

Fruity Chutes Recovery Bundle Users Guide

This guide will show how to use the Fixed Wing Recovery Bundle. This bundle assumes the UAV is in forward flight for deployment. Put the recovery gear in a compartment below a hatch. When the hatch opens the airflow will quickly fetch the pilot chute and that in turn drags the main parachute out. Each recovery bundle includes:

- Iris Ultra Compact chute (IFC)
- Deployment bag sized for the main chute
- Elliptical pilot chute to pull the main parachute out of the recovery bay.
- Nylon Y harness to provide a 2 point mount to your UAV at the Cg.
- Length of nylon webbing to attach the main chute to the Kevlar Y harness. Length is approximately 1.5x the chute diameter.
- Length of smaller nylon webbing to attach the pilot chute to the deployment bag. The length is 1 x the chute diameter.
- Quick links to attach the components together.

- See more at: http://fruitychutes.com/buyachute/uav-recovery-bundles-c-21/fixed-wing-bundle-c-21_22/#sthash.iVyOyrZB.dpuf

All the recovery gear is assumed to be stowed under a hatch on the UAV. The packing order is from bottom to top:

1 – The Y Harness is pulled down from the wing mount to the bottom of the compartment. It is quick linked to the main shock cord.

2 – The main shock cord is neatly z-folded and put on the bottom. Never wind the cords as they can twist and tangle.

3 – The deployment bag with the chute packed inside on top of the main shock cord. For instructions on how to pack the deployment bag see:

http://fruitychutes.com/help_for_parachutes/how_to_pack_a_deployment_bag.htm

also

http://fruitychutes.com/help_for_parachutes/how_to_fold_a_iris_parachute.htm

4 – The small shock cord is z-folded and put on top of the deployment bag.

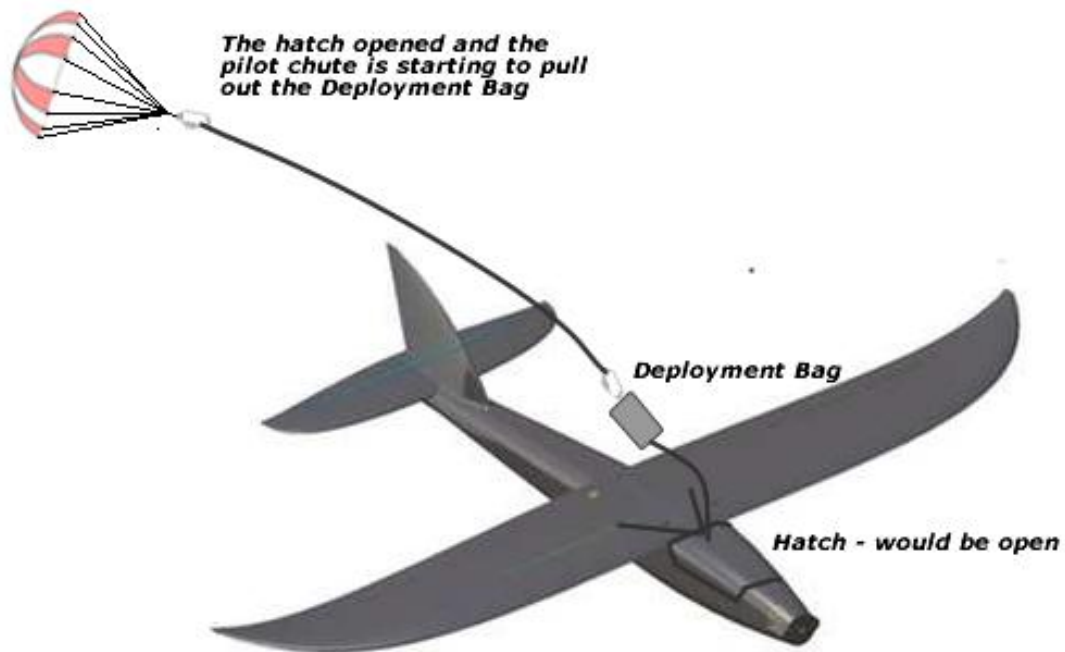
5 – The Pilot chute is neatly folded and put on top of the small shock cord.

TIP: Neatness counts! If it looks like a tangled mess it is. Also you can use small pieces of masking tape to keep the shock cord neatly arranged. Only use a single layer of tape so I can break easily.

Mounting the Y Harness: The Y-Harness allows you to connect the chute so it stays level while under chute. The harness connects just behind the Cg and on the left and right side of the wing. If you can not mount here you can use a second Y-Harness to make a 4 point mount. Connect one harness on the wing front left and right side. Then use the second harness behind the wing left and right side. You can make a 3 point harness with a Y-harness plus an additional simple harness.

Deployment Steps: When the hatch opens the pilot chute is fetched from the compartment. Below are illustrations of the deployment process:

Step 1 Deployment



(C)2013 Fruity Chutes Inc.

The hatch has opened and the pilot chute has come out. The small shock cord extends until it begins to pull out the deployment bag.

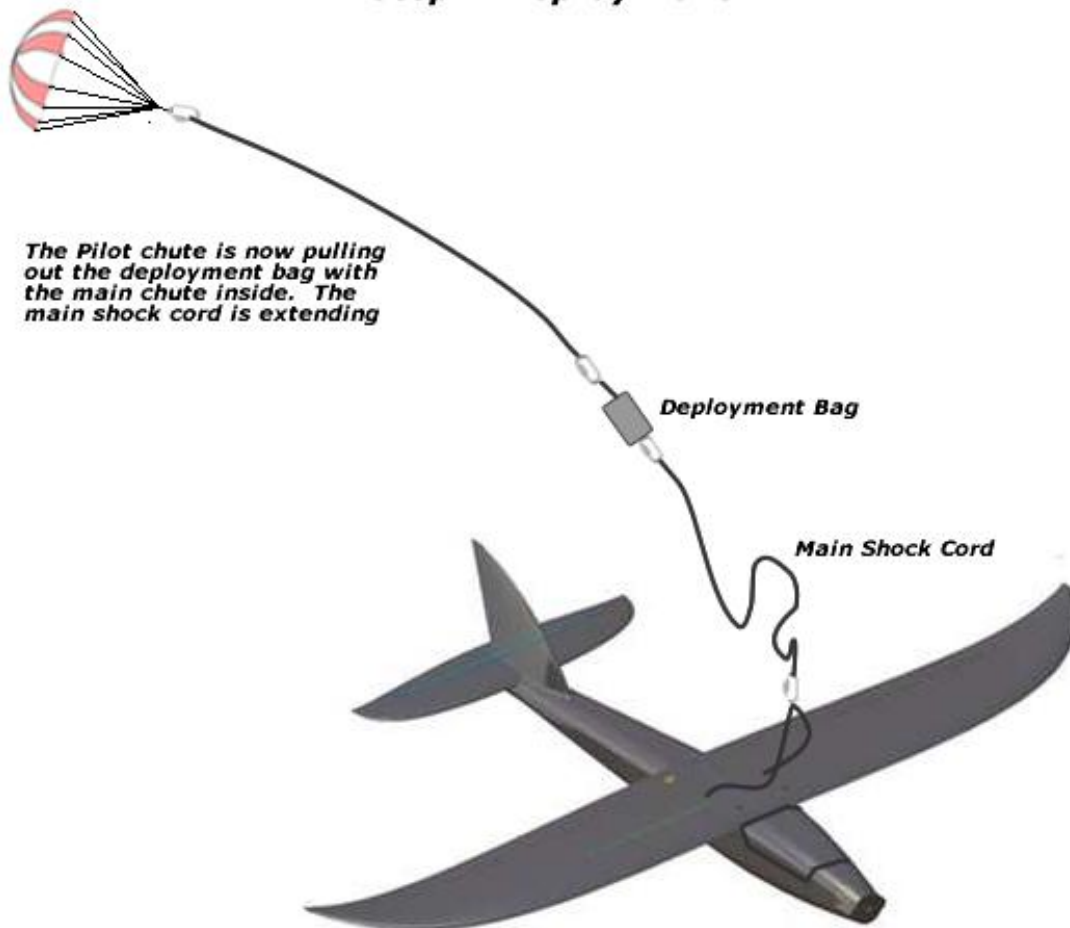
Ground Test Your Packing:

- 1 - Pack the chute per our online pictorials and get everything packed in the UAV.
- 2 - Grab the pilot chute and start pulling that out.
- 3 - Pull till the deployment bag is out. The shock cord will probably want to extend at that time.
- 4 - Then continue to pull the deployment (using the pilot chute) until all the shroud lines are extended.
- 5 - At that time the canopy should easily come out of the bag.

If you are not sure please feel free to take photos of your packing and we can check it for you!

© 2017 Fruity Chutes Inc., 4/18/2017

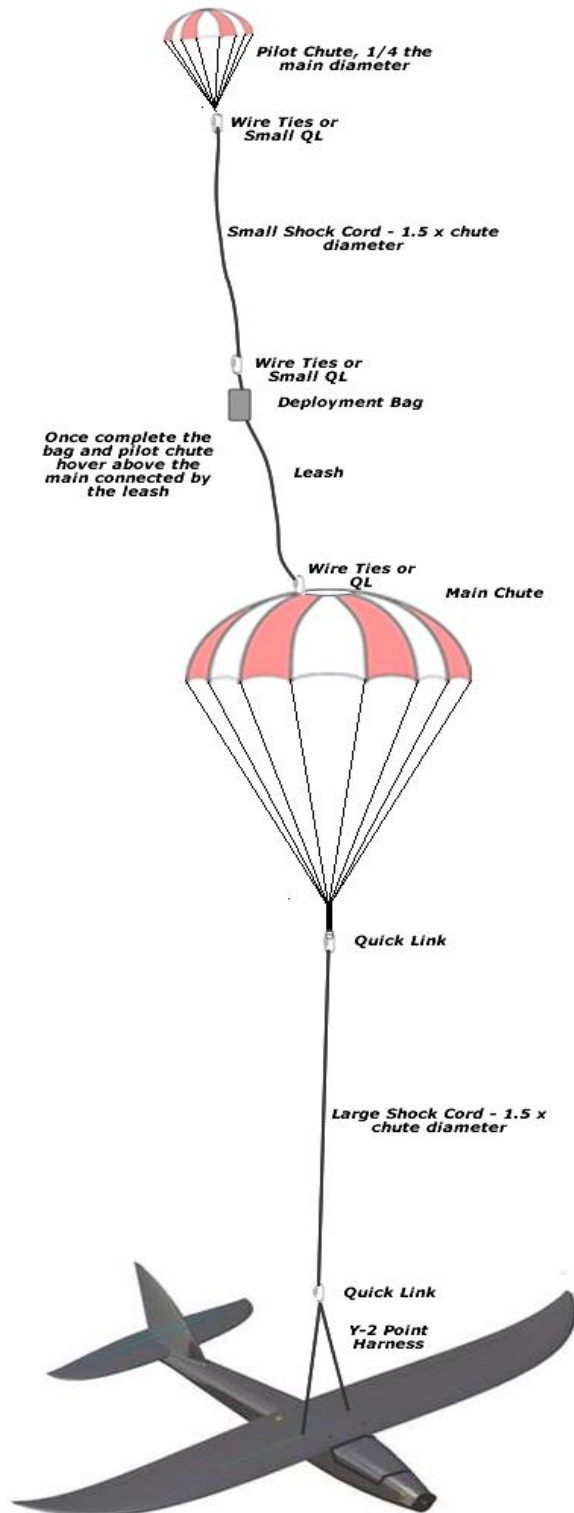
Step 2 Deployment



(C)2013 Fruity Chutes Inc.

The pilot chute has pulled out the deployment bag, and is beginning to extend the main shock cord and Y harness.

Step 3 - Complete Deployment



(C)2013 Fruity Chutes Inc.

This shows the configuration once deployment is complete. Also shown is the order in which components are interconnected.