# 4.2.4 FOLDING RESERVE PARACHUTE

#### Recommended Tools List:

- 1- 1- Tie cord red or brightly coloured (30" recommended.)
- 2- 1-packing weight, 22 Lb. (10 Kg.)
- 3- 1-Packing Paddle 18" or longer (50 Cm.)
- 4- 1-Pull-up cord, 72" (1.82 M)
- 5- Gun Cleaning Rod, .22 CALIBER (5.56 MM)
- 6- 1-Knee-board or slotted Closing Plate
- 7- 1-Temporary pin

#### Parachute Packing Instructions

NOTE: Minimum qualification; FAA Senior or Master Parachute Rigger or foreign equivalent.

**Step 1** Set deployment brakes. Pull toggles down until brake loop is through guide ring on riser. Insert steering toggle tip through brake loop and into keeper above guide ring. (*Figure 4.4*) Stow excess steering line in Velcro keeper. (*Figure 4.5*).



Figure 4.4

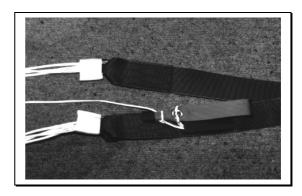


Figure 4.5

Please consult the manufacturers reserve manual for the connection of the Ram Air Reserve canopy to reserve risers and reserve folding to the stage indicated in figure 4.7

### Putting Parachute in Deployment Bag

**Step 2** Make appropriate stacking folds in the following manner: Lay deployment bag beside canopy with line stow pocket underneath. Align bottom edges of deployment bag and canopy. Fold top of canopy towards container. (Figure 4.6 & 4.7)

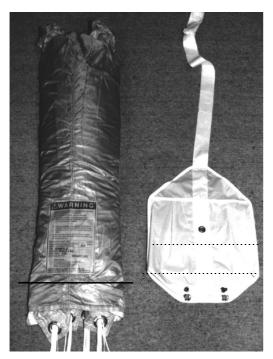




Figure 4.6

Figure 4.7



Figure 4.8

**Step 3** Fold canopy towards top. These two folds places the slider in middle of the stacked canopy. Next, following centre seam, spread top of canopy to create Molar shape. (Figure 4.8. Ideally only the centre cell remains in centre, leaving plenty of room for AAD and pilot chute. Roll the centre cell fabric towards the 'S' folds. (Figure 4.9 & 4.10)





Figure 4.9

Figure 4.10

**Step 4** Wrap a molar strap around centre cell. Pull molar strap tight and lock.

**Step 5** Shape the upper part of the canopy into two cylindrical shapes. Each of these two sections

will have to be wide enough to fit into the upper section of the free bag. (Figure 4.11)

**Step 6** Using the freebag as a guide, fold each top section of the canopy approx. in half and place under the top 's' fold at the lower half of the canopy. (Figure 4.12)



Figure 4.11



Figure 4.12

**Step 7** Gently reach under parachute. Raise parachute 4 inches and slide d-bag under parachute until bottom edge of closing flap lays under lower edge of canopy ensuring that the line pocket on the freebag is facing down. (Figure 4.13)

**Step 8** Kneel on closing flap of d-bag between suspension lines to prevent shifting. Fold or roll the right "ear" until it is same width as "ear" in deployment bag. Fold ear to same length as deployment bag. Push ear into top of deployment bag. (*Figure 4.14*)







Figure 4.14

Step 9 Repeat Step 8 on left "ear".

**Step 10** Fold deployment bag top flap over canopy and one side at a time push the canopy to within the freebag. (Figure 4.17)



Figure 4.17

## ATTENTION: - Remove the molar packing assist strap Now!

Insert temporary pin into one loop of safety stow. Pull other end of safety stow through grommet on deployment bag lip. Insert 3 inch bite of suspension lines into loop of safety stow. (Figure 4.18)

**Step 11** Remove temporary pin. Make second locking stow with a 3 inch bite of suspension lines. Adjust safety stow until sewn portion is concealed in channel. (Figure 4.19)





Figure 4.18

Figure 4.19

**Step 12** Sit on bridle. Gently pull lines and rotate d-bag until it lays in your lap. (Figure 4.20) Open line stow pocket and Stow suspension lines in pocket in a "Figure 8" pattern. Leave last 8 to 10 inches of suspension lines exposed. Distribute line bulk evenly to minimise lumps. Close line stow pocket. Do not allow hook Velcro to contact lines. (*Figure 4.21*)



Figure 4.20



Figure 4.21

## Placing Deployment Bag in Container

**Step 13** Closing the reserve container: Spread the risers with the rear riser to the outside to minimise the bulk against the back pad. Engage the reserve riser covers into their pockets on the floor of the reserve tray.

**Step 14.** Take this opportunity to tidy the rigging lines as to front/rear and left/right.

**Step 15** Close internal riser covers and insert tabs into pockets on the floor of the pack tray. *Figure 4-22.* 

**Step 16 Place the** deployment bag on the reserve tray, centered on closing loop. Reserve d-bag opening is towards main container with line stow pocket against the floor of the reserve pack tray.

**Step 17**- Thread pull-up cord through closing loop and pass both ends through grommet in centre of deployment bag.





Figure 4-22

Figure 4-23

Step 18 - Work the freebag as much as possible down into the container corners at the main/reserve dividing wall. S-fold the bridle longitudinally between the molar shaped canopy ears in length equal to the distance between the top of the freebag and the lower edge of the closing loop grommet until the 1st fold past the 2nd F111 assist pocket. (Figure. 4-23)







Figure 4-25

Step 19 - Fold the remaining freebag bridle across and level with the top of the freebag. Figure 4-24

Step – 20 Use the gun cleaning rod to thread the pull-up cord through Stealth pilot chute from bottom to top. (Figure. 4-25).

Step 21 - Place the bridle cover panel over the S-folded bridle. Centre the base of the pilot chute on centre grommet of freebag containing the edge of the bridle cover panel. Figure 4-26.





Figure 4-26

Figure 4-27

Step 22 - Compress pilot chute while placing fabric and mesh between the spring coils. Figure 4-27.

WARNING! Do not leave fabric outside of spring coils as a coil lock could occur and pilot chute launch may be inhibited!

Position the cap of the pilot chute with the arrow facing toward top or bottom of container and secure with a temporary pin.



Figure 4-28

Figure 4-29

Step 23 - If an AAD such as a Cypres<sup>™</sup> is installed, route the pull-up cord through the cutter first then through the right (#1)side flap grommet. Figure. 4-28.

Step 24 - Thread the left (#2) side flap grommet. Simultaneously close the side flaps. Secure with temporary pin. Figure. 4-29.

Step 25 - Close bottom flap #3 and secure with temporary pin. Figure. 4-30. Note: At this point, you should only be able to pull 1/4" – 1/2" of loop through the first three flaps. If you can pull more, the loop is too long. Open container and shorten loop.

Double check that the reserve ripcord passes through RSL ring before continuing!







Figure 4-31

Step 26 - Close flap #4 and insert ripcord pin. Figure. 4-31.

**CAUTION:** Place closing plate on bottom edge of top flap. Placing closing plate or kneeling on pin protector flap will kink or break the flap. The rigger should determine how tight closing loop is and decide whether to perform a pull test.

**WARNING**: MAXIMUM ALLOWABLE PULL FORCE ON RESERVE RIPCORD 22 POUNDS (10 KILOGRAMS).

Step 27 - Once rigger is satisfied that pull force is less than 22 pounds (10 kilograms) then log pack.

## **Step 28 - COUNT YOUR TOOLS!**