

CHAPTER 2

PERSONAL EQUIPMENT

This chapter discusses the types of parachutes, donning the parachutes, and the headgear used in airborne training.

Section I PARACHUTES

The T-10C and MC1-1B/C parachutes are used during static line airborne operations. The T-10C is a nonsteerable canopy, and the MC1-1B/C is a steerable canopy. The MC1-1C is the Standard A steerable canopy and will replace the MC1-1B through normal attrition. The main parachute consists of five major components: the harness assembly, the riser assembly, the deployment bag and static line assembly, the pack tray assembly, and the canopy assembly. The T-10 troop chest reserve parachute is used in conjunction with the main parachute.

2-1. HARNESS ASSEMBLIES

The harness assemblies used with the main canopies are the T-10C and the T-10C modified with triangle links. The modified T-10C is the Standard A harness; it replaces the T-10C harness (Figure 2-1, page 2-2).

a. **Components.** The harness assembly is made of a flexible framework of Type XIII nylon webbing. The components attached to it areas follows:

- (1) Female fitting of the canopy release assembly with a safety clip, cable loop, and latch. Tensile strength of the assembly is 5,000 pounds.
- (2) Canopy release pads permanently attached behind the canopy release assembly.
- (3) Main lift web constructed of Type XIII nylon with a tensile strength of 6,500 pounds.
- (4) Chest strap with an ejector snap with activating lever, ball detent, and opening gate with a tensile strength of 2,500 pounds.
 - An ejector snap pad is attached behind the ejector snap.
 - The quick-fit V-ring has a tensile strength of 2,500 pounds.
 - A webbing retainer is used for stowing excess webbing.

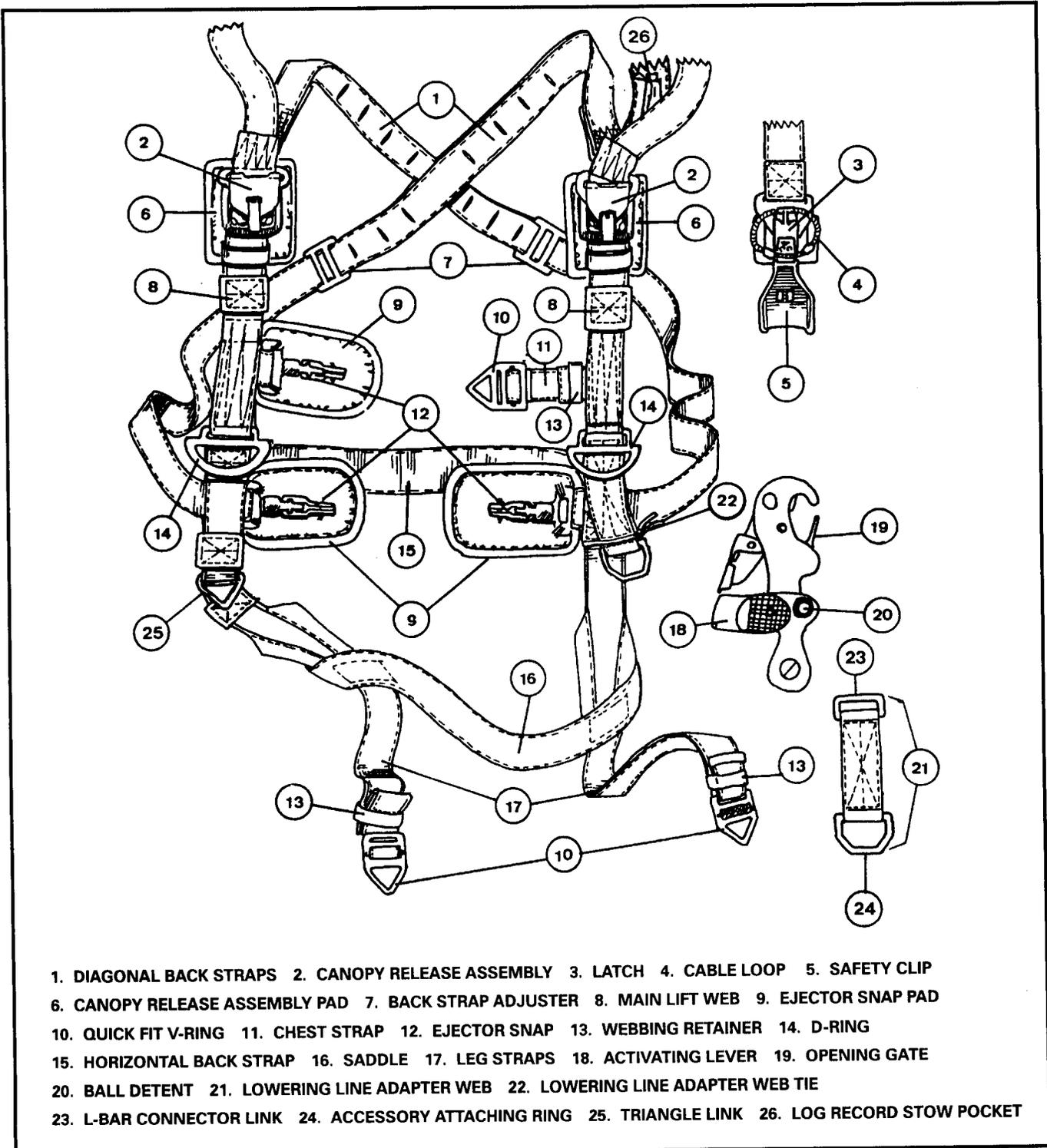


Figure 2-1. T-10C harness assembly and nomenclature.

(5) D-rings used for attaching the T-10 reserve and additional combat equipment, with a tensile strength of 5,000 pounds.

(6) Triangle links sewn into the main lift web of the harness (about 5 ½ inches below the D-rings) for attaching equipment and lowering lines.

(7) Leg straps with an ejector snap with activating lever, ball detent, and opening gate with a tensile strength of 2,500 pounds. The parts of the leg straps (ejector snap pads, quick-fit V-rings, and webbing retainers) are identical to the chest strap.

(8) Saddle (Type XIII nylon) with two attached leg straps.

(9) Diagonal back straps with six sizing channels (S, 1,2,3,4, and L).

(10) Back strap adjusters with attached free-running ends of the horizontal back strap (rolled and sewn).

b. **Adjustment Points.** The harness assembly has five points of adjustment: the chest strap, two leg straps, and two free-running ends of the horizontal back strap.

2-2. RISER ASSEMBLY

The riser assembly on the T-10C consists of the following:

- Two riser assemblies, with a finished length of 30 inches (Type XIII nylon) and a tensile strength of 6,500 pounds. A male fitting canopy release assembly is permanently attached to the center of the webbing. When attached to the canopy, the riser assemblies provide four individual risers.
- Log record stow pocket.
- Connector link loops.
- L-bar connector links.

The riser assembly on the MC 1-1 B/C is identical to the T-10C, but it also has a guide ring retainer strap, a guide ring, and upper and lower control line channels.

2-3. DEPLOYMENT BAG (D-BAG) AND STATIC LINE ASSEMBLY

The D-bag (18 by 12 by 5 inches) is constructed of 8.8-ounce cotton sateen cloth. The static line (Type VIII yellow nylon) is permanently attached to the D-bag, is 15 feet long, and has a tensile strength of 3,600 pounds.

a. **D-Bag.** The D-bag consists of the following:

- Suspension line protector cover with data block.
- Suspension line protector cover tie loop.
- Stow loop panel (used to retain the suspension lines).
- Locking stow loops (two, which keep the D-bag closed until the first two stows are pulled free).

- Connector link tie loops (four).
 - Side flaps (two).
 - Break cord attaching strap pocket.
 - Locking stow panel.
 - Locking stow loop hood.
- b. **Static Line Assembly.** The static line (Figure 2-2) consists of the following:
- Static line sleeve.
 - Pack opening loop.
 - Safety wire and lanyard.
 - Static line snap hook with locking button and sliding sleeve.

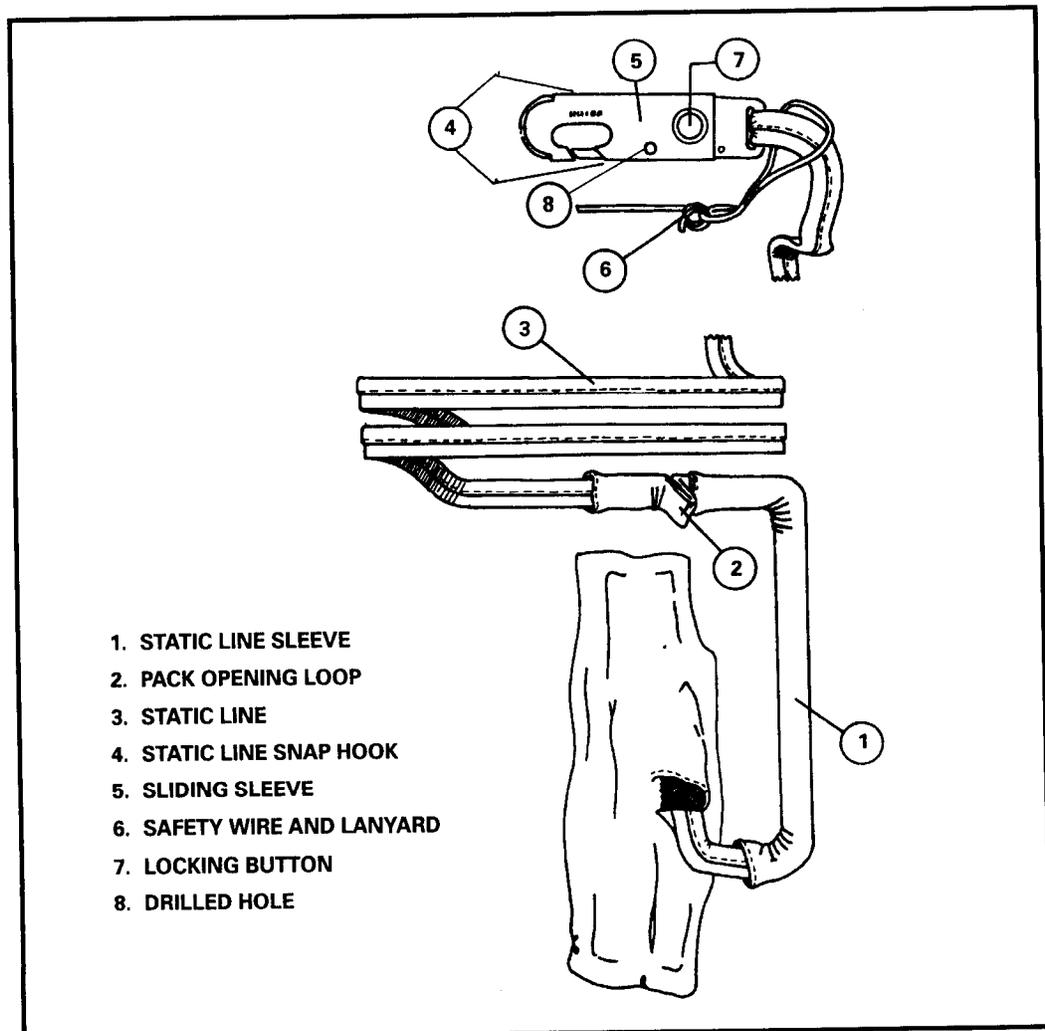


Figure 2-2. Static line and nomenclature.

2-4. PACK TRAY ASSEMBLY

The pack tray assembly (20 by 14 by 5 inches) (Figure 2-3) is constructed of 7.25-ounce nylon duck material and consists of the following:

- Pack closing flaps (four): right and left side flaps, and upper and lower end flaps.
- Pack closing loops (four): right and left side pack closing loops, and upper and lower end pack closing loops.

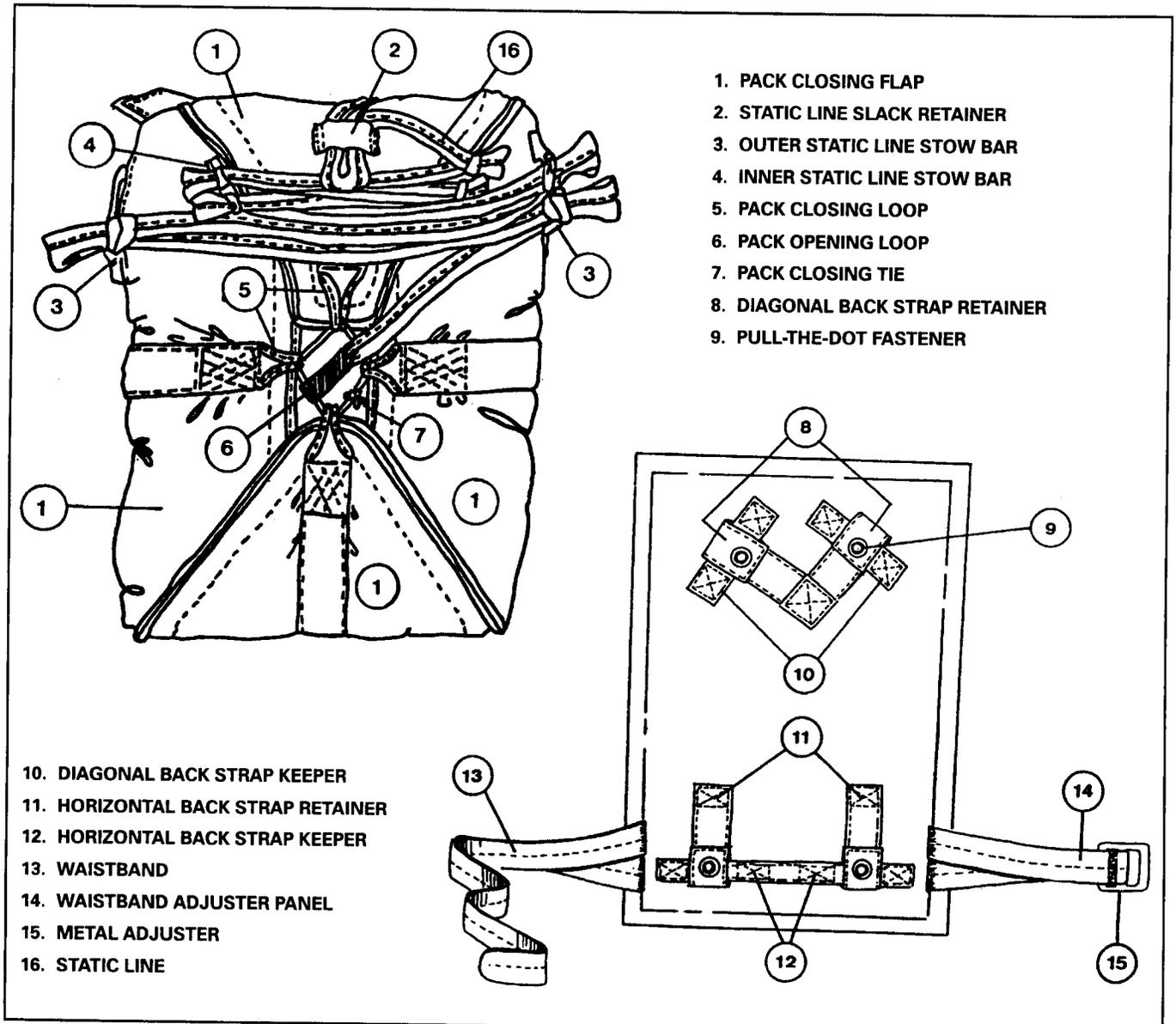


Figure 2-3. T-10 parachute pack tray and nomenclature.

- Static line stow bar.
- Waistband adjuster panel.
- Metal adjuster.
- Waistband (46 inches long).
- Pack closing tie (one turn ¼-inch cotton webbing) tied in a surgeon's knot and a locking knot; the knot is between the 3 and 6 o' clock positions.
- Diagonal back strap retainer.
- Diagonal back strap keeper.
- Horizontal back strap retainer.
- Horizontal back strap keeper.

2-5. CANOPY ASSEMBLY

The T-10C and MC1-1B/C parachutes are static line deployed. The parachute deployment sequence is the same for both types of canopies.

- The parachutist falls to the end of the static line, his body weight breaks the pack closing tie, and the deployment bag is pulled from the pack tray.
- Two connector link ties break and the suspension lines are pulled from the deployment bag.
- Two locking stows disengage and the canopy is pulled from the deployment bag to its full length.
- The break cord tie securing the apex of the canopy to the static line ending loop breaks, and the parachute begins to inflate, retarding the parachutist's rate of descent.

a. **General Characteristics.** Following are characteristics of both T-10C and MC1-1B/C canopies:

(1) **Shape and weight.** Shape is parabolic; weight is between 28 and 31 pounds.

(2) **Rates of descent.** Depending on the jumper's total weight and relative air density, the average rates of descent for the different canopies are as follows: MC1-1B, 18 to 22 feet per second; MC1-1C, 14 to 18 feet per second; and T-10C, 19 to 23 feet per second.

(3) **Diameter.** Nominal diameter is 35 feet (measured 3 feet up from the skirt) and 24.5 feet at the skirt.

(4) **Anti-inversion nets.** The anti-inversion net is sewn 18 inches down on each suspension line and is made of 3 ¾-inch square mesh, knotless, braided nylon.

(4) **Shelf and service life.** Combined shelf life and service life is 16.5 years; service life is 12 years, and shelf life is 4.5 years.

(5) **Repacking.** Both canopies are repacked every 120 days.

(6) **Use.** Both canopies are suitable for airdropping personnel from as high as 10,000 feet MSL.

b. MC1-1B Parachute Design Characteristics. The MC1-1B has an estimated 8.8-second turn rate.

(1) The bridle loop is 3 inches in diameter; it is made of Type VIII nylon with a tensile strength of 3,600 pounds.

(2) The 15 apex vent lines are 19 inches long and made of Type II nylon cord with a tensile strength of 375 pounds. The apex vent lines with centering lines keep the bridle loop in place and the canopy even during deployment.

(3) The apex vent cap has a 3-inch-diameter opening, which reduces oscillation and assists in a positive opening of the canopy.

(4) The upper lateral band is 1-inch tubular nylon with a tensile strength of 4,000 pounds. It is sewn in as reinforcement, since the first 64 inches of the canopy is a high-pressure area.

(5) Each canopy has 30 gores with five sections per gore. Each gore is numbered 1 through 30, and each section is sewn diagonally to prevent rips and holes from spreading throughout the canopy.

(6) The 30 radial seams are 9/16 inch wide and 17 feet 2 7/32 inches long, measured from the upper lateral band to the lower lateral band.

(7) The T-U shaped configuration has 11 gores removed (25 to 5) from the rear (100.4 square feet of canopy), which enables the canopy to turn 360 degrees in 8.8 seconds and gives a forward thrust of 8 knots (9.5 mph), or 14 feet per second.

(8) Two 28-foot-long control lines are attached to a control bridle that in turn is attached to radial seams 5 and 6. They are 6 feet long and attached to seams 25 and 26. They run down and out to the front of the rear set of risers and through the control line channel and control line guide ring. They are attached to a toggle that is a 5/8-inch-diameter hardwood dowel.

(9) The lower lateral band is a 1-inch nylon tape with a tensile strength of 525 pounds.

(10) The 15 pocket bands ensure positive opening of the canopy.

(11) The 30 V-tabs are 9/16 inch wide and are sewn over the suspension lines to the lower lateral band for reinforcement.

(12) The 30 suspension lines are Type II nylon with a tensile strength of 375 pounds. They are 25 feet 6 inches long when measured from the lower lateral band to the L-bar connector link.

c. MC1-1C Parachute Design Characteristics. The MC1-1C canopy has the same basic design as the MC1-1B with the following exceptions:

(1) It has an estimated 7.7-second turn rate.

(2) It is made of nonporous (NOPO) material (0-3 CFM).

- (3) The vent cap is removed.
- (4) The suspension lines are shortened to 22 feet.
- (5) The H-TC modification is a 60-square-foot opening.

d. T-10C Parachute Design Characteristics. The T-10C parachute is designed with the following characteristics:

- (1) The bridle loop is 3 inches in diameter and made of Type VIII cotton or nylon with a tensile strength of 3,600 pounds.
- (2) The 15 apex vent lines are 19 inches long and made of Type II nylon cord with a tensile strength of 375 pounds.
- (3) The two apex centering loops are 9 inches long and made of Type II nylon cord with a tensile strength of 375 pounds.
- (4) The apex vent is 20 inches in diameter and, when the canopy is inflated, the vent expands to 22 inches in diameter.
- (5) The upper lateral band is 1-inch tubular nylon with a tensile strength of 4,000 pounds.
- (6) The 30 gores have five sections each.
- (7) The 30 radial seams are 9/16 inch wide and 17 feet 2 7/32 inches long.
- (8) The lower lateral band is made of 1-inch nylon tape with a tensile strength of 525 pounds.
- (9) The 15 positive opening pocket bands have been lengthened to 11 3/4 inches to provide a more positive opening and a 4.37 foot (overall) increase in the canopy to reduce descent to about 15 feet per second.
- (10) The 30 V-tabs are 9/16 inch wide.
- (11) The 30 suspension lines are 25 feet 6 inches long.

2-6. T-10 TROOP CHEST RESERVE PARACHUTE

The T-10 reserve parachute (used with T-10C and MC1-1B/C) is loaf-shaped when packed, chest-mounted, and manually operated. It weighs about 12 pounds, has a combined shelf life and service life not to exceed 16.5 years, and is 24 feet in diameter. It is repacked every 365 days. It is an emergency-type parachute designed to be activated by the parachutist if the main parachute malfunctions. The reserve parachute consists of four major components: spring-activated pilot parachute assembly, canopy assembly, and pack tray assembly, which includes a rip cord assembly.

a. Pilot Parachute Assembly. The pilot parachute acts as an air anchor to assist the canopy to deploy quickly. It is spring-activated, made of 1.1-ounce ripstop nylon parachute cloth, and is 40 inches in diameter. It is described as follows:

- (1) Octagon-shaped, with reinforcements sewn to the inside of the canopy.
- (2) Four pockets sewn on the inside of the canopy to stow the spring framework.

(3) Eight suspension lines of Type I nylon cord. Each pair of suspension lines is formed by one continuous line that runs through the canopy and is stitched together at the lowest point to form the connector loop. The connector loop is used to attach the pilot parachute to the apex of the reserve by means of a bridle line that is 15 inches long and made of Type III nylon cord with a tensile strength of 550 pounds.

b. **Canopy Assembly.** The canopy assembly is a 24-foot, flat, circular parachute constructed of 1.1-ounce olive drab ripstop nylon parachute cloth. Depending on the jumper's total weight, its rate of descent varies from 15 to 22 feet per second. The canopy general characteristics follow:

- (1) An apex vent, 20 inches in diameter.
- (2) Twelve suspension lines, 57 feet 6 inches long (measured from connector snap to connector snap), made of Type III nylon cord with a tensile strength of 550 pounds. On this parachute, the suspension lines serve three purposes:
 - From the connector snaps that double as connector links, the lines are 20-foot suspension lines.
 - Where the suspension lines go through the radial seams of the canopy, they become canopy lines.
 - Across the apex vent, the canopy lines become apex vent lines until they again go into the upper radial seam; there they again become canopy lines.
- (3) An upper lateral band of 1-inch tubular nylon with a tensile strength of 4,000 pounds.
- (4) A lower lateral band of 1-inch nylon tape with a tensile strength of 525 pounds.
- (5) Twenty-four gores with four sections per gore.
- (6) A 9/16-inch nylon V-tab reinforcement sewn into the lower lateral band of the parachute and wrapped around each suspension line.
- (7) Twenty-four pocket bands.

NOTE: Inside the pack tray is a 10-inch spreader bar. If one reserve connector snap becomes disconnected from one of the harness D-rings, the spreader bar keeps that connector snap attached to the parachute harness. This arrangement enables the reserve to function if a malfunction occurs.

c. **Pack Tray Assembly.** The pack tray is made of 12.29-ounce nylon or 7.25-ounce nylon on a rigid frame (Figure 2-4, page 2-10). It contains the parachute until activation. The pack tray is described as follows:

- (1) Carrying handles (top and left).
- (2) A safety wire and lanyard.
- (3) Four panels (right-end panel, left-end panel, top panel, and bottom panel) with attached eyelets.

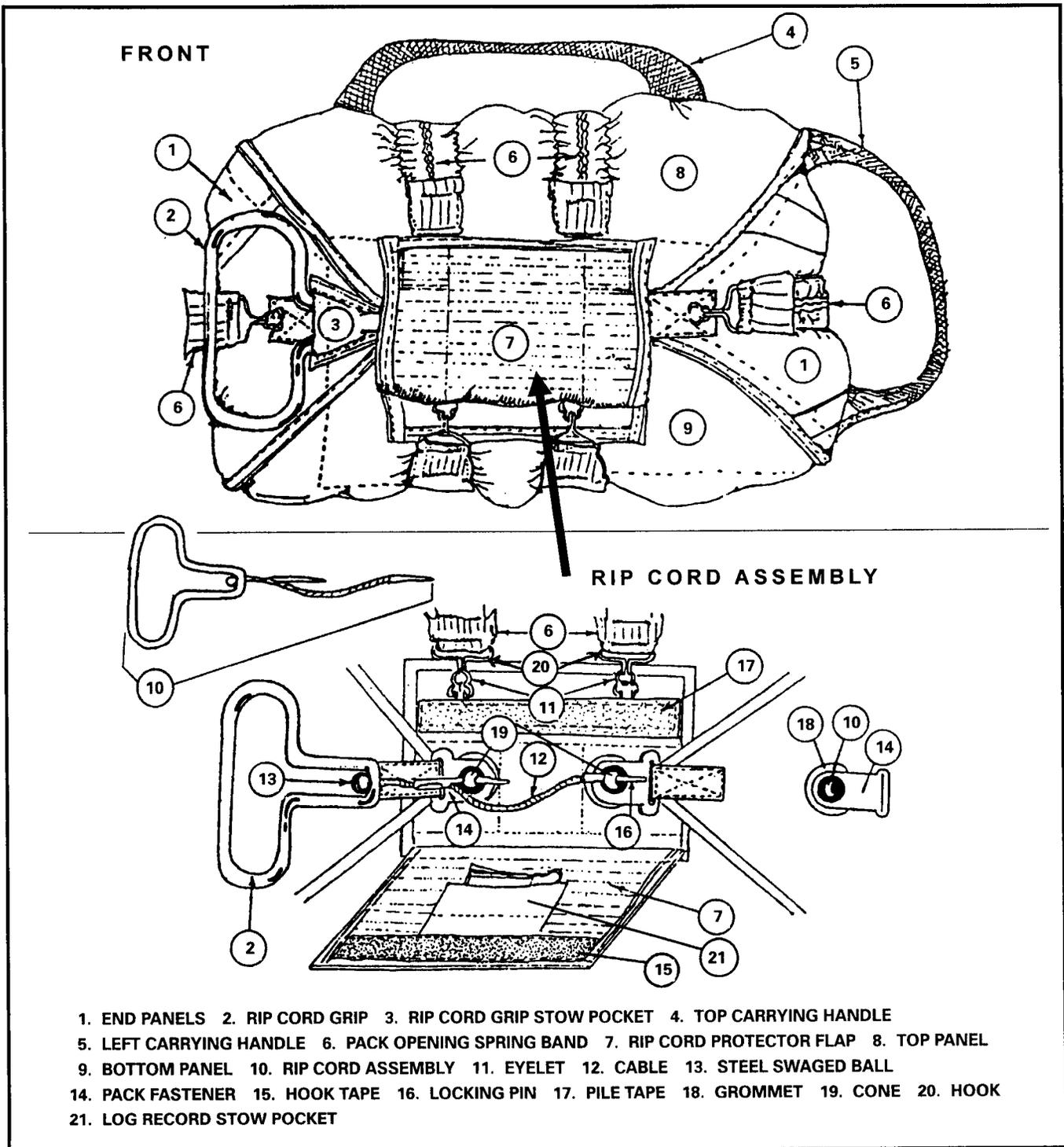


Figure 2-4. T-10 reserve parachute pack tray and nomenclature.

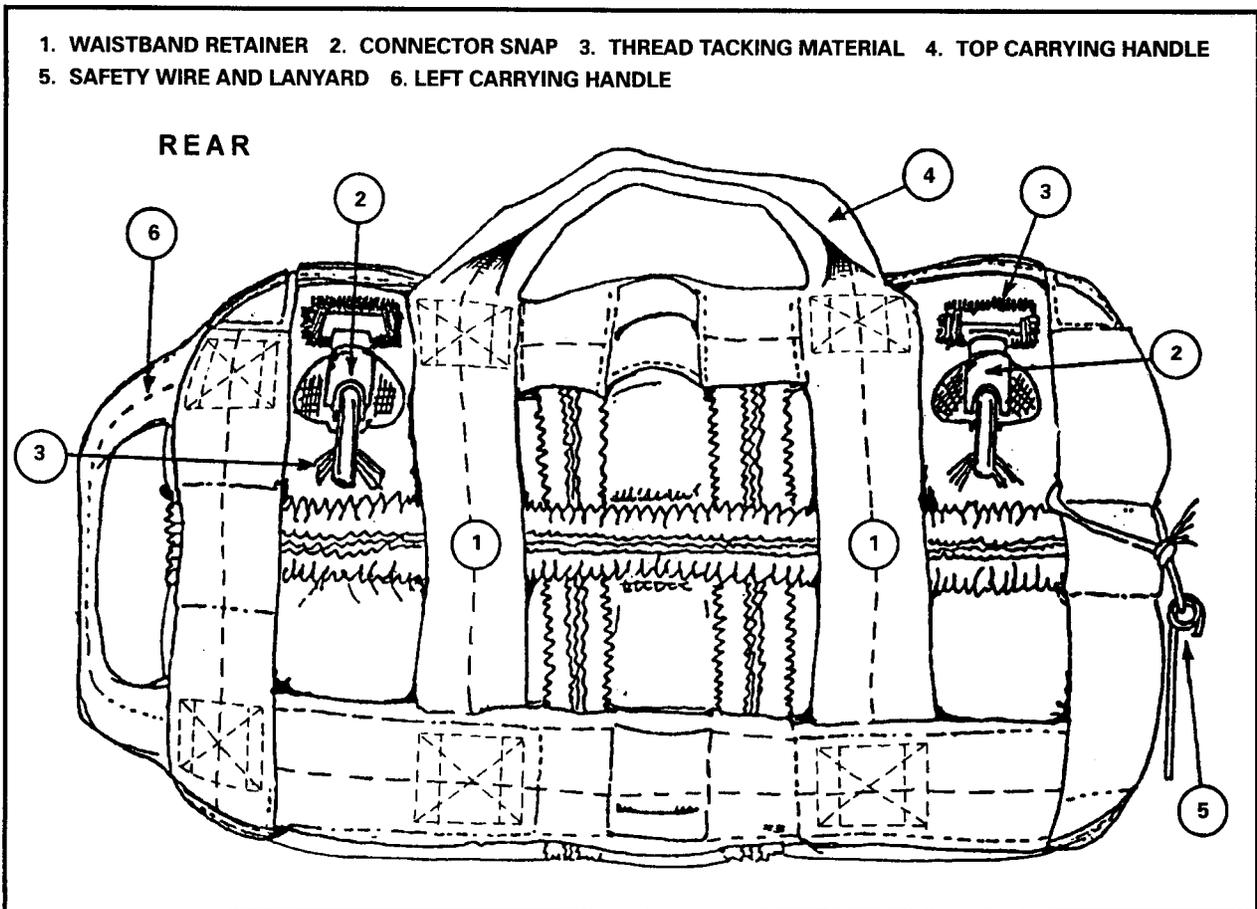


Figure 2-4. T-10 reserve parachute pack tray and nomenclature (continued).

(4) Three pack opening spring bands with six running ends connected to six hooks.

(5) A rip cord grip stow pocket sewn to the right-end panel.

(6) A rip cord protector flap sewn to the bottom panel, with log record stow pocket on the inside of the rip cord protector flap.

(7) Pack fasteners sewn to the left- and right-end panels.

(8) Grommets and cones that keep the pack closed by inserting the locking pins of the rip cord assembly through the cones. (Grommets are on the top panel and cones are on the bottom panel.)

(9) Two connector snaps to attach the reserve to the D-rings.

(10) Two nylon waistband retainers through which the waistband is routed. The waistband retainers consist of a single piece of material sewn into the pack tray, which forms the reserve top carrying handle.

d. **Rip Cord Assembly.** The rip cord assembly is used to activate the reserve parachute and requires about 27 pounds of pull pressure to activate the reserve. It is composed of a cloverleaf-shaped, cadmium-plated, steel rip cord grip attached to a 7-inch-long flexible steel cable by means of a steel swaged ball. The cable has two permanently fastened locking pins (1 ¼ inches long) that preinserted into holes in the pack tray bottom panel cones; they keep the reserve pack tray closed until activation.

2-7. CARE OF THE PARACHUTE BEFORE JUMPING

Troop parachute assemblies and reserves may be issued in kit bags to aid handling and to prevent damage or unintentional opening. Until removed for fitting by parachutists, parachutes and reserves should remain in the kit bags and protected from moisture during storage to prevent mildew. (Kit bags are not waterproof and do not provide adequate protection from wet weather or damp ground.) Parachutes must be stored in weatherproof areas such as adequate storage buildings, trucks, tents, or transport aircraft.

2-8. CARE OF THE PARACHUTE AFTER JUMPING

The parachute is recovered and properly cared for so that supply and maintenance will not be a problem. Upon landing, parachutists activate the canopy release assembly (while lying on their backs to observe other landing parachutists), take off the harness, and place it in the kit bag (Figure 2-5). The specific actions are as follows:

- a. Remove all air items. Place harness in the aviator's kit bag with the smooth side up, leaving the waistband out. Place released riser underneath the harness.
- b. Move to the apex of the canopy, grasp the bridle loop, elongate the parachute into the wind to straighten the canopy and suspension lines, and remove all foreign objects and debris from suspension lines and canopy.
- c. Fold the canopy and suspension lines into a series of figure eights, using both arms. Do not twist the canopy unnecessarily because friction can cause the nylon to fuse.
- d. Lay the canopy on the top of the harness and, before closing the bag fasteners, ensure the bridle loop is on top of the canopy and the waistband is routed through the bridle loop. Close bag fasteners; *do not zip* the bag because the canopy may become entangled in the zipper and damaged. Attach a reserve connector snap to each kit bag handle. Carry the equipment so the reserve parachute is to the (parachutist's) front and the kit bag to the rear. (Reverse the carry when jumping with combat equipment.)

NOTE: If it is necessary to activate both canopy release assemblies upon landing, then fold the canopy in figure eights by itself and place it in the kit bag on top of the harness.

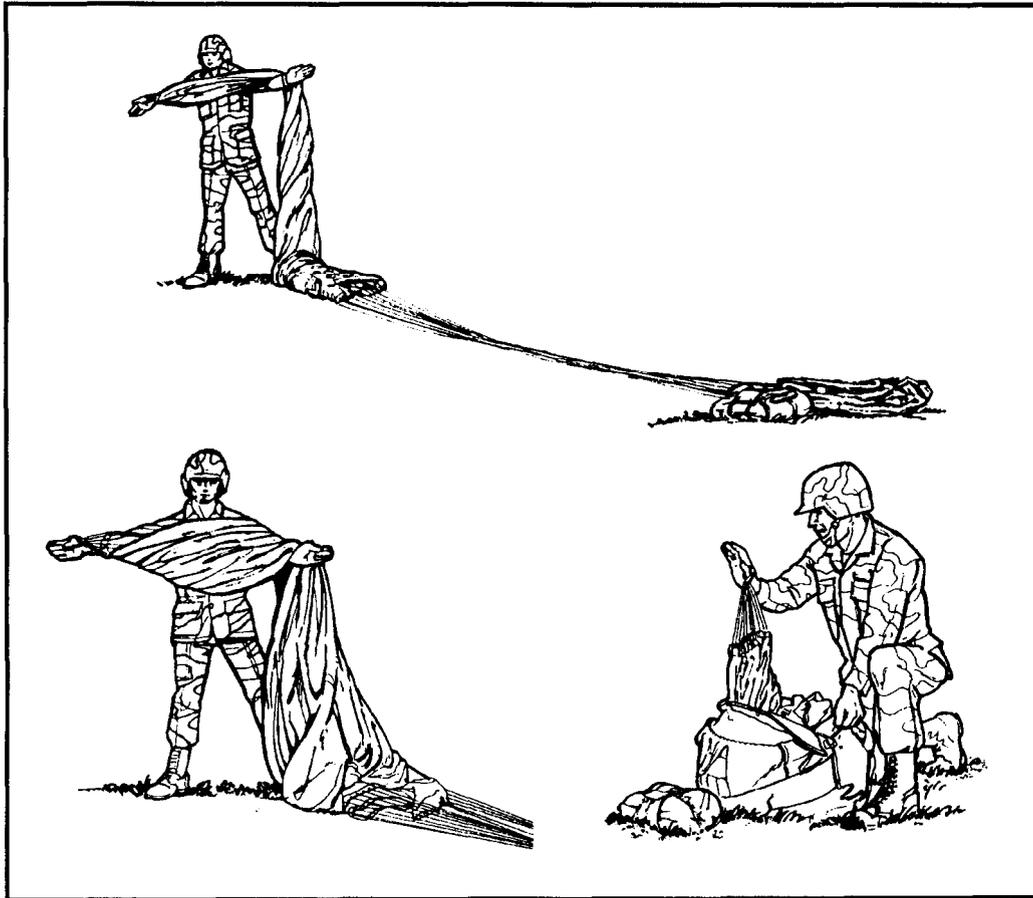


Figure 2-5. Stowing the parachute.

2-9. SHAKEOUT PROCEDURES

The parachute is suspended from a rope passed over a pulley suspended from a ceiling (or from poles) high enough to allow the canopy to clear the surface area.

a. **Main Canopy.** A two-man shakeout team is recommended. Number 1 holds the bridle loop, while number 2 fastens the rope to the loop. Number 2 pulls the rope until the skirt is about 1 foot above number 1's head. They accomplish the rest of the shakeout by taking the following steps:

STEP 1: The team leaves the bulk of the suspension lines and the parachute harness in the kit bag. Number 2 grasps the rope attached to the suspended canopy while number 1 shakes the parachute.

STEP 2: Number 1 grasps two adjacent suspension lines at the lower lateral band, one in each hand, and vigorously shakes the gore, making certain no grass, twigs, insects, or other foreign matter are left on the fabric or tangled in the anti-inversion net.

STEP 3: Number 1 then transfers both suspension lines to his left hand, grasps the suspension lines of the next gore with his right hand, and continues as in step 2, working counterclockwise, until each gore has been shaken and all suspension lines are in his left hand. He must pay particular attention to the anti-inversion net to ensure no foreign material remains. Debris left in the net can result in a total malfunction.

STEP 4: Number 2 begins to slowly pull the canopy up, elongating the suspension lines. Number 1 shakes the suspension lines and dusts them by hand and then turns the kit bag inside out and cleans it thoroughly to ensure no debris is in the bag.

If the parachute is to be placed in the kit bag:

STEP 5: Number 1 puts the harness in the bag.

STEP 6: Number 2 then slowly lowers the parachute while number 1 coils the suspension lines on top of the harness and places the canopy inside the bag.

Or, if the parachute is not to be placed in the kit bag, the following steps are substituted:

STEP 5: Number 1 places the harness on the floor with the ejector snap side up. Number 1 folds the harness neatly on top of the parachute pack.

STEP 6: Number 2 lowers the canopy, coils the suspension lines on the pack, and lays the canopy on top of the lines in accordion folds. The canopy and suspension lines are secured by fastening the waistband to the metal adjuster.

b. **Reserve Parachute.** The shakeout procedure for the reserve parachute (if used) is the same as that for the main canopy. Do the shakeout as soon after jumping as practicable.

c. **Wet Parachute Procedures.** Do not repack parachutes used in wet weather or exposed to moisture after landing until they are hung to dry. Then proceed with shakeout procedures. After the shakeout, place the parachutes in a drying shed.

Section II DONNING THE PARACHUTES

Using the buddy system to properly don and adjust the troop parachute harness provides an additional safety check, prevents delays during JM inspection, and provides minimum discomfort to the parachutist while aboard the aircraft or when receiving the opening shock of the parachute. The buddy system method provides the best combination of speed and accuracy for parachutists to adjust and check each other's parachutes.

2-10. TROOP PARACHUTE HARNESS

Each parachutist first checks the parachute assembly for visible defects.

STEP 1: The parachutist lays the assembly out with the pack tray face down. Then he—

(1) Activates the waistband quick-release and pulls up each of the activating levers on the ejector snaps, releasing the leg straps and the chest strap.

Then, checks for appropriate size and, if necessary—

(2) Lifts the pull-the-dot fasteners on the diagonal back strap retainer and frees the diagonal back straps from the sizing channel.

(3) Sizes the parachute to one of the six sizing channels (S, 1, 2, 3, 4, and L).

(4) Rechannels the diagonal back strap retainer and fastens the pull-the-dot fastener.

(5) Lets out about half of the slack in the horizontal back strap, leg straps, and chest strap; straightens the leg straps and chest strap; and folds the kit bag, leaving the outermost carrying handle extended.

STEP 2: The parachutist (number 1) bends slightly forward at the waist to don the parachute. A second parachutist (number 2) holds the parachute assembly by the main lift web under the canopy release assemblies and places it on the back of number 1.

STEP 3: Number 1 remains bent forward at the waist; number 2 pushes the pack tray high on number 1's back and pulls the saddle well down over the buttocks. As the adjustment is being made, number 1 fastens the chest strap and ensures that the activating lever is closed over the ball detent.

STEP 4: Number 2 calls out "LEFT LEG STRAP," grasps the leg strap by the quick-fit V-ring with one hand, and with his other hand starts from the saddle (with thumb and index finger) and feels the length of the leg strap, removing any twists and turns, and hands the left leg strap to the jumper. Number 1 inserts the left leg strap through (over the bottom and under the top) the kit bag carrying handle and snaps the quick-fit V-ring into the left ejector snap. The right leg strap is passed over the other end of the kit bag (securing it in place), and the quick-fit V-ring is snapped into the right ejector snap. The parachutist ensures that both the left and right activating levers are closed over the ball detents.

STEP 5: Number 1 stands erect and checks to ensure the canopy release assemblies are in the pockets of the shoulders.

STEP 6: Number 2 locates the free-running ends of the horizontal back strap and tightens the harness until number 1 indicates it fits snugly and comfortably. The horizontal back strap is the main point of adjustment for the harness. After final adjustment, number 1 should be able to stand fully erect without straining (Figure 2-6).

STEP 7: Number 1 and number 2 then change positions and repeat steps 1 through 6. When both parachutists have donned their parachute harnesses, they face each other and make a visual inspection. They correct any discrepancies before securing the reserve parachute.

All excess webbing is stowed in webbing retainers.

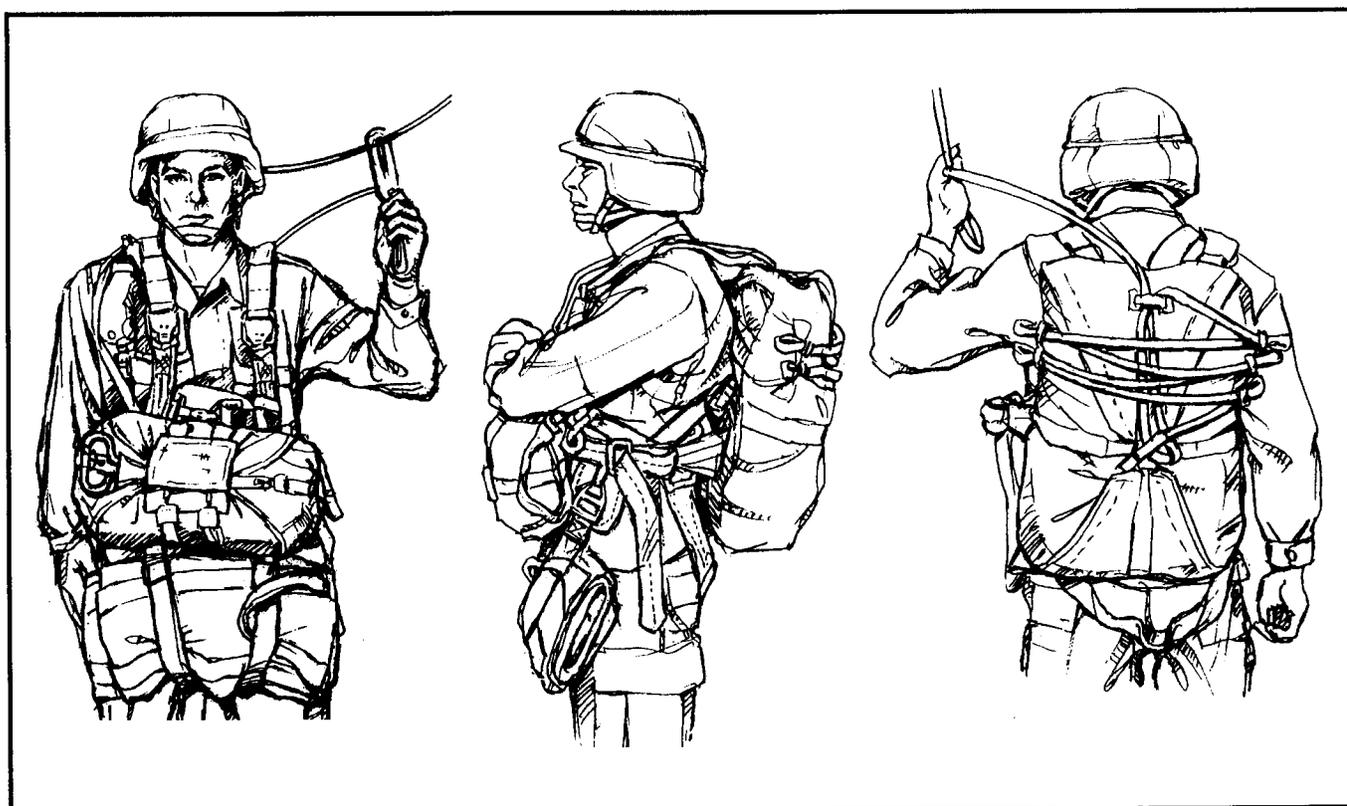


Figure 2-6. Troop parachute harness fitted.

2-11. T-10 RESERVE PARACHUTE

The parachutist attaches the reserve parachute by cradling the parachute in his left arm with the connector snaps up and the rip cord grip in the palm of the left hand.

STEP 1: Using the right hand, start at the pack tray and run out the waistband between the thumb and index finger to remove any twists or turns.

STEP 2: Thread the waistband through the two reserve waistband retainers and fasten the right connector snap to the right D-ring. Insert the safety wire in the right connector snap and then bend the wire down to safety it. Then connect the left connector snap to the left D-ring.

STEP 3: Parachutists help each other in securing the waistband and forming the quick-release. They ensure that all slack is pulled out of the waistband, and the slack in the quick-release loop is about the width of two to three fingers.

NOTE: During the initial periods of airborne training, students receive thorough training in the nomenclature, fitting, and wearing of the parachute assemblies. Demonstration, followed by student participation, is the key to the success of this instruction. Instructors constantly check to ensure students know the proper nomenclature as well as the proper methods of wearing and fitting the parachutes.

Section III PROTECTIVE HEADGEAR

The PASGT helmet with foam parachutist's impact liner (PIL) is used during airborne operations. The helmet must be fitted properly to ensure it stays on the parachutist's head during deployment of the parachute and during the parachute landing fall. The PIL must be fitted according to the directions on the pink instruction card provided with each set of foam pads.

2-12. DESCRIPTION

The PASGT helmet is a laminated, one-piece helmet. It has a low profile, a close fit, and a low center of gravity. The helmet is available in four sizes: extra small, small, medium, and large. It weighs from 2 pounds 8 ounces (extra small) to 3 pounds 4 ounces (large).

a. Parachutist Helmet Modifications. The helmet is modified for airborne operations by adding a parachutist retention strap and a foam impact pad (Figure 2-7, page 2-18). These items provide maximum safety and stability. Also, the PIL is inserted to further protect the jumper's head during PLFs.

NOTE: Be sure the hook-pile tape on the ends of the parachutist retention strap faces the rear of the helmet.

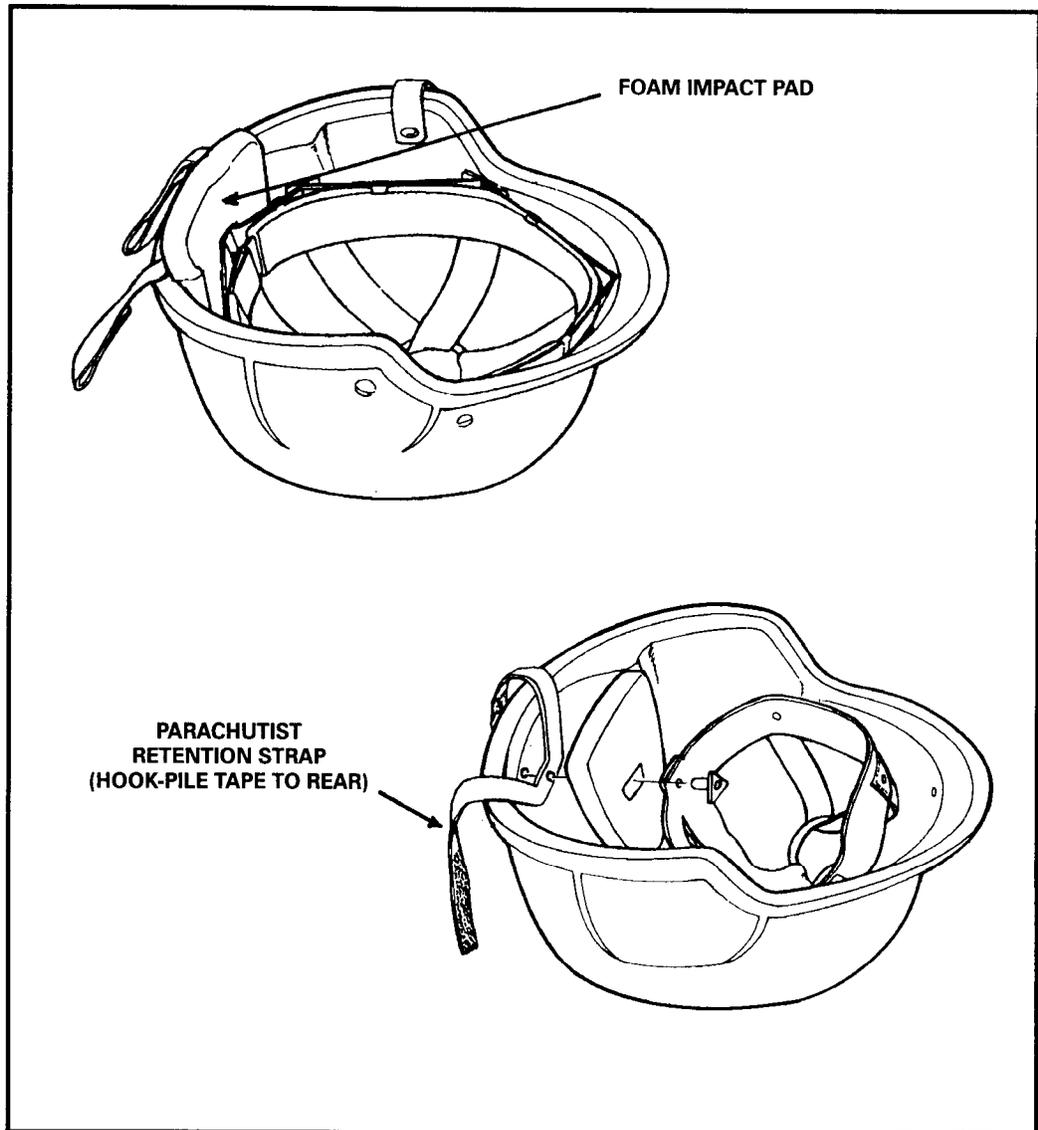


Figure 2-7. PASGT helmet with parachutist retention strap and foam impact pad.

b. **Camouflage Cover.** A camouflage cover (Figure 2-8) is secured to the helmet by placing the cover over the helmet and threading both sides of the unfastened chin strap through the corresponding slits in the cover. The two rear attachment tabs of the cover are tucked between the cover and the helmet. The two ends of the parachutist retention strap are threaded through the corresponding slits in the rear of the cover. The four remaining attachment tabs are fastened around the nylon webbing of the suspension band with drawstring and adjustable tab.

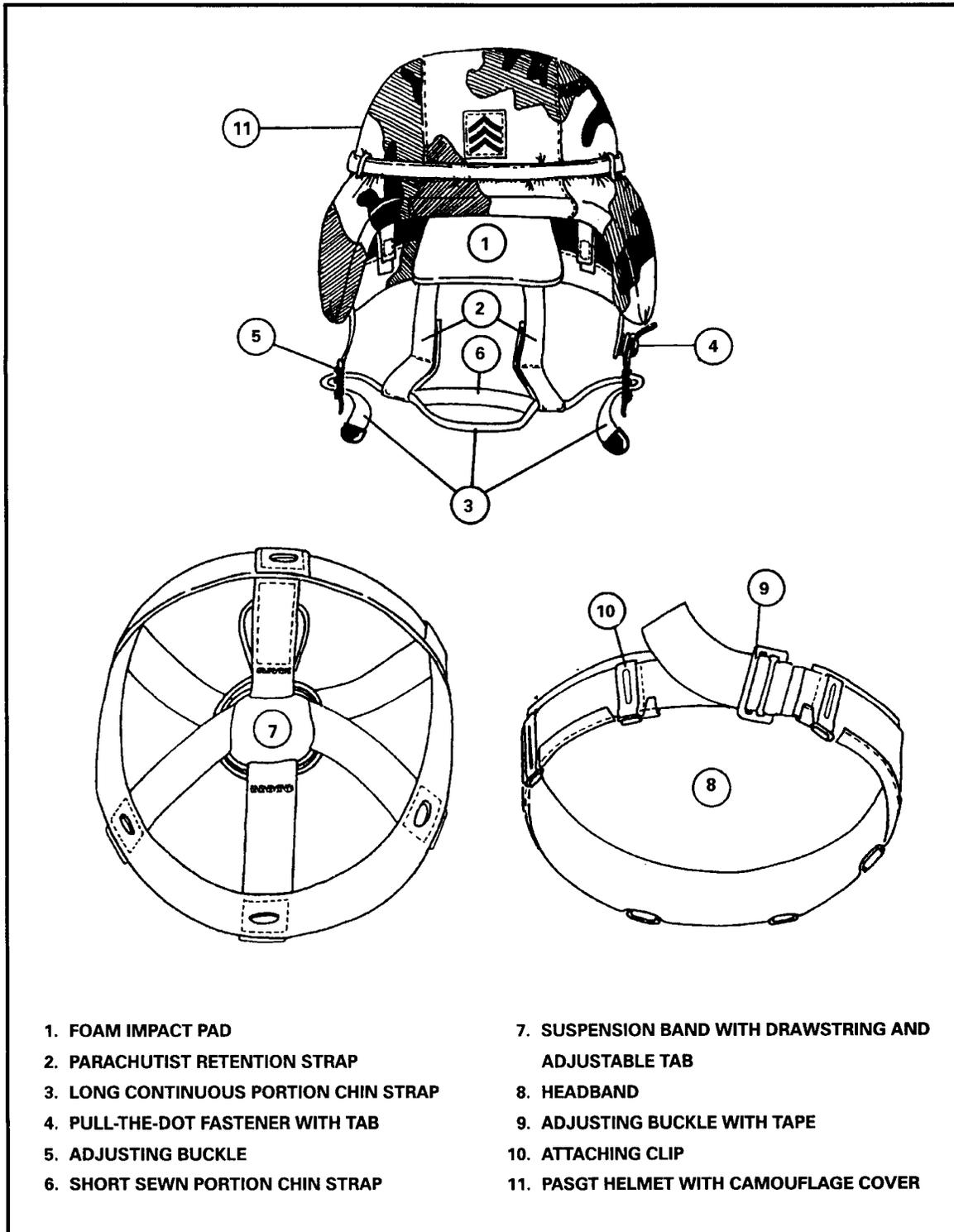


Figure 2-8. PASGT helmet and nomenclature.

c. **Installation of Parachute Impact Liner.** The foam PIL comes in a preformed block of liners perforated for easy installation. The PIL can be placed in and removed from the helmet without removal of the retention strap, foam impact pad, chin strap, cover retaining straps, camouflage cover, or suspension band with drawstring and adjustable tab. The PIL installation instructions are as follows:

- (1) Separate the three portions of the foam PIL.
- (2) Size the PIL at the perforations according to your helmet size (Figure 2-9).

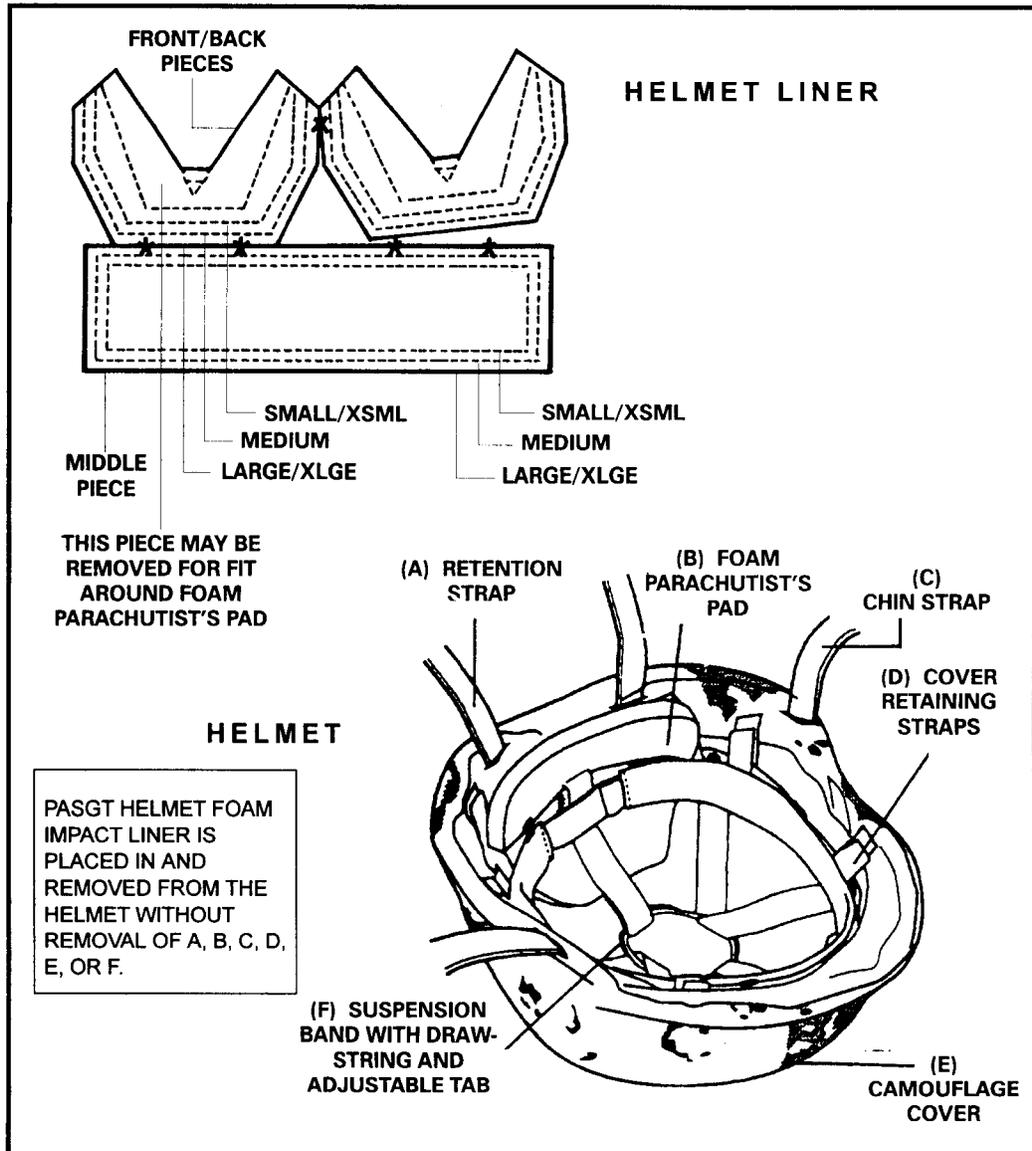


Figure 2-9. PASGT helmet foam parachute impact liner.

(3) Place the insert portions into the helmet so that the front and back pieces are located under both the foam impact pad and the suspension band with drawstring and adjustable tab (Figure 2-10).

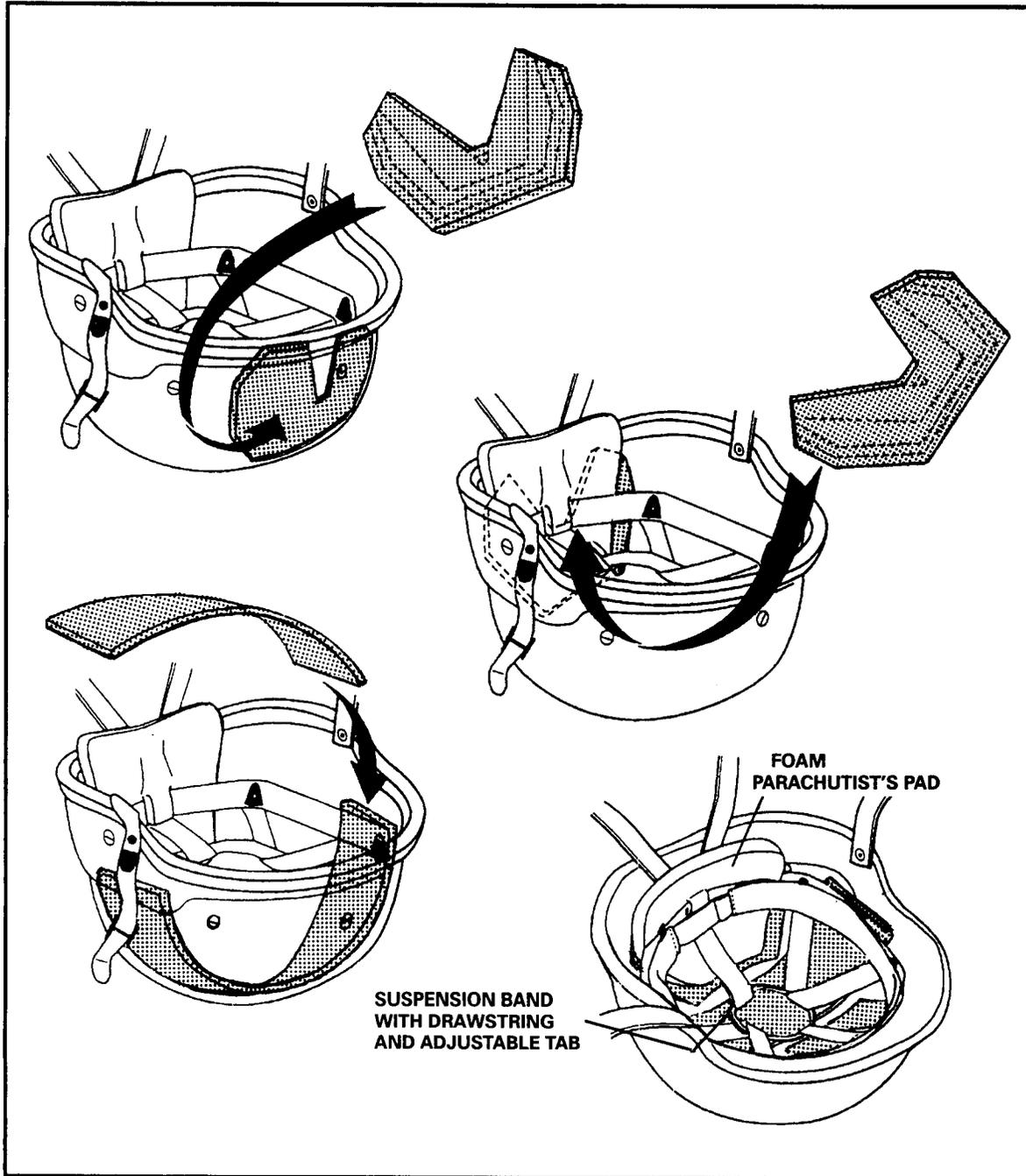


Figure 2-10. Installation of PIL.

2-13. DONNING THE HELMET

The helmet is placed on the head to make any comfort adjustments. The chin strap is fastened and the chin cup is adjusted to fit snugly. Then, each end of the parachutist retention strap is placed alongside the face and wrapped around the chin strap, and its free-running end (below the adjusting buckle) is pulled tight and fastened to itself with the hook-pile tape attachment.

Section IV PARACHUTIST ANKLE BRACE (PAB)

The parachutist ankle brace stabilizes the jumper's ankle during PLFs and reduces the potential for ankle injury. The PAB, which is worn outside the combat boot, consists of sidewalls that extend vertically to encircle the ankle and the lower leg. The side and back portions are connected by a U-shaped support that fits over the boot heel. The support has a hook-pile strap system that attaches the brace to the leg and boot. The PAB is lined with a three-section aircell to cushion the lower leg.

2-14. OBTAINING THE PARACHUTIST ANKLE BRACE

The unit orders the PAB or the heel strap replacement kit directly from AIRCAST, P.O. Box 709, Summit, NJ 07902-0709, commercial 1-800-526-8785. All sizes are based on men's shoe sizes. The size codes for ordering are small, less than man's size 8, 02G; medium, man's sizes 8 through 11, 02H; or large, larger than man's size 11, 02I. European sizes are small, less than 42; medium, 42 through 45; and large, larger than 45. The cost is about \$60 per pair.

NOTE: The PAB must be worn using boots with a standard heel. When worn with boots with flat or rippled soles, the PAB tends to slip and does not provide the proper support for the jumper's ankles.

2-15. INSPECTING THE PARACHUTIST ANKLE BRACE

Both jumpmaster and parachutist inspect the parachute ankle brace for serviceability as follows:

a. **Inspection.** Parachute ankle braces are inspected by examining the PAB cushion, the upper and lower leg straps, and the heel strap.

(1) If the leg cushion is missing, the PAB is unserviceable. If the cushion is torn, the jumpmaster decides if the PAB is serviceable.

(2) If the hook portion of the hook-pile tape is missing from the leg straps, the PAB is unserviceable and must be replaced.

(3) If the heel strap is unserviceable, it can be replaced by the following method.

b. **Heel Strap Replacement.** If the PAB is unserviceable because of a worn or torn heel strap, the heel strap is replaced as follows:

(1) Use a flat-blade screwdriver to remove the screw that secures the heel strap to the brace. Save the screw from the folded tab on the heel strap.

(2) Unthread and remove the heel strap from the buckle on the opposite side of the brace.

(3) Fasten the hook-pile tab to the brace.

NOTE: Ensure the new heel strap size corresponds to the brace size (small, medium, or large).

(4) Flip the brace over so the heel strap buckle is facing up. Thread the heel strap through the buckle top slot and pull through the slack. Loop the strap through the bottom slot and pull until snug.

(5) Flip the brace back over, remove the hook-pile tab to expose the screw hole, fold the strap end over, line up the screw holes, insert the screw through the strap, and refasten the screw to the brace.

2-16. DONNING THE PARACHUTIST ANKLE BRACE

To reduce the potential for jumper ankle injury, the parachutist ankle brace must be adjusted to fit snugly around the foot, ankle, and lower leg. The PAB is adjusted to the jumper's foot as follows:

a. Loosen the two leg straps and the heel strap, step into the PAB with the heel strap under the boot's instep (the area in front of the boot heel), and tighten the heel strap and then the two leg straps. The bottom of the shell should align with the top of the sole.

b. Fasten the leg straps using only the outer portion of the leg strap buckle. If both inner and outer portions of the buckle are used, the PAB could be difficult to remove in a tactical situation.

NOTE: The PAB is designed so the jumper can run short distances while wearing the PAB if necessary due to the tactical situation.

2-17. DOFFING THE PARACHUTE ANKLE BRACE

The parachutist ankle brace is removed by loosening the leg straps and pulling the PAB off the leg and foot. The PAB is an air item and must be retained by the jumper for use during subsequent jumps.