## PREDATOR R Series

9 CELL
SQUARE RESERVE
SAUARE INSTRUCTIONS
PACKING

# CHUTE SHOP

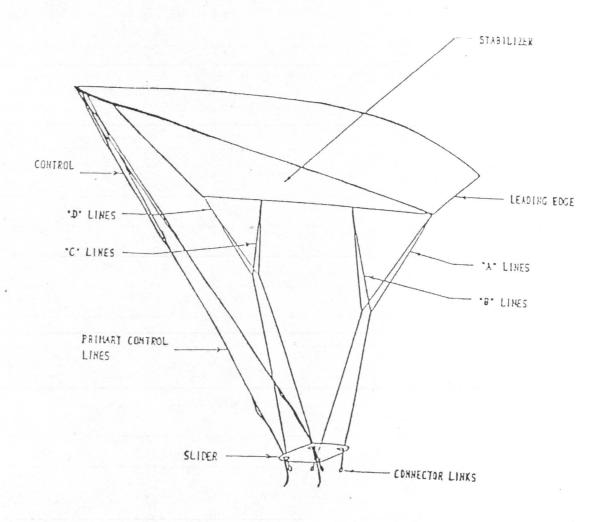
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#### INTORDUCTION

The Predator R Series 9-Cell Reserves are drop tested in accordance with TSO C23C under category B 136Kg (300LBS) at 175 knots.

THIS PARACHUTE IS LIMITED TO USE BY PERSONS UP TO 115 KG (254LBS) fully equiped, and up to 150 KNOTS.

Specification:-	150R	170R
Area FT	150	170
Span FT	19,40	20,60
Chord FT	7,85	8,40
Aspect Ratio	2,5:1	2,5:1
Weight (Kg)	2,5	2,8
Pack Volume	331	360



#### INSTALLING ON RISSERS

NOTE:- Your reserve should be assembled by or under the supervision of an experienced FAA certificated Rigger.

- 1) Select a clean, dry working area of at least 5mx5m.
- 2) have somebody hold the links. Go up to the Canopy and grasp the nose of the Canopy. And pull some tension on the lines. Take all the high points on the nose then holding them in one hand flip the Canopy down on it's side.
- 3) Positioning yourself at the top of the canopy take the centre seam of the bottom cell and pull it towards yourself. Working along the whole length of the cell. Repeat this with all the cells until you reach the top cell of the canopy.

  NB: Make sure you dont miss out any cells.
- 4) Move to the bottom of the canopy, collect the four suspension line grounds and extend them away from the canopy, pulling light tension on them to separate and straighten them.

- 5) Move the slider down to the connector links.
- 6) Lay the harness/container system face down just below the connector links, with the top facing the canopy.
- 7) Extend the Reserve risers towards the canopy and place the riser ends next to the connector links.
- 8) Locate the right outside "A" line on the top of the flaked canopy near the leading edge. Clear this line from the canopy through the slider, and to the right front connector link.
- 9) Attach this connector link to the right front riser, with the right outside "A" line to the outboard side of the riser. Close but do not tighten the connector links.
- 10) Locate the right outside "C" line on the top of the flaked canopy near the centre. Note that this line is attached to the stabilizer. Clear this line from the canopy, through the slider, and to the right rear connector link.
- 11) Attach this connector link to the right front riser, with the right outside "C" line to the outboard side of the risers.

  Close the link.
- 12) Locate the left outside "A" line on the bottom of the flaked canopy near the leading edge. Clear this line from the canopy, through the slider, and to the left front connector link.
- 13) Attach this connector link to the left front riser, with the left outside "A" line to the outboard side of the riser, close the link.
- 14) Locate the left outside "C" line on the bottom of the flaked canopy near the centre. Note that this line is attached to the stabilizer. Clear this line from the canopy, through the slider, and to the left rear connector link.
- 15) Attach this connector link to the left rear riser, with the left outside "C" line to the outboard side of the riser. Close the link.
- 16) Clear both of the trailing edge control line groups and locate the two primary control lines. Ensure that the left control line follows the left rear riser group through the slider and that the right control line follows the right rear riser group through the slider. Pass the left control line down through the control line guide ring on the back of the left rear riser and the right control line down through the guide ring on the back of the right rear riser.
- 17) Temporarily secure the primary control lines by tying them to each of the respective control line guide rings with a half-hitch knot at each control toggle mark.

#### CONTINUITY CHECK

### VERIFYING REAR LINE GROUP CONTINUITY

- 1) Lay the harness/container face down (open reserve/main container up) at one end of your work area. Move the slider down slightly below the connector links so that the links and all lines are clearly visible.
- 2) Grasp the primary control lines and clear them from each riser's guide ring, through each rear slider grommet, and up to the trailing edge of the canopy.
- Collect the entire tail of the canopy in your right hand. Lift the tail high enough to clearly expose the "D" suspension lines. Note that each of the two outboard "D" lines are attached to the lower trailing edge of each stabilizer. Collect all the exposed "D" lines in your left hand. Separate the two control line groups with your right hand and drop one group to either side of the collected "D" lines. The tail should now be symmetrically split and laying on the floor between you and the raised groups of "D" lines collected in your left hand.
- 4) using your right hand, locate the line attached to the lower trailing edge of the right stabilizer. Clear this right outboard "D" line all the way to the harness and verify that it is attached to the outboard side of the right rear connector link.
- 5) Continuing this inspection from cell to cell inward towards the centre cell, transfer the "D" line from each adjacent cell into your right hand, verifying that each of the respective "D" lines is attached in the correct sequence to the right rear connector link.
- 6) Upon completing the inspection of the right rear "D" line group at the centre cell, drop the right rear line group and begin collecting the left rear "D" lines in your right hand starting with the left inboard "D" line attached to the centre cell. Clear this line all the way to the harness and verify that it is attached to the inboard side of the left rear connector links.
- 7) Continue this inspection from cell to cell outward to the left end cell, again transfering the "D" line from each adjacent cell into your right hand, verifying that each of the respective "D" lines is attached in the correct sequence to the left rear connector link. Note that the last line inspected should be attached to the lower trailing edge of the left stabilizer and run to the outboard side of the left rear connector link.

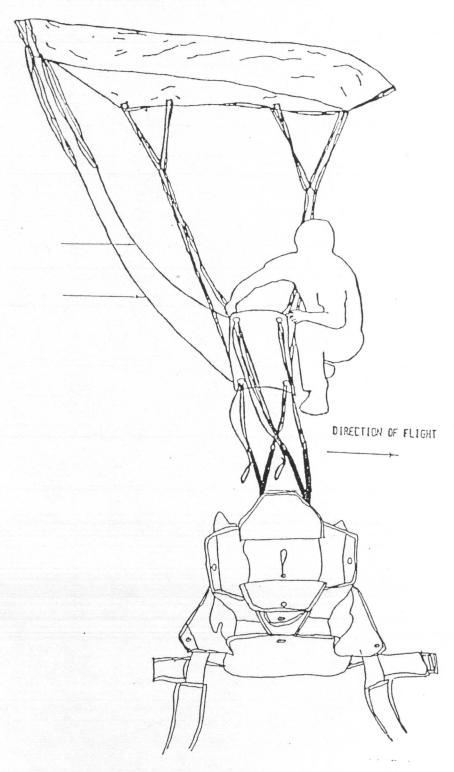
Lay the "D" suspension lines back down and smooth the canopy back into a roughly flaked position, pulling light tension on the attached lines to straighten them. Move down below the harness/container system.

Face the canopy and turn the harness/container over counterclockwise, so that it lays face up (open reserv/main container down). Ensure that the slider remains slightly below the links.

#### CONTINUITY CHECK

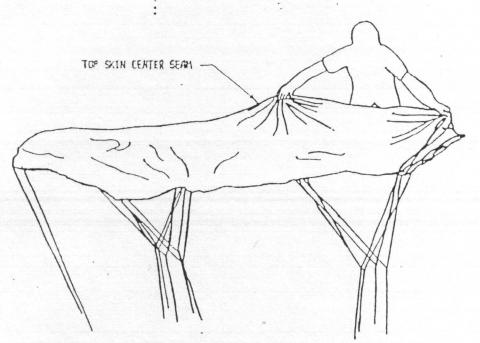
#### VERIFYING FRONT LINE GROUP CONTINUITY

- 10) Positioning yourself at the top of the canopy, grasp the centre leading edge of the right end cell. Lift it off off the flaked canopy, pulling light tension on the attached lines to straighten them. Clear the right outboard "A" line all the way to the harness and verify that it is attached to the outboard side of the right front connector link. Verify that the adjacent "A" line you've also lifted up is clear and is the next line inboard on the connector link.
- 11) Continuing this inspection from cell to cell along the leading edge to the centre cell, collect each centre leading edge of the adjacent cells in you right hand, verifying that each of the respective "A" lines is attached in the correct sequence to the right front connector link.
- 12) Upon completing the inspection of the right front "A" line group at the centre cell, drop the right front line group and begin collecting the left front "A" lines in your right hand, starting with the left inboard "A" line atached to the centre cell. Clear this line all the way to the harness and verify that it is attached to the inboard side of the left front connector link.
- 13) Continuing this inspection from cell to cell along the leading edge to the left end cell, collect each centre leading edge of the adjacent cells in your right hand, verifying that each of the respective "A" lines is attached in the correct sequence to the left front connector link. Note that the last line inspected should be attached to the left end cell and run to the outboard side of the left front connector link.
- 14) Lay the "A" suspension lines back down and smooth the canopy back into a roughly flaked position, pulling light tension on the attached line to straighten them. Move back down below the harness/container system.
- 15) Face the canopy and turn the harness/container system over clockwise so that it again lies face down (open reserve/container up). Move the slider back up to its normal position above the connector links.
- Inspect all four Maillon Rapide ≠ 5 connector links for corrosion or damage, then tighten. (Hand tight). Using a 3/8 or 9mm open end or a small crescent wrench, tighten them no more than 1/4 turn further.
- 17) Verify that the control lines are clear of all suspension lines and are not looped around the guide rings. If the control toggles have not yet been installed, until the primary control lines from the control line guide rings. Securely tie a control toggle to each line below the guide rings, so that the control toggle mark of each line is located at the top of each guide ring when laid upward and flat against the risers.



1) Verify that the suspension line groups run continuously from the canopy, through the slider, and down to the connector links without twists or entanglements. Ensure that the primary control lines are clearly separated from the suspension line groups and are correctly routed through the slider and control line guide rings.

NOTE: Improper line continuity is a common cause of malfuntion and canopy damage. If any doubt about line continuity exists after performing the continuity check procedure (pages 6 and 7) you should ask your rigger to assist you before packing the canopy.



1) Positioning yourself at the top of the canopy, lay the canopy out on its left side. Grasp each cell's to centre seam and pull light tension on the suspension line groups to separate and straighten them.

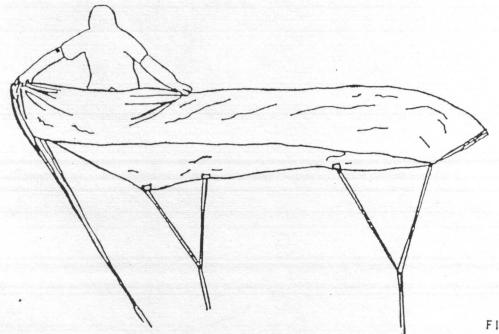
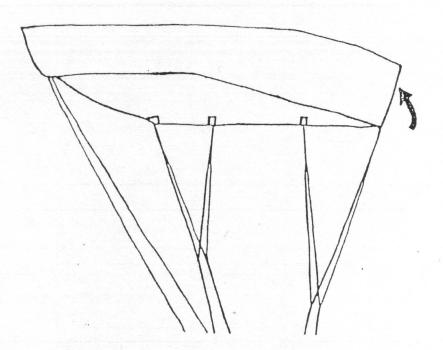


FIGURE 6

2) Move towards the tail of the canopy and repeat this procedure until the entire canopy is neatly flaked, with each of the suspension line and control line groups clearly separated shown.



#### PACKING THE CANOPY:

3) Fold the nose under the flaked canopy in line with the "A" suspension line group.

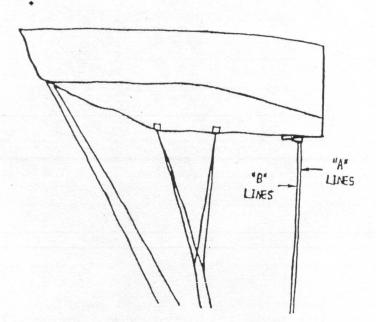
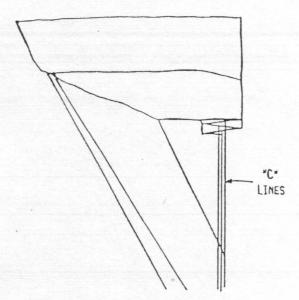


FIGURE 8

4) Grasping all the top skin centre seams on the upper side of the flaked canopy in line with the "B" line group, pull the lines taut and "S" fold the canopy, placing the "B" line group on top of and slightly to the left of the "A" line group. Staggering the stacked line groups slightly as illustrated wil help reduce the pack volume.



5) Grasp the top seams in line with the "C" suspension line group and "S" fold the canopy again, staggering the "C" line group slightly to the right of the other groups.

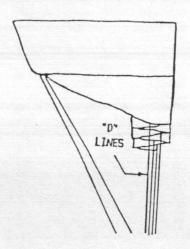
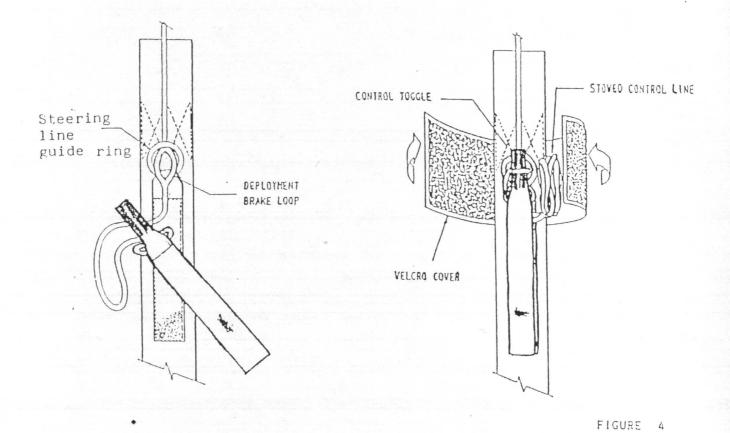


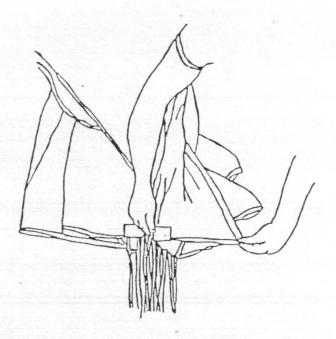
FIGURE 10

6) Complete the "S" folding of the canopy by grasping the topseams in line with the "D" line group and staggering the "D" lines slightly to the left of the other line groups.



## SETTING THE DEPLOYMENT BRAKES

- 1) Pull one of the primary control lines through its guide ring until the white deployment brake loop is positioned just through the guide ring. Pass the toggle up through the deployment brake loop and position in centre of guide ring as shown.
- 2) Make sure brake loop is centred in middle of bartacked section of toggle.
- 3) Neatly stow the excess control line and close the Velcro .. cover.
- 4) Repeat this procedure for the remaining side.



7) Centre the trailing edges of the stabilizers on the stacked canopy, clearing them from the lines by gently pulling them to the outside. Clear all three stabilizer segments on each side.

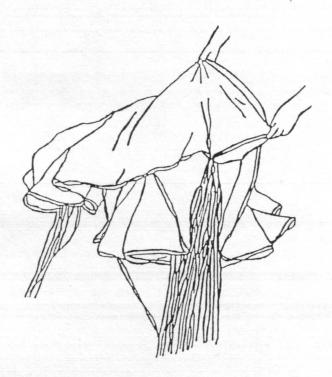
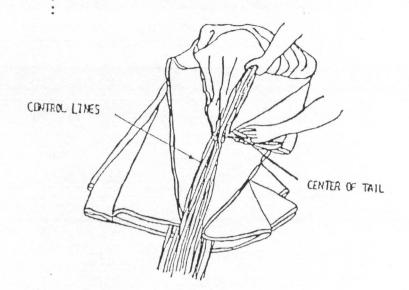


FIGURE 12

#### FOLDING THE TALE

8) Starting on the right side, grasp each segment of the tail between each secondary control line and pull the control lines taut, flaking each segment of tail to the right.

Continue across the tail, stacking each flaked cell to the right as shown.



9) Split the folded tail at the centre cell, ensuring that all the control lines are taut and centered on the stacked canopy.

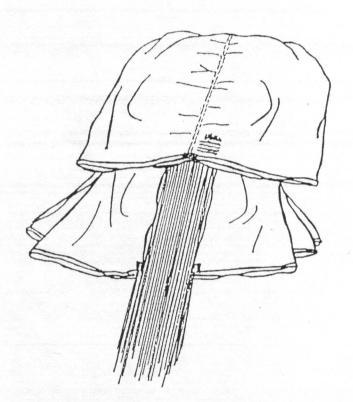
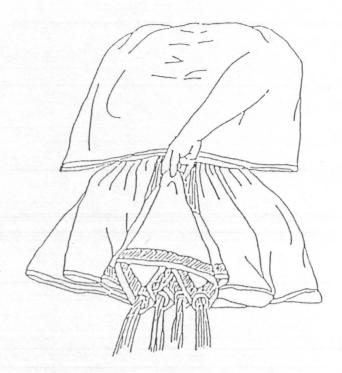
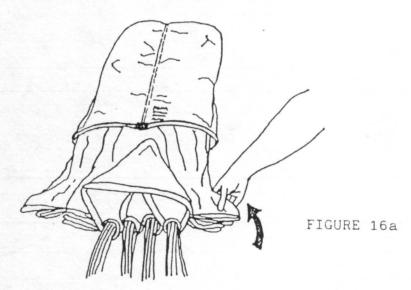


FIGURE 14

10) Spread the trailing edge outward on both sides of the folded canopy, keeping the lines centered. Leave the centre of the tail at the level of the taut control lines.



11) Grasp the slider by its centre and pull it up to the canopy ensuring that it moves freely and seats at the slider stops at the base of the stabilizers. Place the slider on the stacked canopy, centred between the suspension line groups. Spread the four slider grommets evenly as shown.



12') Grasp bottoms of stabilizer and fold inward at 45 degree angle over slider repeat on other side. See 16(a) and 16(b).

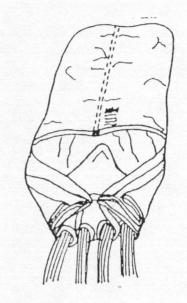


FIGURE 16b

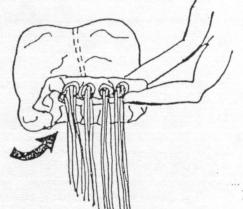


FIGURE 17

S-Fold the bottom 20cm of Canopy up towards the top.

Make sure the slider remains neatly in position and there is equal tension on each line group.

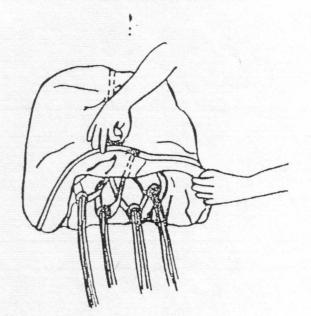


FIGURE 18

14) Grasp centre of tail and pull tail down over S-Fold canopy and slider. Make it level with spread grommets. Kneel on tail facing top of canopy. Wrap the outer edges of the tail around and under the canopy to form it into a flattened tube (see fig. 19) about 4cm wider than the free bag.

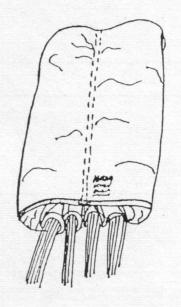


FIGURE 19

- 15) Kneel again on tail facing top of canopy and push out as much air as you can while dressing the outer edges.
- 16) Still kneeling on tail lift canopy up by grasping the top. Make sure not to drop any. Get hold of nose of canopy and make sure to clear all the nose cells from under the folded outer edges. Count the cells to make sure they are all clear. Drop the canopy down again and dress it neatly so as to look like figure 19.
- 17) The canopy is now ready to be put into the free bag. This must be done in accordance with the container manufacturer's Instructions. (See container manuf. packing Instruction).