. Remove the SKED from the pack and place on ground.
- 2. Unfasten the foot straps and stand on the foot end of SKED and unroll to the opposite end.
- 3. Bend the SKED in half and back roll both ends.
- 4. The SKED should now lay flat.

**TO USE THE SKED WITHOUT A BACKBOARD**

- 1. Position the patient with the two grommet holes in the bottom of the SKED at the armpits.
- 2. Use the chest strap to go around the SKED and patient through the two grommets.
- 3. Place the four patient securement straps through the buckles on the other side and tighten.
- 4. Put the two foot straps through the respective grommets and tighten. The patient's feet should be inside the straps (injuries permitting).
- 5. The nylon handle straps can be placed through grommets, with the knot as a stopper, for extra handles besides the four handles attached to the sked.
- 6. When the straps are tightened and the SKED is rolled around the patient it becomes rigid.

**RIGGING FOR HORIZONTAL LIFT/DESCENT**

The two nylon webbing straps with eyelets at each end are used for horizontal lifting or lowering of the SKED. The head strap is marked and is 4" shorter than the foot strap. When the SKED is suspended, the head will be slightly higher than the feet.

1. Insert one end of the head strap through the lift slot at the head end of the SKED.
2. Bring the strap under the SKED and through the lift slot on the opposite side of the SKED. For longer patients, use the slots closer to the head end of the SKED.
3. Repeat this procedure for the foot end with the foot strap and equalize the straps.
4. Attach straps together at the center with a carabiner. Attach load line here.
5. A belay line should be attached to the patient via harness, after connecting to the center carabiner.

### **RIGGING FOR VERTICAL LIFT/DESCENT**

1. Double the 30' nylon rope and tie a figure-8 on a bight (2 loops preferred) in the center.
2. Pass each end of the rope through the grommets at the head end of the SKED with some slack between the figure-8 knot and the head of the stretcher.
3. Lace the rope down both sides of the SKED, outside in, through the grommets and the carrying handles. Keep both sides of the rope even.
4. Pass the rope ends inside out through the foot end grommets and tie a square knot on the outside end of the SKED.
5. Bring the rope ends up and over the foot end of the SKED, through each of the carrying handles and tie with a square knot over the patient's shins. Secure square knot with safety half hitches.

### **USING THE TOW STRAP**

The nylon handle straps can be used for connecting points at the head of the stretcher. Attach the tow strap and use the handles to drag the SKED. The tow strap can also be attached to the backpack that can be worn for extra leverage in towing.

### **USING THE SKED WITH A BACKBOARD**

A backboard fits nicely inside the SKED. Normal C-spine procedures can be used to secure the patient on the backboard before enclosing in the SKED.

In high angle operations a seat harness should be put on the patient that secures them to the backboard and is attached to the belay line (Figure 1). An attendant can be used but must make their own system that attaches to the load and the belay line.

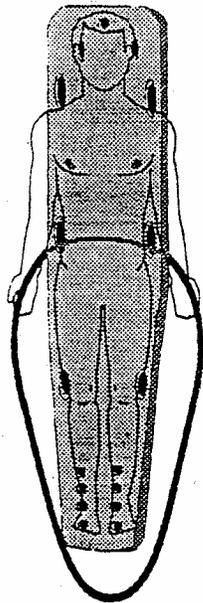
When rigging for vertical operations with a backboard (Figure 2), a double wrap is taken while lacing with the 30' nylon rope at the waist hole of the backboard. **THIS IS VERY IMPORTANT.** This will hold the backboard and will not allow it to slip inside the SKED. All the lacing is tightened before the SKED straps. The nylon rope will not be long enough to tie at the foot end of the SKED and is secured across the shins with a square knot with safety half hitches.

#### **ROLLING UP THE SKED STRETCHER**

1. Lay the SKED flat with all the patient securement straps to the inside of the SKED with the foot straps laid outside.
2. Start at the head end and roll up tightly. Use your knee to keep the SKED from unrolling.
3. Use the foot straps to go around the rolled up SKED and secure them back to their buckles.
4. Place the SKED back in the backpack and the accessories in their pockets.

### One Type of Backboard Harness

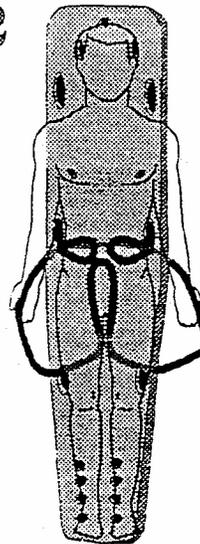
A seat harness may be tied for a patient with possible spinal injuries to allow attachment of an additional safety line. It is necessary that this harness be secured to both the backboard and the injured patient to prevent manipulation of the spine should the safety line be tensioned.



**1**

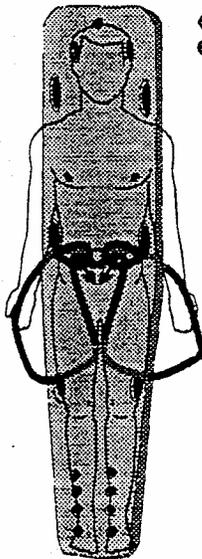
20'-30' of 1" webbing tied in loop placed under backboard at waist holes.

**2**



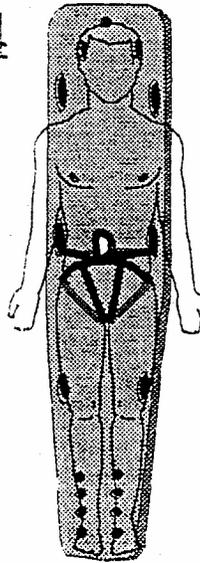
The other end of the loop is brought under patient's legs and up through crotch. A small portion of the webbing under the board is pulled through the waist holes forming small loops.

**3**



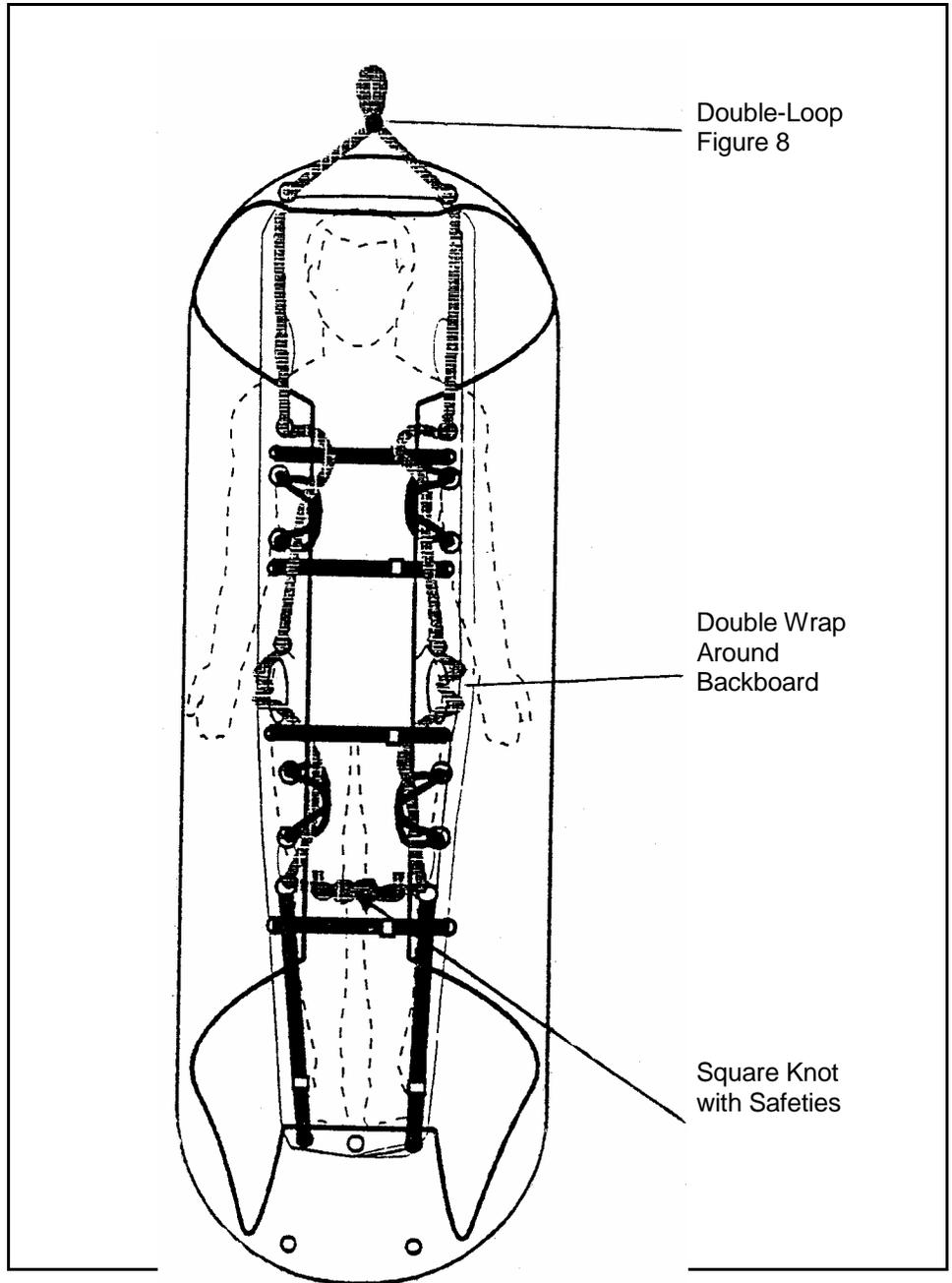
The loop pulled through the crotch is divided and placed through the two waist hole loops.

**4**



The loop ends are pulled tight and tied in a square knot over lower abdomen. Excess loops are wrapped opposite ways around, resulting in a waist strap with carabiner placed through both loops to attach to safety line.

**Figure 1**  
Securing a Harness to the Patient and Backboard



SKED Rigging for a vertical Lift or Lower