#### PARA-FLITE, INCORPORATED

# EOS™ HARNESS/CONTAINER RESERVE PACKING INSTRUCTIONS

#### WARNING:

The Eos harness/container system is designed and equipped to be compatible with square (or "ram-air") reserves only.

DO NOT pack a conventional (round) reserve into the Eos.

Because square reserves are radically different from conventional (round) reserves, it is absolutely essential that riggers be specifically trained before packing, assembling, repairing and/or inspecting them.

FAR Part 65.129 "Performance Standards" states that:

"No certificated parachute rigger may:

- (e) Pack, maintain, or alter a parachute in any manner that deviates from procedures approved by the Administrator or the manufacturer of the parachute; or
- (f) Exercise the privileges of his certificates and type rating unless he understands the current manufacturer's instructions for the operation involved."

Further, PARA-FLITE, INC. states that:

Prior to packing an EOS HARNESS/CONTAINER system, an FAA Senior or Master Rigger must attend a ram-air reserve training course conducted by a qualified individual.

Anyone who circumvents PARA-FLITE, INC. instructions regarding attendance of such a course, or by packing a round reserve into an Eos harness/container system, is in violation of Part 65.129 and is therefore performing an illegal procedure.

**JULY 1991** 



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- A ...

## WARNING

1. TRAINING AND/OR EXPERIENCE ARE REQUIRED TO LOWER THE RISK OF SERIOUS INJURY OR DEATH.

NEVER USE THIS EQUIPMENT UNLESS YOU HAVE:

A. READ THIS WARNING LABEL AND COMPLETED A "CONTROLLED PROGRAM OF INSTRUCTION" IN THE USE OF THIS PARACHUTE ASSEMBLY.

- OR -

- B. READ THIS WARNING LABEL AND ALL APPROPRIATE OWNERS/FLIGHT MANUALS. PACKING INSTRUCTIONS AND COMPLETED AT LEAST 100 RAM AIR PARACHUTE JUMPS.
- 2. LOWER THE RISK OF DEATH, SERIOUS INJURY, CANOPY DAMAGE AND HARD OPENINGS BY NEVER EXCEEDING THE LIMITS SHOWN BELOW (THE LOWEST LIMIT OF ANY COMPONENT APPLIES TO THE ENTIRE ASSEMBLY):

	HARNESS/CONT.	MAIN	RESERVE
MAXIMUM DEPLOYMENT SPEED	150 KNOTS	ктѕ	ктѕ
MAXIMUM GROSS WEIGHT (JUMPER + CLOTHING+ EQUIPMENT)	115KG (254 LBS.)	LBS.	LBS.
MANUFACTURER	PARA-FLITE, INC.		
MODEL			

ATTENTION RIGGER: FILL IN CANOPY DATA WITH WATERPROOF INK. CHANGE DATA ON LABEL IF A DIFFERENT CANOPY IS INSTALLED.

#### EOS™ HARNESS/CONTAINER ASSEMBLY

PART NO.	SERIAL NO.		DATE
WITH SWIFT PLUS	TSO-C23C, CATEGOR 145 AND 225 RESER MBLY WAS TESTED	IVE CANOPIES.	THIS SIZE HARNESS/
CANOPY	APPRO	X. VOL.	(cu. in.)

PARA FLITE Incorporated

5800 Magnolia Avenue Pennsauken, New Jersey 08109-1399 U.S.A.

REMOVAL OF THIS LABEL VOIDS ALL WARRANTIES AND THE TSO

#### EOS HARNESS/CONTAINER COMPATIBILITY

According to FAR Part 65, as a rigger you are responsible for the airworthiness of any parachute system you assemble or pack. If you are assembling an Eos harness/container with a reserve parachute not listed below, you must first ascertain that the item you are substituting is compatible with the Eos. If you are not sure about the compatibility of a reserve canopy with the Eos, contact the manufacturer of that canopy.

NOTE: The instructions in this manual are for the Swift Plus reserves, although they apply in general to most ram-air reserves. For further information about the specific canopy you are installing or packing, refer to the packing instructions and owner's manuals which came with that canopy or contact the manufacturer of the canopy.

#### **EOS PART NUMBERS**

The Eos part number identifies the main and reserve canopy sizes which are compatible with the specific Eos harness/container system. The Eos part number is of the form

#### 817ABC

where the letter "A" gives the reserve canopy size group, the letter "B" gives the main canopy size group, and the letter "C" specifies the particular hardware configuration of the system. Compatibility of reserve canopies with each reserve size group is given below. For further information on main canopy size compatibility and hardware configurations, see the Eos Owner's Manual.

#### **CANOPIES**

Para-Flite, Inc. tested and TSO'd the Eos harness/container system with the Swift Plus 145 and Swift Plus 225 reserves, using the packing method in these instructions. Size compatibility is as follows:

- Eos Group One reserve containers (with part numbers of the form 817<u>1</u>BC) are compatible with the Swift Plus 145 Reserve (PFI P/N 828100), which has a pack volume of approximately 330 cubic inches.
- Eos Group Four reserve containers (with part numbers of the form 8174BC) are compatible with the Swift Plus 225 Reserve (PFI P/N 828000), which has a pack volume of approximately 480 cubic inches.

Para-Flite, Inc. has also determined, through drop tests and other tests from AS8015A, that the Swift Plus 175 Reserve (PFI P/N 827400, formerly identified as the Swift Plus Reserve, with a pack volume of approximately 385 cubic inches) is compatible with the Eos Group Two reserve containers (with part numbers of the form 8172BC) using the packing method in these instructions.

#### OTHER COMPONENTS

Para-Flite, Inc. has tested and TSO'd the Eos harness/container system with the accessory reserve system components listed below. Because the Eos depends upon the interaction of all these components for its proper functioning, the items listed below must be used. Except as noted, substitution of non-PFI components is strictly forbidden.

Note that in the reserve deployment system part number, 8165AB-0, both of the digits represented by "AB" must match the similar digits in the Eos part number, 817ABC.

#### EOS COMPONENTS

Component	Part Number	
Reserve Ripcord	816313	
Reserve Deployment System (composed of the following)	8165AB-0	
Reserve Pilotchute	816208	
Reserve Deployment Bag and Bridle	8165AB-1	
Reserve Steering Toggles (Red)	801239	
Reserve Closing Loop*	816341	
Reserve Elastic Closing Loop	811343	
Safety-Stow Loop	801317	
Reserve Static Line**	816321	

<sup>\*</sup> This item may be manufactured in the field using PFI-supplied materials, to the specifications contained in this set of packing instructions.

<sup>&</sup>quot; Installation and use of the reserve static line (RSL) is optional.

#### MAINTENANCE AND REPAIRS

As a Senior or Master Rigger, you may maintain and repair this harness/container system and its components. A Senior Rigger is allowed to perform only minor repairs. A minor repair is a repair that, if improperly done, does not adversely affect the strength or performance of the system; replacing frayed stitching on binding tape or patching a small hole in the container fabric are examples of minor repairs. A Senior Rigger may also repair and maintain (but not modify) the reserve deployment bag, bridle and pilotchute assembly.

A Master Rigger's license is required to perform major repairs. These are repairs which, if improperly done, might appreciably affect structural strength or performance. Repair or replacement of 5-cord harness stitching or replacement of a reserve steering line guide ring are examples of major repairs.

Any damage which requires the replacement of an entire flap on the container or replacement of harness webbing must be repaired by PARA-FLITE, INC.

NOTE: You may repair the reserve container and the harness portions of this harness/container system, BUT YOU MAY NOT ALTER THEM IN ANY FASHION. All repairs must be done with PARA-FLITE, INC. specified materials.

#### ASSEMBLY PROCEDURE.

As a rigger, you must be able to determine whether or not a reserve parachute is compatible with the Eos harness/container system (see the preceeding pages for further information). You must also be familiar with the assembly and Rigger's Packing Checklist (printed below in these instructions) in order to assure maximum performance of the system.

#### RIGGER'S TOOLS

Para-Flite strongly recommends the use of the tools listed below: packing the Eos harness/container is easy when they are used, while it may be more difficult to accomplish without them. All are inexpensive to buy or make, and are readily available.

- Molar Strap: For controlling the "molar" folded canopy prior to its insertion in the reserve deployment bag. Sew a plastic buckle to one end of a three or four foot length of brightly-colored inch-and-a-half Type 4 nylon tape; the cut ends of the tape should not be sharp, if they are seared.
- Pilotchute Threading Rod: For threading the pullup cord through the pilotchute. A new, clean gun cleaning rod at least 30 inches long works very well; a large caliber is best, for easy insertion of the pullup cord ends.
- Slotted Plate: For applying pressure to the container when pulling the closing loop through the container grommets. This tool can be made from a 6-inch by 12-inch aluminum plate, one-quarter inch thick, with a half-inch wide slot cut into one long side. Make sure all edges are smooth.
- Velcro Tab: For covering the Velcro hook on the reserve deployment bag linestow pouch while stowing the suspension lines, to prevent snagging the lines. Sew four or five inches of inch-wide Velcro pile to a long, brightly-colored piece of one-inch Type 3 or Type 4 tape to make one; two are required.

Para-Flite also suggests that you use a checklist to track your tools during packing; a sample is provided below. Copy the list and place it in a plastic sheet cover. A film marker or grease pencil can be used for checkoffs.

#### RIGGING TOOLS CHECKLIST

Tool	Check Out	Check In
Pullup Cord (2)		
Velcro Tab (2)		
Molar Strap		
Pilotchute Threading Rod		1/-
Slotted Plate		1
Packing Paddle		
Temporary Pin		
Tacking Needle		
3/8-inch (9 mm) Open End Wrench		

#### RIGGER PACKING CHECKLIST

#### CANOPY:

- 1. Check the connector links for proper tightness.
  - a. With a 3/8 inch open end wrench, loosen the locking barrel.
  - b. Tighten the locking barrel to finger tightness.
  - c. With a 3/8 inch open end wrench, tighten the locking barrel 1/4 turn.
  - d. Place the slider bumper ("link protector") over the link and secure it.
- Check the condition of the fingertrapped loops and locking loops for imperfections and wear.
- While checking for proper line continuity, also check the lines for broken strands or damage of any kind.
- 4. Check all bartacks and suspension line attachment points.
- 5. Inspect the canopy for damage and wear.
- Inspect the slider.
  - a. Check the slider grommets for damage.
  - b. Check the fabric and tapes for wear and/or damage.

#### **DEPLOYMENT SYSTEM**

- 1. Check the bag (including the Safety-Stow) for wear and/or damage.
- 2. Check the bridle (including assistor pockets) for wear and/or damage.
- 3. Check the pilot chute for wear and/or damage.

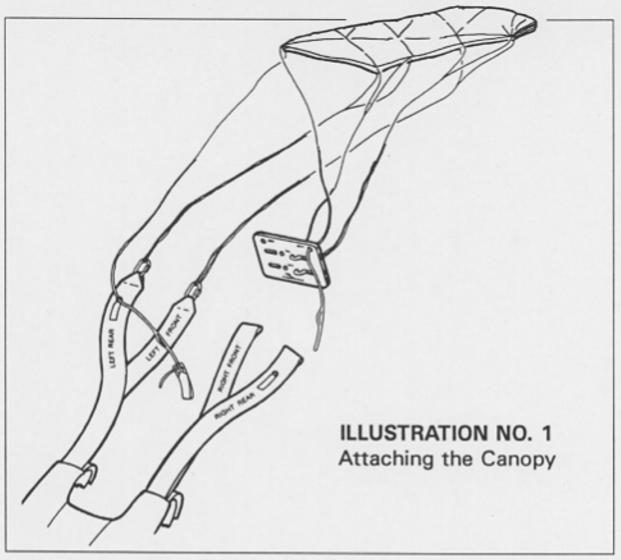
#### HARNESS/CONTAINER

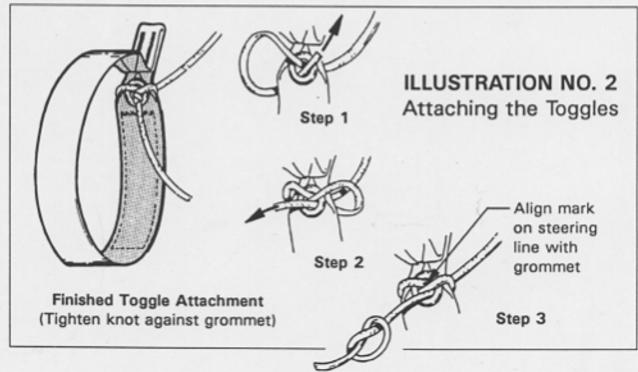
- Inspect the harness.
  - a. Check the harness webbing and stitching for wear and/or damage.
  - b. Check the hardware for wear and/or damage.
- 2. Inspect the containers.
  - a. Check the container fabric, binding and stitching for wear and/or damage.
  - b. Check the grommets for wear and/or damage.
  - Check the ripcord and 3-Ring release housings for wear and/or damage.
- 3. Check the locking loops (nylon, elastic and spectra) for wear and/or damage.
- 4. Check the ripcord and 3-Ring release handle for wear and/or damage.

#### RISER ASSEMBLY INSTRUCTIONS

NOTE: The following instructions are written specifically for the Para-Flite, Inc. Swift Plus Reserve parachutes. These are supplied on a card to preserve the correct riser and steering line sequence. When installing other manufacturer's reserve canopies, refer also to their instructions and/or to standard rigging practice to supplement the instructions below.

- Lay the canopy out with its left side on the ground. Use Illustration #1 as a guide to transfer the links DIRECTLY to the risers in the following order; left rear, left front, right rear, right front.
- 2. Tighten the connector links finger-tight, and with a 3/8 inch (9 mm) open end wrench, tighten an additional quarter (1/4) turn. At this point, check to see whether any link threads are visible next to the connector link "lip". If two or more threads are visible, tighten the barrel nut further until all but one thread is hidden, taking care not to strip or damage the threads. Press the slider bumpers down over the connector links, until the barrel is covered.
- 3. TIE OFF the steering lines to the toggles as shown in Illustration #2. Be certain you have threaded the steering lines through the guide rings on the riser. Ensure that the canopy's full-flight setting conforms to the manufacturer's specification. DO NOT CUT OFF excess steering line.
- After the links and toggles are assembled, make a full line continuity check to be certain the canopy is assembled correctly.





### PACKING INSTRUCTIONS EOS HARNESS/CONTAINER SYSTEM

The following instructions are written specifically for the Swift Plus Reserve canopies. If you have questions about another manufacturer's reserve parachute you are installing into an Eos (see *Eos Harness/Container Compatibility*, page 1), contact the canopy manufacturer.

NOTE: The Federal Aviation Administration's Advisory Circular 105-2C (dated 1-2-91), Paragraph 11a, states that the container manufacturer's instructions take precedence over the canopy manufacturer's, if there is a conflict between the two.

#### OVERALL LAYOUT

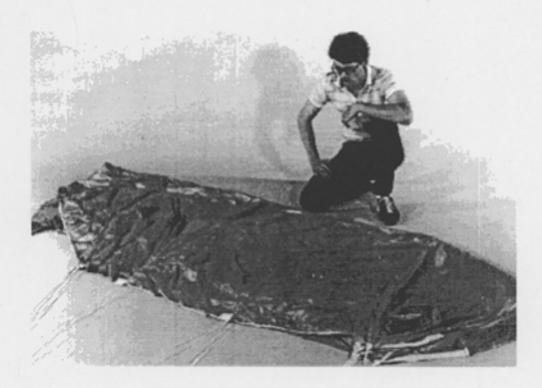
STEP 1

Figure A



STEP 2 Figure A





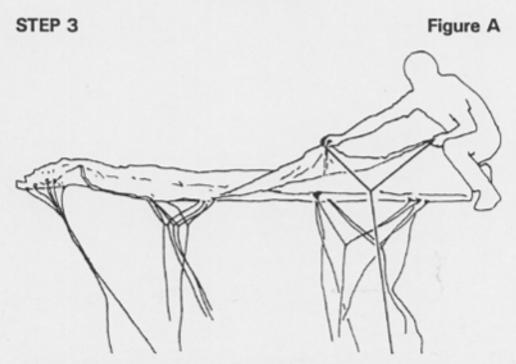
Start by grasping the canopy by the top surface high points at the leading edge. With the high points in your hand, flip the canopy and lay it down with either the left or right side on the packing surface. (The photos were taken with the left side down.)

STEP 2 Figure B



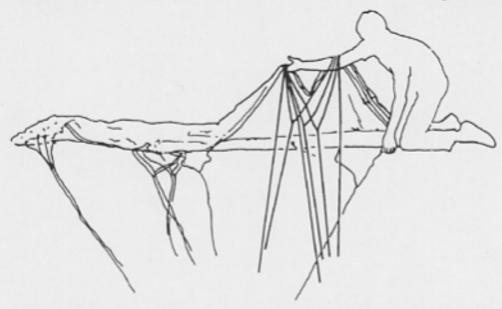
Lift the slider and ensure that all four line groups run freely from canopy to risers.

#### LINE CHECK



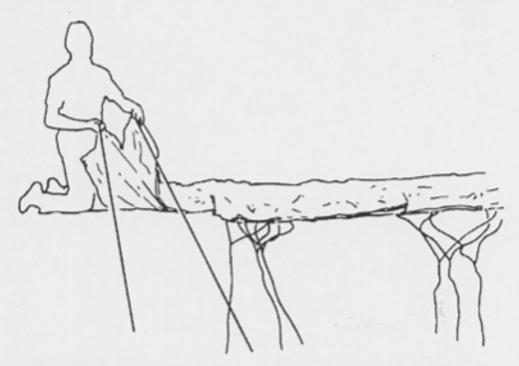
With the slider at the connector links, raise the first two and second two outboard lines at the canopy. They should run to the outside of the right front and rear risers respectively.

STEP 3 Figure B



Raise all the lines except the left outboard lines which are on the ground. The first two lines should run to the outside of the left front riser and the second two to the outside of the left rear riser.

STEP 3 Figure C



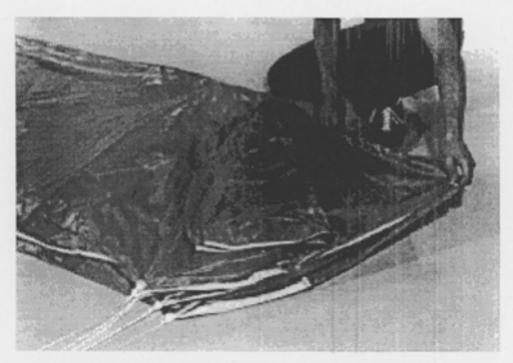
Grasp and raise the trailing edge lines. The steering line on the top should run to the right rear riser; the steering line on the bottom should run to the left rear riser.

CAUTION: ENSURE THAT THE STEERING LINES RUN THROUGH THEIR RESPECTIVE SLIDER GROMMETS.

#### FLAKING THE CANOPY

STEP 4 Figure A

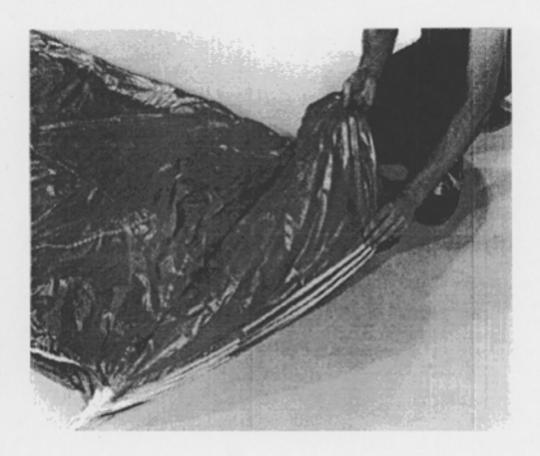




With the canopy on its side, throw all the tops, or high points, forward. Pull the top seams individually toward you until the lines are taut, smoothing the canopy from front to back. Continue this process from one cell to another until the entire canopy is neatly flaked with all the line groups, including the trailing edge lines, clearly separated.

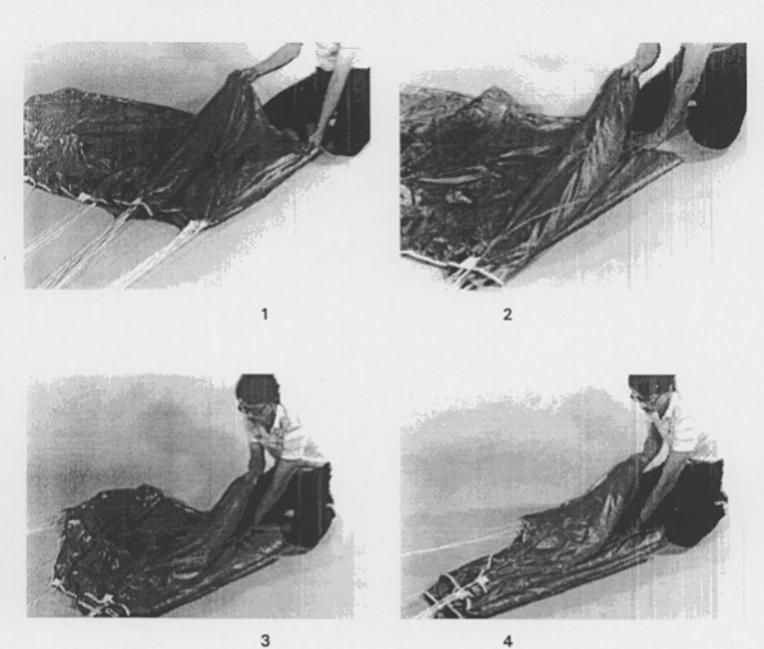
#### FOLDING THE CANOPY

STEP 5 Figure A



Fold the nose under, making the fold directly in line with the A line group.

Figure B



Make an "S" fold so that the B line group is on top of the A line group. Continue this process with the C and D line groups until you have stacked all four line groups. Ensure that all suspension lines are taut.

#### CLEARING THE TRAILING EDGE LINES

STEP 6

Figure A

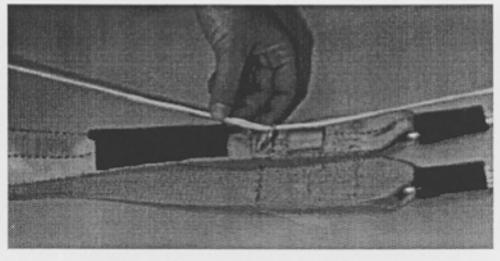


While holding the D line group in place, pull the trailing edge down until it is even with the rear slider stops. Separate the left and right trailing edge lines and check for proper routing.

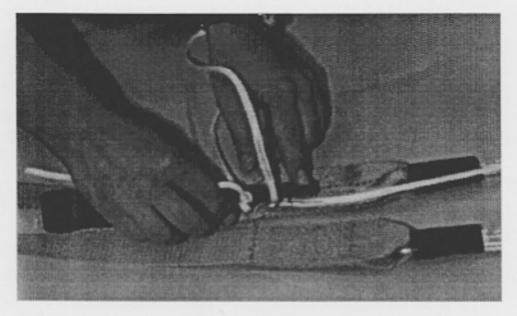
#### SETTING THE DEPLOYMENT BRAKES

STEP 7

Figure A

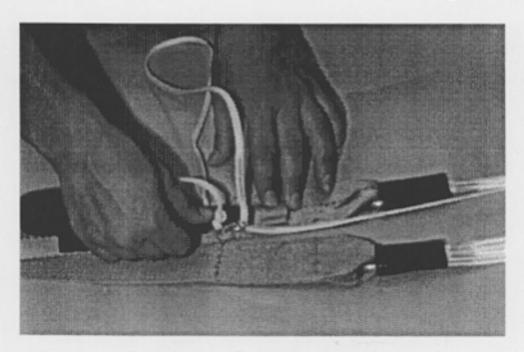


Beginning with either rear riser, pull the deployment brake loop through the steering line guide ring. STEP 7 Figure B



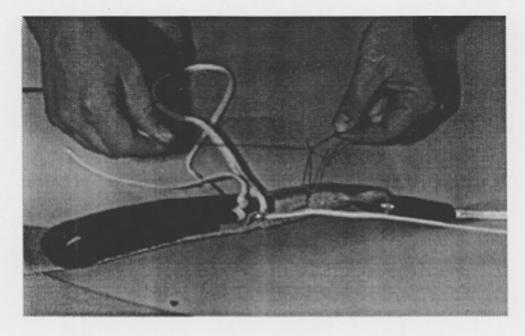
Lock the loop with the narrow top bartacked end of the toggle. The slack in the steering line should be on the side toward the Velcro pile on the riser.

STEP 7 Figure C



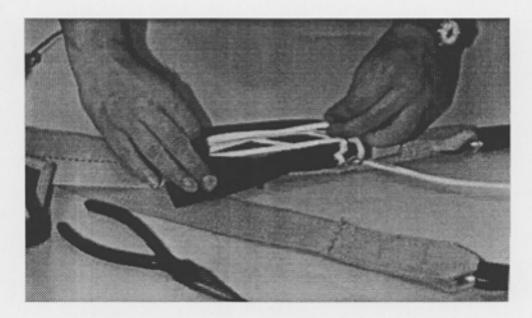
Place the bartacked end of the toggle under the loop of tape above the guide ring. Push the toggle into the loop until the end of the toggle is flush with the top edge of the loop.

CAUTION: Do not insert the end of the toggle through the guide ring. This may cause premature brake release. The end of the toggle *must* lie on *top* of the guide ring. STEP 7 Figure D



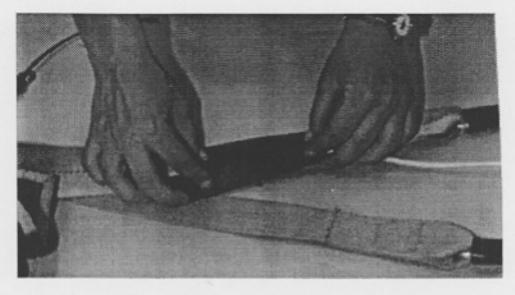
Tack the top of the toggle to the rear riser with ONE turn of doubled red rigger sealing thread, passing the thread through the tape loop and the toggle inside it. Secure with a surgeons' knot and locking knot. Do not use nylon thread or cord for this tacking.

STEP 7 Figure E



Pull out the excess steering line, fold it to the length of the Velcro on the riser, and place it under the flap of Velcro hook below the guide ring. Close the flap of Velcro pile securely over the the folds.

STEP 7 Figure F



Place the toggle on the Velcro hook, next to the flap covering the folded steering line. Mate the toggle Velcro securely to the hook on the riser.

Repeat Steps 7-A through 7-F on the other side.

#### TRAILING EDGE FOLDING

STEP 8 Figure A



Locate the tops of the "S" folds and pull gently on each one to remove any slack from the suspension lines.

STEP 8 Figure B



Place the steering lines and rib seams in the center on top of the suspension lines.

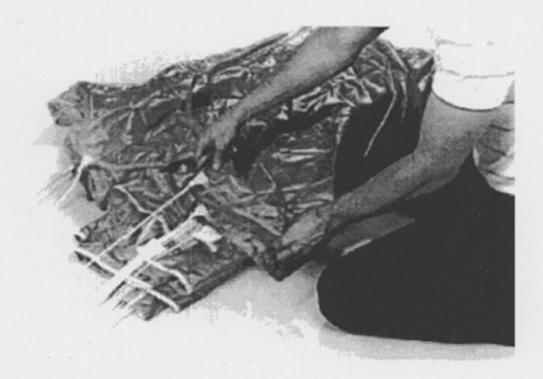
STEP 8 Figure C



Flake the tail panels.

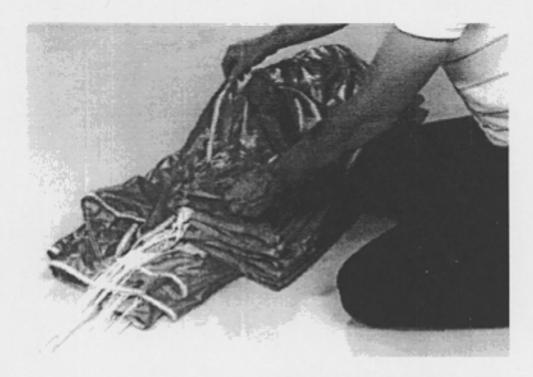
STEP 8 Figure D





Continue to flake the tail, stacking the steering lines and rib seams in the center, until the entire tail is flaked.

STEP 8 Figure E





After flaking the tail, split the stack of folds at the center of the tail and place an equal number of folds to each side. The center of the tail (on Para-Flite reserves) is identified with an orange warning/ TSO label. Be careful not to disrupt the folded canopy when splitting the tail. The entire tail seam should be even with the steering line attach points.

STEP 9 Figure A

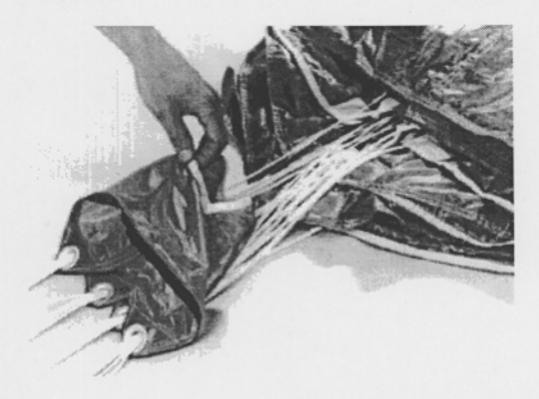


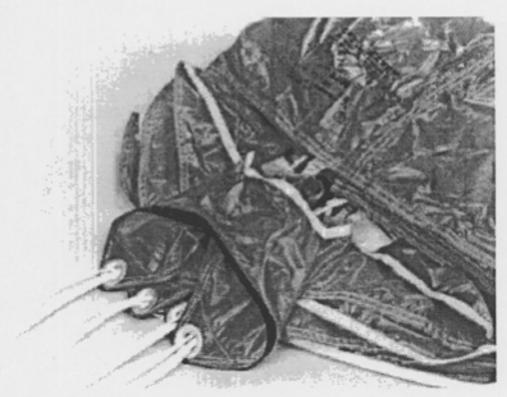


Clear the stabilizers (three sections on each side) by pulling out the slack and making sure that there are no lines wrapped around them. Stabilizer edge tapes should be visible. If they are not visible, the stabilizers may be inside out.

#### STOWING THE SLIDER

STEP 10 Figure A





Pull the slider up to the slider stops by its center. Be sure that the slider is not inverted, and that it runs freely up the suspension lines.

#### WRAPPING THE TAIL

STEP 11 Figure A



While kneeling on the tail, squeeze the air out of the canopy.

STEP 11 Figure B



Fold the sides under the canopy and dress it to the approximate width of the deployment bag.



NOTE: DO NOT wrap the center panel around the nose of the canopy.

#### FOLDING THE CANOPY ("MOLAR" FOLDING)

The folding method shown below is popularly known as the "molar method." For the best looking reserve pack job, it is important to make the first two folds short—without losing control of the canopy. Para-Flite, Inc. therefore strongly recommends the use of a "molar strap" packing aid, as shown below.

STEP 12 Figure A



Fold the bottom four inches of the canopy towards the top. Keep this fold short, an inch or more less than the distance from the mouth of the deployment bag to the central tube.

NOTE: The grommets are separated slightly to spread their bulk.

STEP 12 Figure B



Now fold the top of the canopy towards the container, making the fold tight around the top edge of the first fold.

STEP 12 Figure C

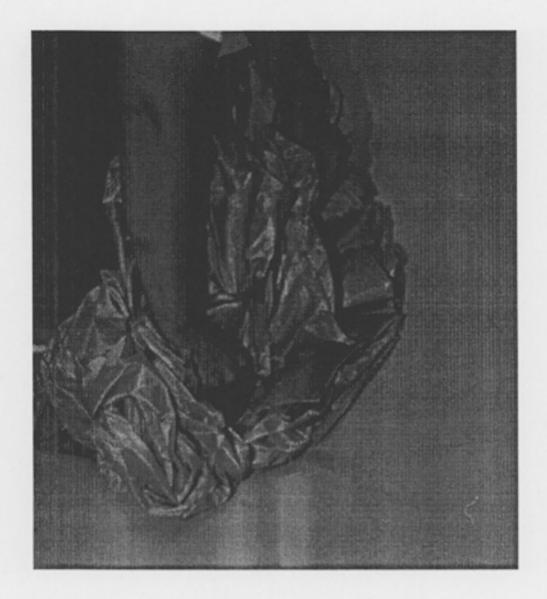


Locate the high points of the leading edge, and ensure that they are COMPLETELY exposed, folding three cells to each side and splitting the center cell. Redress the sides of the canopy to the approximate bag width.

STEP 12 Figure D



Kneel on the the folds, with one knee on each side of the center seam. Grasp the cells to each side of the central panel and gently pull them apart, separating the three cells on each side from the center cell. STEP 12 Figure E



Work down through the stacked canopy, separating the cells to each side; separate the cells as far as you can, without moving your knees from the bottom folds. Continue until you reach the exposed nose of the canopy.

CAUTION: DO NOT disturb the exposed nose folds, or irregular openings could result.

STEP 12 Figure F



Distribute the center cell bulk to each side, placing equal amounts into each "root" of the "molar." Dress the folds on each side, making them equal and uniform in width.

STEP 12 Figure G



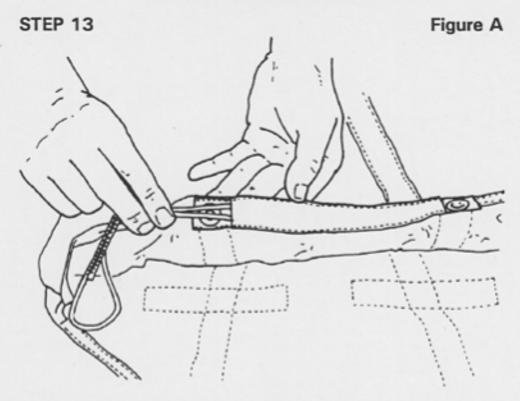
Carefully lift one side of the folded canopy and place the molar strap under it, centered on the folds from side to side. The right and left riser groups should be separated by the molar strap. Fasten the strap and tighten it securely around the center seam, with equal bulk on each side. Position the buckle on the molar strap at the bottom center of the folded canopy.

NOTE: The tighter the molar strap is pulled, the better the final pack job will be.

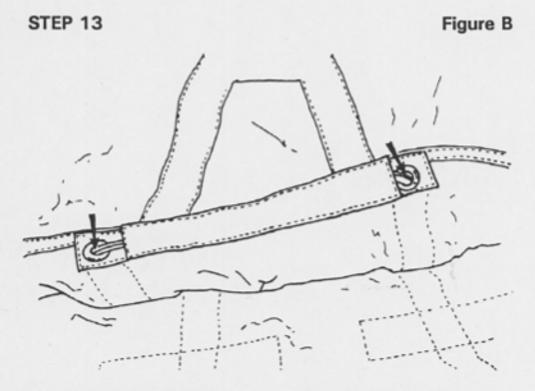
CAUTION: DO NOT pull any canopy into the buckle on the molar strap. Fabric damage could result.

The exposed nose folds should be visible at the outside edge of each "root" of the "molar" when the canopy is properly folded.

#### SAFETY STOW ASSEMBLY

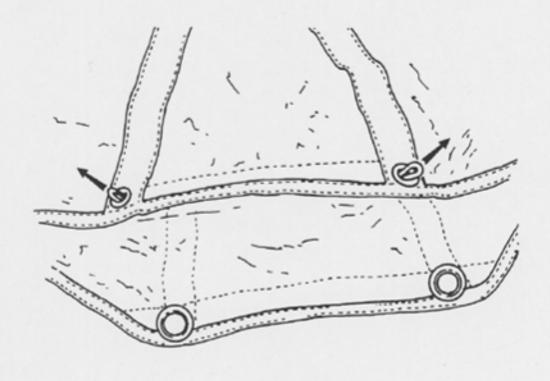


Insert the "Safety Stow" elastic loop in the channel. Center the loop splice between the grommets.



After the loop is inserted, pass each end of the loop through the appropriate grommet. (Inside View)

STEP 13 Figure C



(Outside View)

CAUTION: NEVER TACK THE ELASTIC LOOP TO THE DEPLOYMENT BAG OR CHANNEL. NEVER MODIFY THE LENGTH OF THE ELASTIC LOOP. USE LOOPS SUPPLIED BY PARA-FLITE ONLY.

#### PLACING THE CANOPY INTO THE BAG

STEP 14 Figure A



Starting with either side, work one "root" of the folded canopy into the proper side of the deployment bag. Leave the molar strap in place, to aid in controlling the folded canopy, but keep the free end of the molar strap outside the bag.

STEP 14 Figure B



Most of the bulk should go into the bottom of the bag, even with and below the center tube. DO NOT fold the "root" back on itself, since this will result in too much bulk in the top of the bag.

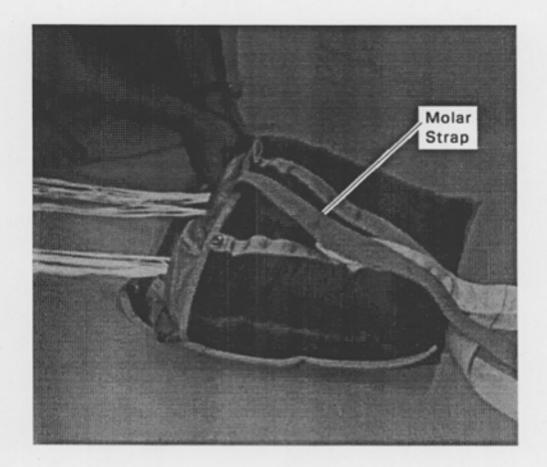
Position the molar strap as closely as possible to the central tube.

STEP 14 Figure C



Work the other "root" into the remaining side of the deployment bag.

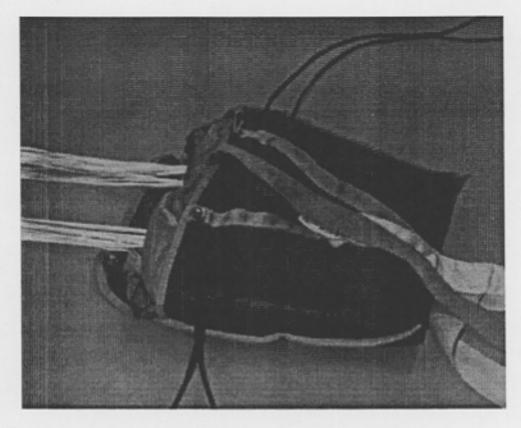
STEP 14 Figure D



Distribute the canopy evenly in the bag, and work the folds at the bottom into the bag's mouth. The molar strap should be positioned as closely as possible to the central tube in the bag.

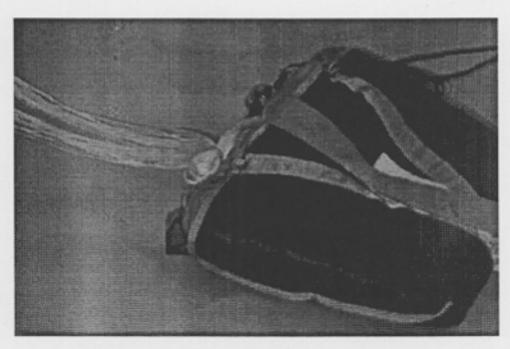
CAUTION: THE END OF THE MOLAR STRAP MUST REMAIN OUTSIDE THE BAG. DO NOT PROCEED WITH PACKING UNTIL YOU VERIFY THAT THE STRAP IS OUTSIDE THE BAG.

STEP 14 Figure E



Insert a pullup cord through each loop of the Safety Stow.

STEP 14 Figure F



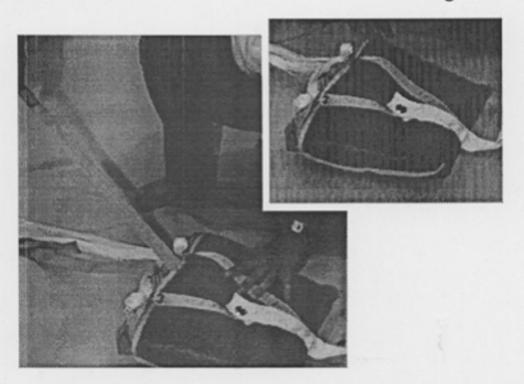
Make the first locking stow using the elastic loop. THE LOCKING STOWS SHOULD BE BETWEEN ONE AND ONE AND ONE-HALF INCHS IN LENGTH, MEASURED TO THE INSIDE OF THE LOOP.

STEP 14 Figure G



Using the remaining pullup cord to pull the elastic loop through the grommet, make the second locking stow.

STEP 14 Figure H



Remove the pullup cords. Remove the molar strap by releasing the buckle and *slowly* pulling the free end through the bag.

DO NOT PROCEED WITH PACKING UNTIL YOU HAVE VERIFIED THAT BOTH PULLUP CORDS AND THE MOLAR STRAP HAVE BEEN REMOVED. COUNT THEM!!!

#### SUSPENSION LINE STOWING

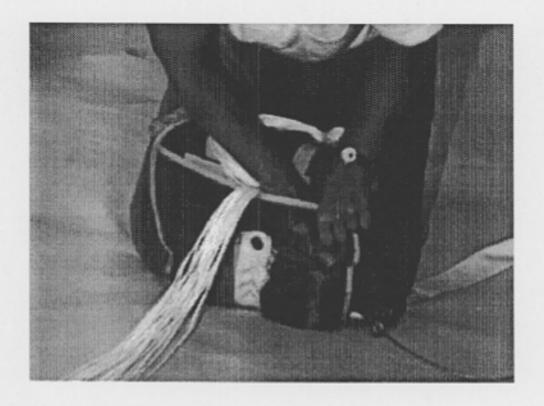
STEP 15 Figure A



Position yourself at the top of the bag facing the container. Rotate the bag up onto its pointed end, exposing the suspension line retaining pocket.

NOTE: Be very careful when stowing the Spectra lines in the suspension line retaining pocket. Assure that the hook part of the Velcro tape does not pull any fibers from the Spectra lines. Suggestion: Cover the hook Velcro with a "Velcro Tab" temporarily.

STEP 15 Figure B



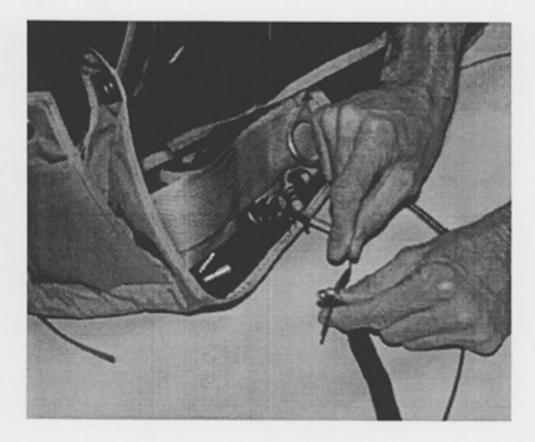
Neatly S-fold the lines into the pocket, leaving approximately 8 to 10 inches of suspension line exposed.

NOTE: If you used a "Velcro Tab" to cover the hook Velcro, remove them, close the suspension line retaining pocket and count your "Velcro Tab."

# INSTALLING THE RIPCORD AND RESERVE STATIC LINE

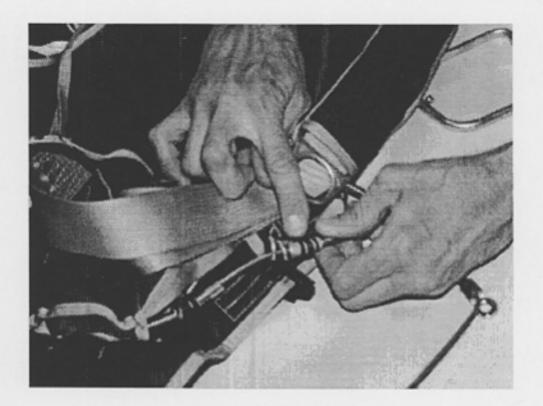
NOTE: The Eos comes equipped with a reserve static line (RSL). Installation and use of the RSL is at the option of the user. To install the RSL, follow the instructions in this step. If the RSL is not to be installed, do not place the terminal ring on the RSL lanyard over the ripcord cable, but follow the remainder of the ripcord routing instructions.

STEP 16 Figure A



Insert the reserve ripcord into the lower end of the ripcord housing, inside the left "mudflap" above the ripcord pocket. Push it through the first housing section, then through the terminal ring on the RSL lanyard, and finally through the small ring at the end of the housing.

CAUTION: The ripcord must pass through the ring on the RSL lanyard before being routed through the ring on the harness/container. STEP 16 Figure B



Route the ripcord through the upper housing section.

#### RESERVE CLOSING LOOP LENGTHS

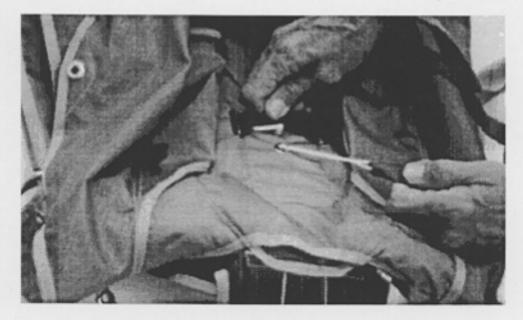
Because of the unique construction of the Eos reserve container and deployment bag, the pilotchute does not compress the bag when the container is closed. The length of the closing loop is therefore kept constant for each size of container, and does not have to be adjusted to account for variations in humidity or canopy volume. Use only the appropriate length of loop as given in the table below.

Reserve Group	Loop to Knot* (inches)	Loop to Pack Tray (inches)
817 <u>1</u> BC	4.50	3.25
817 <u>2</u> BC	5.00	3.75
817 <u>3</u> BC	5.25	4.00

This dimension is included for initial sizing; the critical dimension is from the end of the loop to the grommet in the reserve pack tray.

#### INSTALLING THE CLOSING LOOP

STEP 17 Figure A

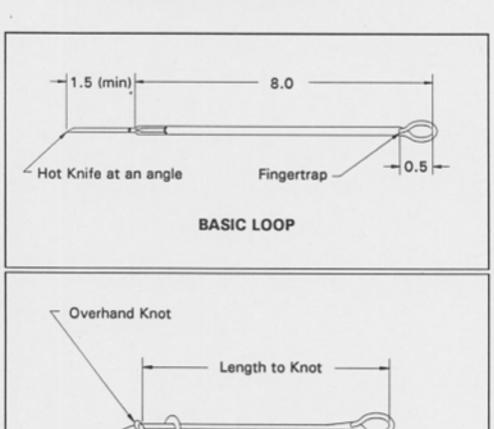


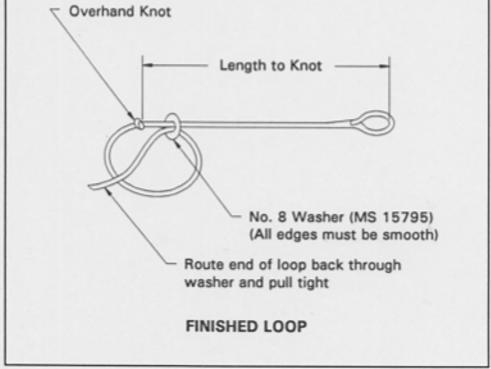
Pass the closing loop down through the pack tray grommet under the elastic keeper, and back up through the grommet above the keeper. Thread a long (72 inches minimum) pullup cord through the closing loop.

#### CLOSING LOOP CONSTRUCTION

Closing loops are provided with each Eos, and are also available from Para-Flite. If you must make a new loop, follow exactly the instructions below. The loop is made of 600-pound Spectra® line, Para-Flite Part Number 801366.

CAUTION: Do not substitute other materials. The performance of the system depends on the use of Spectra in the closing loop, to control ripcord pull forces and to maintain pilotchute compression.

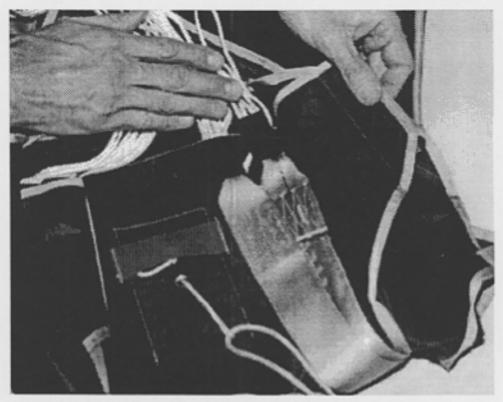




#### STOWING THE RESERVE RISERS

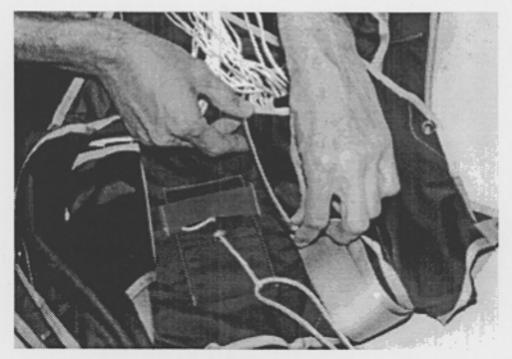
STEP 18

Figure A



Raise the reserve riser cover flaps and lay the reserve risers into the container, placing the rear risers on the outboard side and offsetting the front risers to the inboard side.

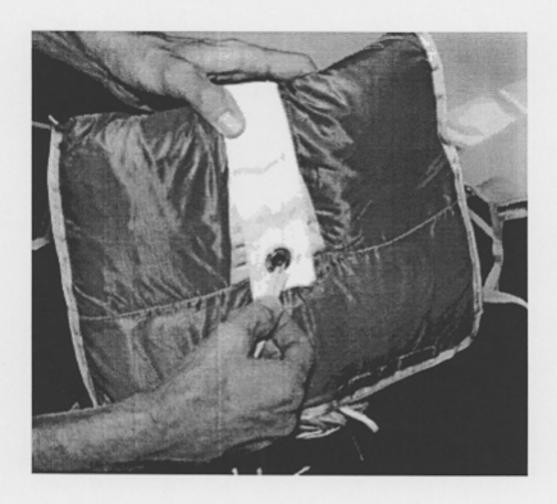
STEP 18 Figure B



Fold one reserve riser cover flap around each riser pair, sliding the stiffened edge of the flap under the risers.

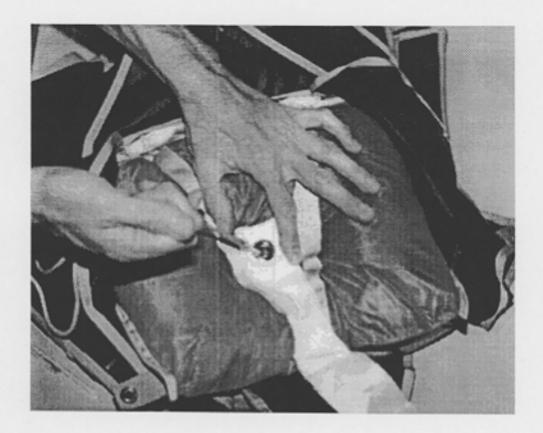
## PLACING THE BAG IN THE CONTAINER

STEP 19 Figure A



Thread the pullup cord through the grommets in the center of the bag, starting with the bottom (a pilotchute threading rod is useful for this step). Ensure that the pullup cord passes through the center of the plastic tube, not outside of it.

STEP 19 Figure B



Work the bottom of the bag into the bottom corners of the container, filling the corners well. While they are still accessible, use a packing paddle to dress up the "ears" on the divider flap where they wrap around the corners of the bag. Work the locking stows down until they are flush with the top of the divider flap.

Pull the locking loop up through the grommets on the bag.

### CLOSING THE HESITATOR FLAPS

STEP 20 Figure A



Lay the bridle to the right side of the container, and close the yoke (Flap 1) over the top of the bag. Thread a pullup cord through the elastic locking loop at the top of the flap.

STEP 20 Figure B



Fold the bridle back around the edge of the yoke, so that it lays across the open top flap.

Using the pullup cord, pull the elastic locking loop through first the right and then the left grommeted tabs at the top of the side flaps. Use a packing paddle if necessary to hold the upper corners of the bag in place, at the outside edges of the container. Ensure that the bridle is routed *above* the tabs.

Form a "needle fold" in the bridle a few inches above the point where it emerges from under the side flap, as follows:

STEP 20 Figure C<sub>1</sub>

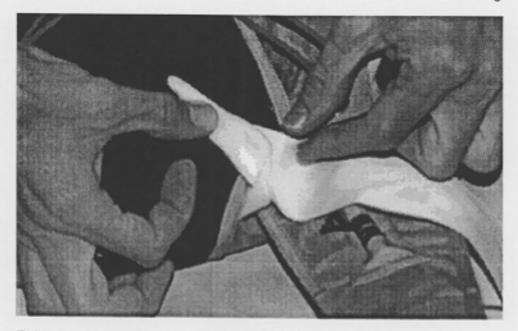


Fold the bridle down onto the side flap, then back onto itself about four inches from the top edge of the side flap.

STEP 20 Figure C<sub>2</sub>

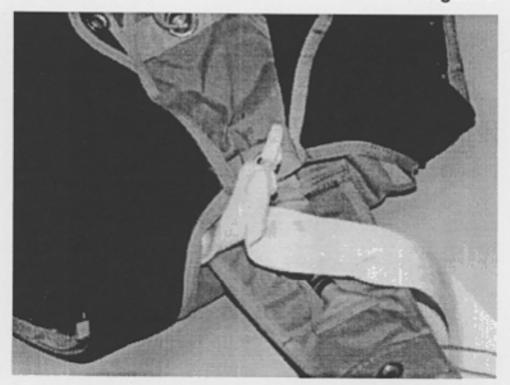


Fold the right side up and across to the left side. This will form a triangular fold.



Fold the triangle in half to form the needle fold.

STEP 20 Figure D

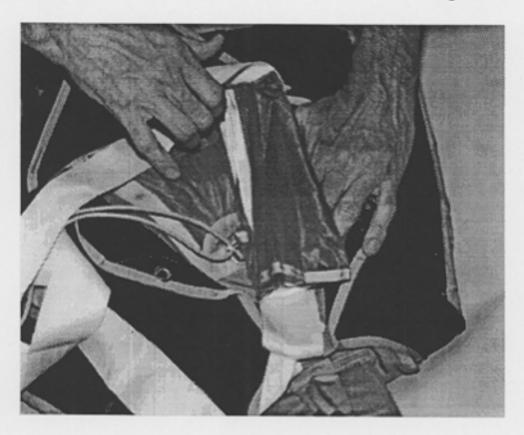


Insert no more than 1 inch of the needle fold into the elastic locking loop. Remove the pullup cord. Be sure that the force required to extract the needle fold is no more than six pounds.

Close the Velcro on the reserve riser covers at this point.

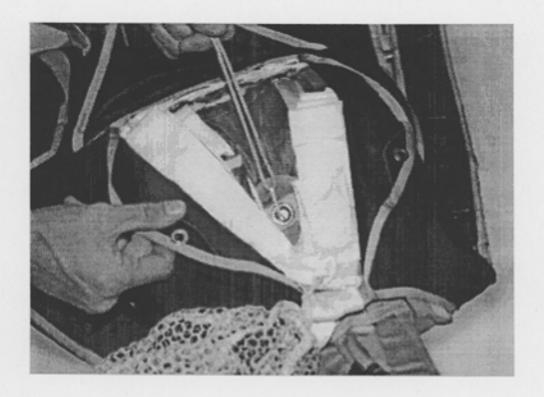
#### STOWING THE BRIDLE

STEP 21 Figure A



S-fold the bridle diagonally across the container from top to bottom, folding the two assister pockets lengthwise to the width of the bridle. Keep the length of the folds no greater than the length of exposed center of the container.

STEP 21 Figure B

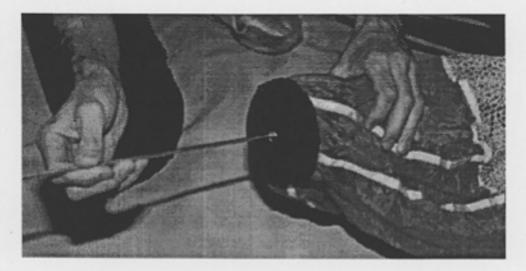


Divide the folds into two equally-sized stacks and place one on each side of the closing loop, running diagonally from the elastic locking loop to the bottom corners of the exposed bag. Re-fold the last three to four feet of bridle into a shorter stack at the top center of the container.

CAUTION: DO NOT push the folds under the side flaps of the container. The folds must be able to deploy freely with only the drag of the first few feet of bridle on them.

#### COMPRESSING THE PILOTCHUTE

STEP 22 Figure A



Insert the pilotchute threading rod through the pilotchute, starting at the grommet in the cap and running it out the opening at the pilotchute's base.

STEP 22 Figure B



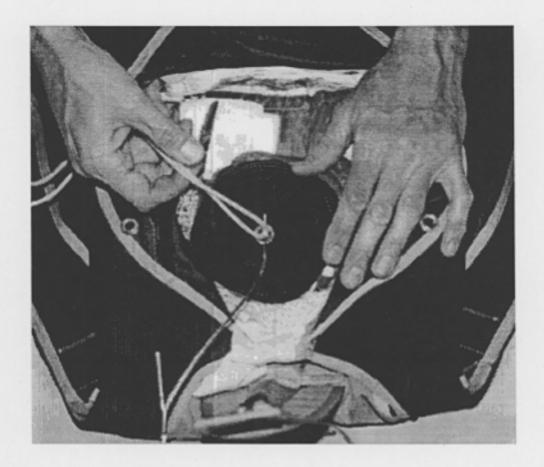
Route the ends of the pullup cord through the end loop on the pilotchute threading rod, and draw the pullup cord through the pilotchute. Tying a loose overhand knot in the free ends of the pullup cord will keep them from accidently being pulled through the grommet during subsequent handling.

STEP 22 Figure C



Place the opening at the base of the pilotchute over the #2 grommet in the yoke flap, and press the spring firmly into the bag until you can feel it seat against the bag's central spacer tube. Do not allow any of the bridle to get between the base of the pilotchute and the yoke flap.

STEP 22 Figure D



Holding the pullup cord taut, compress the pilotchute spring coil by coil, keeping the mesh and canopy fabric in the shallow depression in the center of the bag. DO NOT twist the mesh and fabric around the spring.

Pull the locking loop through the pilotchute cap grommet and pin with a flagged temporary pin. Ensure that all the pilotchute mesh and fabric is within the opening between the side flaps: DO NOT tuck any mesh or fabric under the side flaps, since this may interfere with the pilotchute launch.

#### CLOSING THE CONTAINER FLAPS

NOTE: From this point on, the use of a slotted plate is strongly advised, to aid in drawing the locking loop through the grommets. It will be difficult to accomplish this without a plate. The use of mechanical-advantage tools, such as a "T-bar", is discouraged due to the possibility of damage to the container.

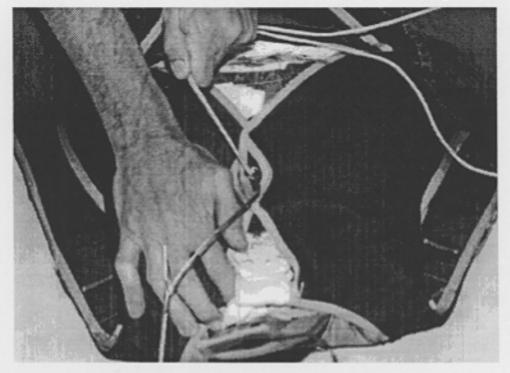
STEP 23 Figure A



Close the right side flap (Flap 2) and secure it with the temporary pin.

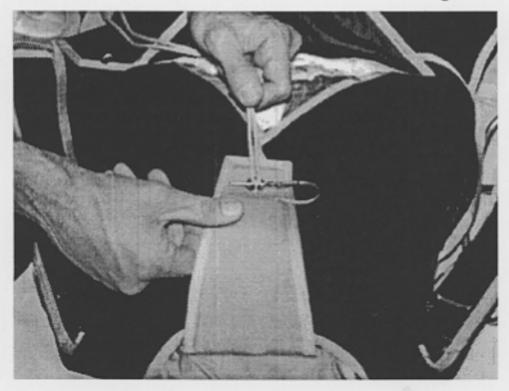
NOTE: The opening in the locking loop is intentionally kept short, so the temporary pin must be removed from beneath each flap before it can be re-inserted on top of it. Do not defeat this safety feature by lengthening the opening in the loop.

STEP 23 Figure B



Repeat the previous step for the left side flap (Flap 3). Make sure the bridle is covered by the side flaps.

STEP 23 Figure C



Close the top flap (Flap 4) and secure it with the temporary pin.

STEP 23 Figure E



While pulling gently on the terminal ball of the ripcord cable (at the pocket end), rotate the pin until it is vertical. Place the tip of the pin under the tape below the grommet.

Tuck the pin cover flap into the top flap slot, on top of the pin. Dress the container, if required.

NOTE: ENSURE THAT THE TEMPORARY PIN AND PULLUP CORDS HAVE BEEN REMOVED. COUNT YOUR TOOLS, AND MARK THEM OFF YOUR CHECKLIST!