Doc.-No.: 01/EHTD400 Date: 01.03.2003 Revision: Rev. date:

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# Equipment Handbook for Parachute Tandem-System

# **TD 400**

JTSO-Authorisation No.: LBA.O.040.014/04 JTSO

Serial Number:		
Mfd		



#### Manufacturer:

## FIREBIRD Am Tower 16, 54634 Bitburg

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written by / date:	proved by / date:
Signature:	Signature:

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#### 1. Foreword

This Handbook applies to the TD 400 (Parachute System Omega Tandem with Quick 400 and Contrail 390 maincanopy) from the firm FIREBIRD, Am Tower 16, 54634 Bitburg.

It describes the Harness-Container and the Parachutes as well as the operating, packing and Maintenance Instructions. It is the duty of the Owner/User to make himself well versed in the contents of this Handbook. Before using the Parachute System and to strictly adhere to the Instructions contained within this Handbook in the use of the Parachute System. Because the described Parachute System contains a reserve Parachute with Steering and Braking Capabilities, we strongly recommend that the user obtain a through theoretical and practical briefing in dealing with this Equipment from the Manufacturer. In this way the Owner/User would guarantee himself the optimal functional safety aswell as a long life expectancy for the Parachute. In addition, with his proper behavior, he contributes to the avoidance of accidents, which in the least spares him and the general public annoyance and damage.

General Data, Classification: JTSO-Authorization C23d according to AS 8015 b

Related Equipment Paperwork:

"Form 1" Release Certification Packing Data Card (control pamphlet with date of last reserve packing) Equipment Handbook

## 2. Description of Container System

Type of Container	Main and Reserve Canopy Container
Number, Reserve Container Flaps	6
Reserve Pilot Chute	Spring loaded, Inside
Manufacturer	FIREBIRD
Reserve Automatic Opener	Cypres ready
Harness Material	Type 7 and Type 8
Hardware	Mil-Spec / PIA-Spec

## 3. Description of Quick 400 Reserve Parachute

Type of Parachute	Ram Air Square Reserve
Number of Cells	9
Construction Technique	I-Beam Chord-Wise
Manufacturer	FIREBIRD
Suspension Line Connectors	Double-L connector links
Canopy Fabric	Nylon F-111
Suspension Lines	Dacron / Vectran

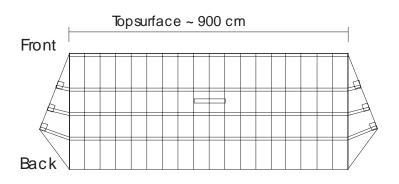
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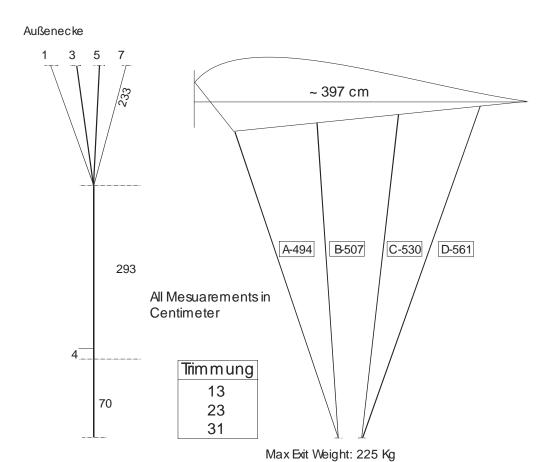
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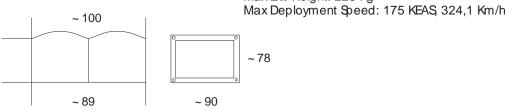


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## 4. Technical Data, Quick 400







Туре	Size	Span	Chord	Volume	Weight	Exit Weight	Lines
	ft²	ft.	ft.	in³	lbs.	lbs.	Vectran
Quick 400	400	30.70	13.03	900	15.4	500	D 900 lbs. V 1050 lbs.

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## 5. System Operating Data

Weight: circa. 25 Kg
Max Load on Canopy: 500 lbs. / 225 Kg

Max. Deployment Speed: 240 Km/h Max. Reserve Repack Cycle: 365 Days Allowable Service Life: 15 Years

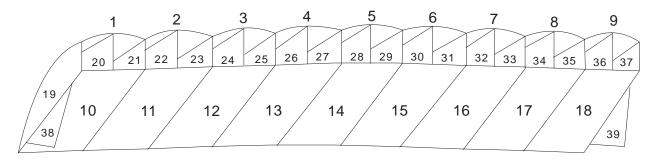
## 6. System Parts List

Harness-Container
Harness Passenger
Drogue Chute with Bridel
Spring loaded Pilot chute with Bridel
Reserve Freebag
Main Canopy Bag (POD)
Maincanopy
Reservecanopy
3-Ring release Handle
Second Release Handle

7. Reserve Parachute Canopy

Reservehandle/Reserve Ripcord with Pillow

9-Cell Ram Air rectangular Parachute of F-111 Fabric in I-Beam / Cordwise construction.



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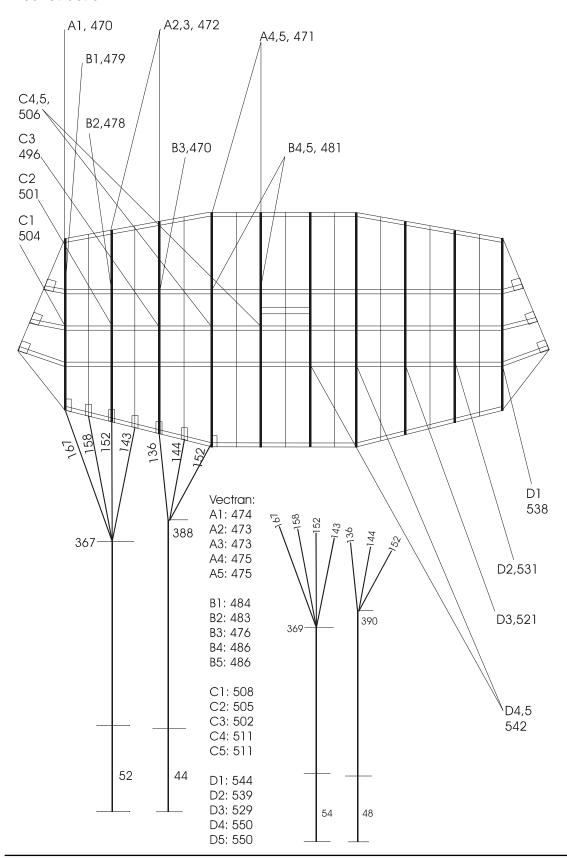
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## 8. Main Parachute

9-Cell Ram Air semi elliptical Parachute of zero perosity Fabric in I-Beam / Cordwise construction.



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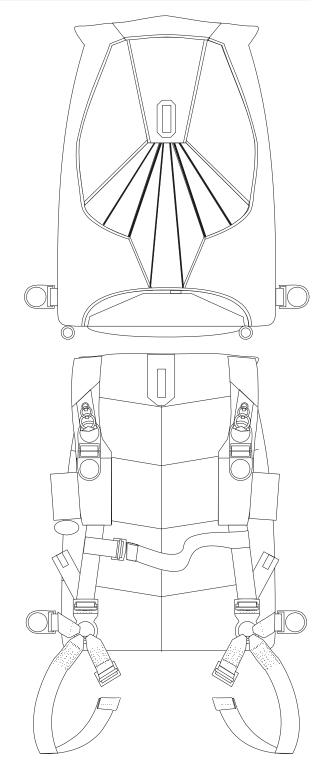
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## 9. Harness and Container

The Container of Cordura Fabric is integrated in the Harness of Mil Spec Typ 7+8 Webbing. The Container is closed by a metal Pin for a manual deployment. The Harness is equipped with a 3-Point closure and has an adjustable chest strap as well as adjustable leg Straps. The attechment to the Reserve Parachute takes place at the suspension line Connector links and the integrated reserve risers. The Main Parachute is attached by means of the suspension line Connector Links and main Risers to the largest ring of the 3-ring release System.



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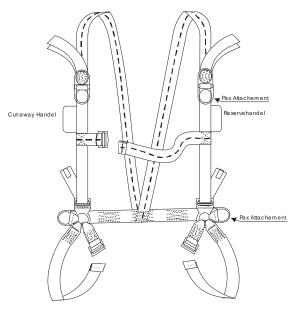
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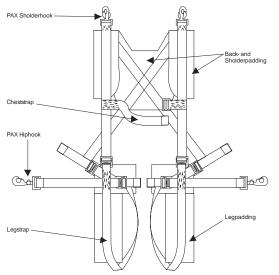


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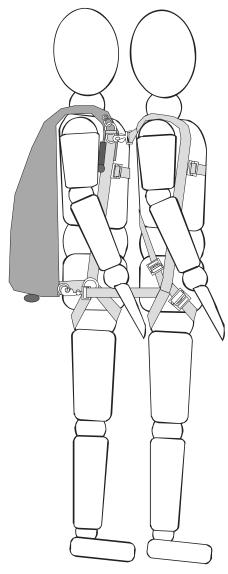
### Tandemharness:



## Passengerharness:



Broken Hardware / Locking spring have to be replaced immediatly



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## 9. Assembly Instructions

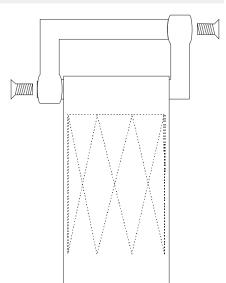
Your new FIREBIRD reserve canopy must be assembled and packed into your parachute system by an qualified person (FAA rigger). Before you begin, be sure the risers, toggles, free bag, pilot chute, harness, container and other items are compatible with your FIREBIRD reserve canopy.

## 10. Attaching to Risers

When assembling the canopy onto risers with reserve links, it is important that the following directions be followed precisely.

The connector links supplied by FIREBIRD for use with their reserve canopies are of the highest quality and carefully inspected and tested. It is important that no substitute links be used. Other links may look similar, or even identical, to those supplied by FIREBIRD, but any substitute could be considerably weaker than the original. (Original MS 22002-2 tensile strenght: 3000 lbs)

If these directions are followed correctly, and only parts supplied by FIREBIRD are used, these links will provide excellent service.



- 1) Remove all grease and dirt from links, using a solvent that will leave no residue. Trichloreothlane or any electrical contact cleaner is recommended.
- 2) Inspect the link carefully. Check for nicks, burrs or any sign of bending or stress.
- 3) Safe the screws, don't drop them. Slide one half of the L- link onto riser.
- 4) Than slide on the secound half of the riser don't rotate them! Check for linetwist!
- **4)** Perform a thorough line check at this point, making absolutely sure that the canopy is straight. After the links are tightened with locking compound (LOCtite, Permanex or Truelock), it will be very difficult to correct any errors.
- **5)** When you are sure the canopy is straight, unscrew the screws and put one drop of locking compound on the threads. Immediately tighten them gently tight. Clean off any excess thread lock with a clean, dry rag. Do not use water or solvents.
- 6) Make a small match mark along the screw and the link. This mark will serve as an easy method to check for tightness. If the match mark remains intact, then the screw is still in place. If the upper and lower parts of the mark become mis-aligned, then the screw has shifted. Should this happen, the link must be immediately disassembled, cleaned and inspected. If no damage has occurred, the riser/link/line assembly may be reattached according to steps 1 through 5.

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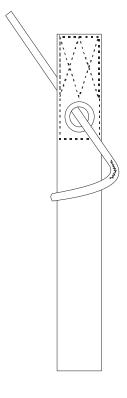
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# 11. Attaching Toggles

Make sure the steering line goes through the grommet of the slider.

Route the steering line through the guide ring on the riser. Then route it through the grommet in the toggle, starting from the side with Velcro. Pull the toggle through the finger-trap loop and tighten.

( Only use Tandem Reserve Toggles!)



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## 12. Periodic Inspection Instructions

The equipment should be re-examined every 12 months.

The main parachute canopy and the container system should be thoroughly examined every 50 jumps or every 120 days after assembly, whichever comes first.

This examination is considerably more detailed than the inspection that is to be carried out each time the parachute is packed.

Every 365 days the reserve parachute must be opened, aired and thoroughly inspected before it is re-packed by a rigger or equivalent specialist.

The inspection can be carried out according to the following directions.

The container should be examined in place that is clean, dry, well lighted and large enough that the parachute can be completely laid out.

The following inspection sequence is systematic and meaningful:

### 1. Drogue Chute, Drogue Chute Bridle and POD

Check the drogue chute and its bridle for secure attachment to the top skin of the canopy as well as for damage.

The parachute fabric and the reinforcment tapes, as well as their stitching, should not be damaged. Check for perfect function of the drogue-chute kill line. If the kill line is twisted, straighten it. The grommets on the POD (Pack Opening Device—also known as the deployment bag), including the grommet at the bottom of the POD, should be free of damage, have no sharp edges and be firmly attached to the POD material. Replace old packing rubber bands.

FIREBIRD prescribes TandemTube Stoes for the POD.

#### 2. Canopy Top Skin

The canopy should be completely spread out. Pay attention to all seams, potential tears, burns and separations.

#### 3. Canopy Bottom Skin

Turn the canopy over and check it in the same manner the top skin was inspected. In addition, pay special attention to the suspension line attachments.

#### 4. Interior Ribs

Each rib of the canopy, from the nose to the trailing edge, should be examined. This requires crawling into each cell. Pay special attention to the reinforcement tapes, the suspension line attachment points and the pilot-chute attachment. Also check that the crossports are not frayed.

#### 5. Outer Side of Canopy

Lay the canopy on its side, so that the cells are stacked one on top of the other. In this way the condition of the stabilizers and slider stops can be examined.

#### 6. Suspension Lines

The entire length of the lines should be examined for damage. Pay special attention to the cascades and the connector links. Check that the connector links are securely fastened.

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#### 7. Slider

The slider should be checked for damage to the fabric, the reinforcement tapes and the seams. The grommets should have no sharp edges, must be tight and securely attached to the slider.

#### 8. Steering Lines

Check that the steering lines and secondary flairs run straight and orderly through the slider and also through the small ring on the main riser and are correctly fastened to the steering toggles. If the steering lines or secondary flairs are twisted, they should be straightened by twisting in the opposite direction.

#### 9. Main Risers

There should be no apparent damage to the material, grommets or rings of the main risers. Check the performance of the Velcro and clean it if necessary.

## 10. 3-Ring System

The 3-ring system must perform flawlessly; the rings must be round and undamaged. The closing loop should also show no apparent damage. The 3-ring system should funtion with a light pull, as soon as the cable is released.

## 11. 3Ring Release System, Reserve Ripcord, RSL und Release Cable

Check that the release device as well as both release cables run freely and unobstructed. The Velcro should be clean and close securely. The reserve ripcord cable should also run smoothly and unobstructed in its housing. Check the function of the RSL, its attachment points and the ease with which it is released and attached.

#### 12. Harness, Hardware and Stitching

An examination of the harness, hardware and stitching can only be performed visually. Pay attention that the type-7 webbing (with a yellow fiber running along the outside edges) is not damaged and that no stitching is broken. All hardware must be free of corrosion and move freely as designed.

#### 13. Container Material

Examine the container for possible tears or separations. The grommets should have no sharp edges or separation. The loop should be flawless. It is better to replace the loop too soon rather than too late. The interior of the container should be clean.

#### 14. Passenger Harness

An examination of the harness, hardware and stitching can only be performed visually. Pay attention that the type-7 webbing (with a yellow fiber running along the outside edge) is not damaged and that there are no broken stitches. All hardware must be free of corrosion and move freely as designed. Check that the padding is in good condition and is easily moved. Examine the attachment hooks for perfect functioning.

Should something unusual be noticed during the inspection, contact the manufacturer immediately.

When it doubt - play it safe and contact us!

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## 13. Safekeeping and Storage

The container system should be kept dry (at 45-70% relative humidity) and cool (10-15°C / 50-60°F), in a container through which light will not pass. Ultraviolet light can cause invisible damage to the fabric through decay of the nylon fibers. The parachute canopies and the harness-container should be kept away from all types of corrosive substances such as lye, acids, fuels, varnishes and solvents. Also, storage in areas with operating electric motors (electrosmog-O³-ozone forming) should be avoided.

In extremely hot and humid climates the canopies should be re-packed every 30 days.

## 14. Cleaning

Basically, parachute canopies and containers should only be cleaned with fresh water. The use of brushes or rough sponges should be avoided.

After contact with salt water, the parachutes and container should be rinsed with fresh water at least three times withing the first 24 hours.

The removal or oil, tar or similar substances should be discussed with the manufacturer. The equipment should not be cleaned in a washing machine.

Only dry the canopies and container by hanging them in the shade. After cleaning the canopies and container should be subject to a thorough re-examination.

## 15. Repair, Alteration and Replacement

When repairs are necessary, they should be performed only by the manufacturer or by a facility authorized by the manufacturer.

Repairs, alterations and modifications may only be performed by the manufacturer or by arrangement with the manufacturer. Only official replacement parts or those approved by the manufacturer may be used.

# Disregard for these procedures can void the airworthiness!

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# 16. Packing Instructions for the Quick Reserve 400

The modern, ram-air parachutes produced today are very reliable canopies. As long as the parachute is packed with straight and untangled lines, it will usually open.

Nevertheless, we recommend the packing instructions illustrated on the following pages in order to achieve consistently good, soft openings that are better for the fabric and the sky-diver.

The parachute should be packed carefully and in the same manner after each jump or according to the periodic re-pack cycle. Part of this careful procedure is to make sure that the packing area is clean and not in direct sunlight. Ultraviolet light can cause irreversible damage to the canopy fabric.

Reserve parachutes should only be packed in a closed area on carpet or a similar surface.

Packing on concrete or asphalt should be avoided, since rough surfaces like these can damage the fabric, lines and hardware.

# ! Important!

The Quick Reserve 400 tandem reserve parachute may only be packed by qualified, expert personnel who have been specifically introduced to the Quick Reserve 400 production series and trained by FIREBIRD.

# Tandem pilots are *not* authorized to pack a tandem reserve!

Since the reserve may only be repacked by *qualified personnel* with the appropriate specialized knowledge, we prefer not to explain the packing procedure with step-by-step individual illustrations but instead to merely illustrate the most outstanding points of the packing method preferred by FIREBIRD.

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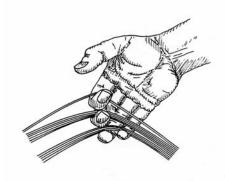
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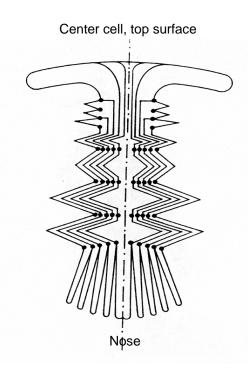
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The packing method that we recommend is described in the following text and illustrations:

1. After checking that the lines and canopy are straight, set the brakes.

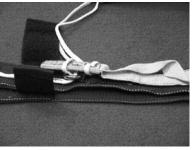


2. The Quick Reserve 400 should be packed in a reserve pro-pack method. The slider should be pulled into the shape of a star.



3. Now find the openings to all the cells. Start with an outside end cell. Pull each cell (both sections) completely out. Be careful that no cell is overlooked or dropped. And put the complete Nose between your knees.









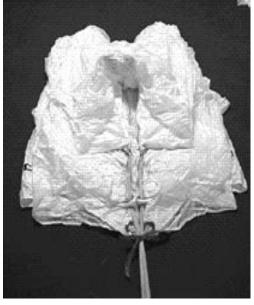
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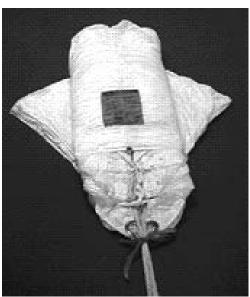
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4. After being laid flat, the canopy—especially the lines in the center—should again be checked and sorted and the stabilizers flaked out.



5. The center cell is pulled over as a cover. The canopy should now be shaped together to the width of the POD/deployment bag. The 4 outer cells should be rolled toward the center cell 3 or 4 times.



6. The canopy should be stacked up in neat S-folds.



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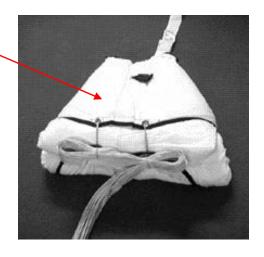
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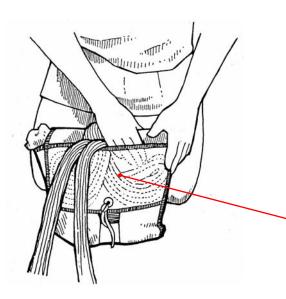
7. Two "horns" or "ears" should be formed and stowed in the freebag.



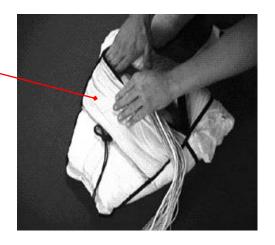


8. The freebag is closed with the shock-cord <sup>3</sup>safety stow."





9. The suspension lines are stowed in S-folds in the line bag compartment of the freebag.



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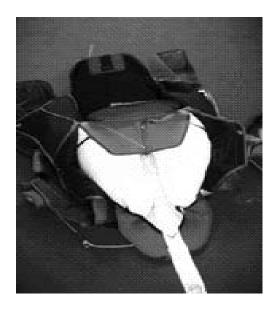
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10. Pay attention that the L-bar connector links are side-by-side at the bottom of the reserve container.



11. The freebag should be placed in the container with the lines at the bottom. The loop should be brought through, and the first, bottom flap closed. The Cypres cutter is on this flap.



11a. The triangular top part of the freebag should be carefully tucked into the container.



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12. The pilot-chute bridle of the freebag should be placed on top of the first flap of the freebag in 5 to 6 medium-size S-folds. Each subsequent S-fold should be slightly shorter than the previous one. There should be at least 2m (6½ ft.) of bridle remaining unstowed.



12a. Carefully lay the second (top) flap on top of the S-folds and close the flap with a temporary closing pin.



13. The remaining bridle should be S-folded in a "V" shape on top of the first two flaps.



14. The pilot chute should be centered and secured by means of the temporary closing pin. Make sure that no fabric is caught in the spring of the pilot chute.

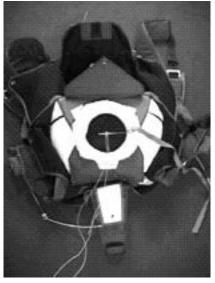


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15. Carefully tuck the pilot-chute fabric together under the edge of the cap.



16. Close the design flap and then both side flaps...



16a. ...in doing so, the sequence of the side flaps is not critical.





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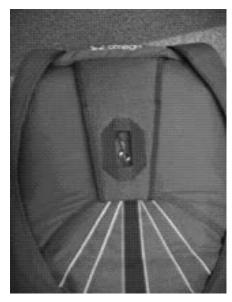
**17.** While closing the top flap with the reserve pin, make sure that the RSL line (when used) is cleanly attached to the reserve cable.



**18.** After the rigger has sealed the reserve with the red safety tie, the top-most flap (reserve pin protector flap with see-through panel) should be closed.



**19.** The see-through panel allows a reserve pin-check to be made at any time—and without opening the pin protector flap.



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## 17. Packing Instructions for Contrail 390

The modern, ram-air parachutes produced today are very reliable canopies. As long as the parachute is packed with straight and untangled lines, it will usually open.

Nevertheless, we recommend the packing instructions illustrated on the following pages in order to achieve consistently good, soft openings that are better for the fabric and the sky-diver.

The parachute should be packed carefully and in the same manner after each jump. Part of this careful procedure is to make sure that the packing area is clean and not in direct sunlight. Ultraviolet light can cause irreversible damage to the canopy fabric. When it is not possible to pack indoors at the dropzone, minimize the amount of time the canopy is subject to direct sunlight and the corresponding ultraviolet rays. When it can not be immediately packed, the canopy and harness-container should be covered and protected from damage.

Packing on concrete or asphalt should be avoided, since rough surfaces like these can damage the fabric, lines and hardware.

## ! Important!

Parachutes may only be packed by the jumper or a qualified individual (rigger or equivalent). Contact the manufacturer immediately with any questions.

#### **Pre-inspection Before Each Pack Job**

The complete skydiving system should be checked for compliance with the manufacturer's specifications. The harness-container and parachute canopy should be stretched out with the lines taut. The lines should be checked that they are straight and not tangled and the slider should be undamaged.

FIREBIRD recommends using a pro-pack method for the main canopy CONTRAIL 390 production series.

Should something unusual be noticed during the inspection, contact the manufacturer immediately.

When it doubt - play it safe and contact us!

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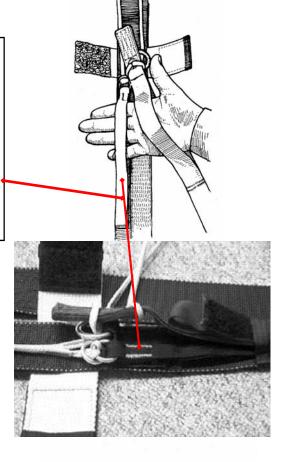
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Stretch the rig and parachute out so that the reserve flaps of the container face up. It is advisable to weight down the container so that it doesn't slide so easily during packing.

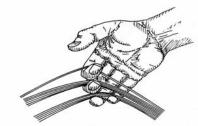
1. Set the brakes of the main steering lines by pulling the line down until the fingertrapped loop in the steering line is below the ring on the riser. Then the tip of the steering toggle can be

Inserted in the loop below the ring on the riser.

On the Contrail 390, the secondary flairs are **not** set.



Grasp the front and back suspension line groups between the fingers and separate them, in this way pushing the slider to the top of the lines against the stabilizers. Pay attention that there is no twist, line-over or line-through the right or left suspension line groups.



2. Now find the openings to all the cells. Start with an outside end cell. Pull each cell (both sections) completely out. Be careful that no cell is overlooked or dropped. And put the complete Nose between your knees.



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3. Pull the stabilizers out, to the left and right, of the canopy.

Reach inside the canopy, beyond the slider from above, between the A and B lines, and flake the fabric to the side.



4. Do the same between the B and C lines. Repeat this process on the other side of the canopy.



5. Follow the D lines on one side with your hand, gently pull them out and place them toward the center of the canopy, so that there's an S-fold between the C and D lines.

Repeat this process on the other side.

Now grasp the steering lines on one side at the edge of the canopy and pull them out with the trailing edge. Lay the trailing edge (tail) in Sfolds in the center of the canopy. Repeat the process on the other side.

Take care that all the lines stay in the middel of the canopy. Avoid lineover-malfunktion, be carefull!



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6. Flake the slider so that it forms a star at the base of the canopy. Grasp the middle cell of the trailing edge (tail) and pull this over the entire parachute.



7. Now roll the 4 cell openings towards the center cell 5 or 6 times.



8. Place the rolled cells into the center cell, so that the right-side cells are on the right of the center cell and the left-side cells are on the left half of the center cell.



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9. Be careful when pulling the tail around the rest of the canopy, so that the steering lines and cascades stay in the middle and DON'T go around the canopy. Otherwise this could lead to a line-over situation upon opening, which in turn could result in a malfunction or severely damaged canopy.

Take both sides of the tail in one hand and roll them several times towards the center of the canopy. Pay attention that the canopy fabric stays taut while being rolled, so that it rolls up to the base.

Then gently ease the evenly finished rolled tail toward the center cell of the canopy nose.



10. With your free hand, reach under the middle of the entire bundled canopy. Use a little forward swing to carefully lay this "cocoon" out on a flat surface. Pay attention that the suspension lines remain taut and that the cocoon stays together.



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11. Secure the base of this cocoon (at the lines) with both knees and carefully squeeze the air out of the canopy. While forcing the air out, narrow the cocoon to the width of the POD/deployment bag by carefully working the fabric sideways, under the cocoon. Watch out that the seam of the center cell stays in the middle.



12. Move to the side of the canopy, put one hand under the base of the cocoon, and fold the parachute upward in an S-fold as shown.



13. Secure the first S-fold with both knees and reach under the cocoon with one hand to compress the material against your thighs. Now fold the upper part of the canopy material over your lower arm and squeeze the rest of the air out, so that it can be folded in an S-fold in the opposite direction from the first S-fold. Continuously secure the canopy material with one hand.



14. Then place one side of the canopy into the POD. Use your knee to make sure that the other (still free) side doesn't slip away while you're doing this.



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15. Now place the second side into the POD. Secure the canopy with one hand so that it doesn't slip out.



16. Stow the suspension lines. Make the loops uniform in length; pay attention that there is no exceptionally long loop. The loops should be about the width of 3 fingers. Stow the suspension lines until about 50cm (20") of line remains unstowed.



17. Attach the drogue-release with the double loop before puting in the POD. It is much easier.



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18. Next place the POD upright, with the lines underneath, in the container. Stow the risers alongside the reserve container so that the toggles face towards the reserve.



19. Turn the POD about  $90^{\circ}$  in the container. . Make sure that the release grip is again seated and the cable correctly positioned.



20. The flaps of the main container should be closed in this order: Bottom, top, right, left. During the closing process, the kill-line of the drogue chute should be routed out down and to the right. Close the container with the pin. Attach the big Releasering with the double Loop. Only one yellow cable through one end of the Loop.

Stow the excess kill-line centered under the closed flaps of the main container.







21. The Bridel should be routed through that small corner in the pouch.

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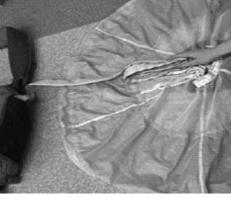
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22. Lay the drogue chute beside the container, fold it in half and lay the bridle in S-folds inside.



23. Now fold the drogue chute to the size of the BOC pocket and stow it there.



24. Close all the flaps of the container so that neither the kill-line nor the drogue-chute bridle is visible.



25. Here is the end product of a perfect pack job!



Have fun and enjoy your Skydive!



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## 18. Putting on the Parachute

The user puts the rig on over his shoulders like a backpack. The leg straps are brought up between the legs and the ends are fed through the buckles. The chest strap is also fastened with a buckle onto the main-lift web. The leg and chest straps should be pulled tight, so that the parachute fits the body snugly but without restricting movement. If the fit is too tight, the rig hinders the wearer; a fit that is too loose can lead to the uneven distribution of opening shock and possibly to the injury or endangerment of the wearer.

## 19. Manual Activation of the Reserve Parachute

After separation from the main canopy, the parachutist should pull the reserve ripcord handle from the pocket on the left vertical main-lift web with an even, strong pull. The steel cable attached to the ripcord handle will be pulled out of the housing and the pin at the end will slid out of the closing loop. At this point the reserve flaps of the rig open to free the spring-loaded pilot chute. This reaches the air stream and, with the attached bridle, pulls the freebag out. The suspension lines come out of the line bag, straighten out and, with the last two stows of the "running loops," free the reserve parachute. The parachute stretches out of the freebag and becomes filled with air, during which the slider slides downward and comes to rest on the connector links.

## 20. Allowable Service Life

On the condition that the parachute is in accordance with the regulations and has been handled corresponding to the instructions contained in this Equipment Handbook, the allowable service life is 15 years.

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## 21. Preinspection before each jump

The following points we recommend to be inspected befor you take on or jumping the parachute.

The documantation wich belongs to the parachute and the reservepack data card.

AAD is switched on.

Check all handles. 3ring release systems and the routing of the cable housings.

We recommend to not hook the RSL on the riser. But we leave it in the rig as additional reserve handle.



Main release riser.

Cabel routing through the loop. Only one cable in one end of the loop.



Check the reserve cable in it's housing. Pin check and RSL mounting.



Main pin check, shape of the main loop.



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# 21. Preinspection before each jump

**BOC** and Droguechutes.

Main release.



#### Before exit the airplane:

Student/passenger hook on, tight straps, hooks locked.

Cheststrapt of the passenger harnes closed and tightened.

Student/passenger jumpsuit closed.

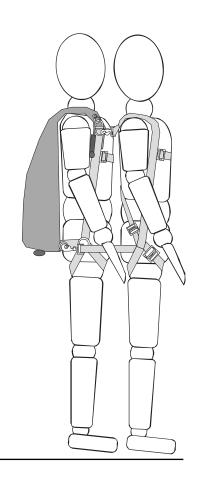
Headgear and goggle on.

Check 3-ring release left and right.

Check cut away handle / 2nd release handle and reserve handle.

Check droguechute.

Check main release.



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## 22. Tandem-Pilot Candidate Training

With System TD400 (Omega Tandem / Contrail 390).

Before using the TD400 (Omega Tandem) it is absolutely necessary to have participated in tandem-pilot training according to the minimum requirements and performance limitations specified by the manufacturer. Every owner or user of a TD 400 must have read the manual and these training instructions before the first use.

The tandem-pilot training must be carried out exclusively through the manufacturer or his designated agent.

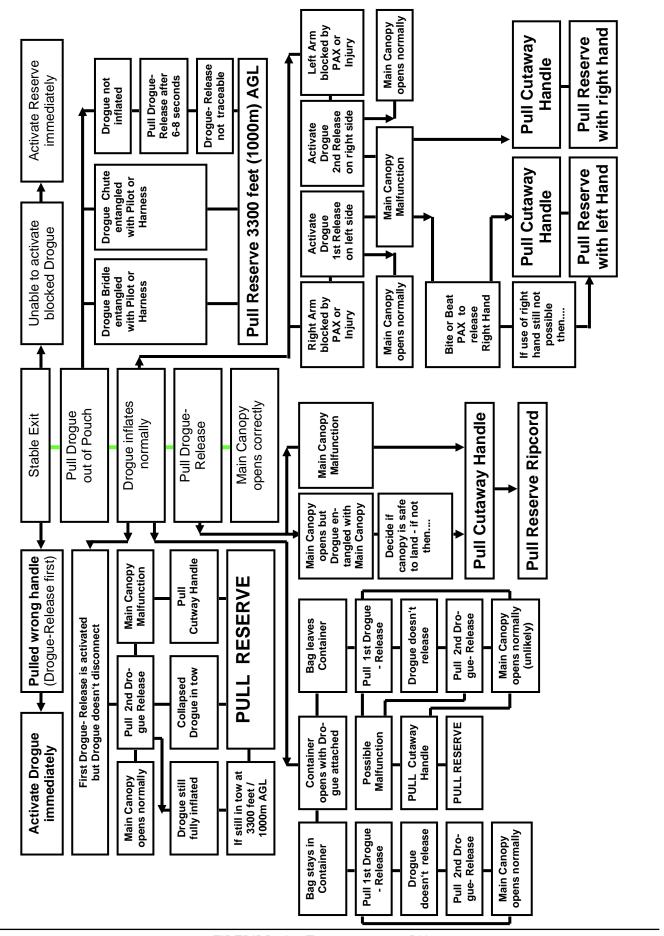
Attention must be paid that, during training as well as in use, the TD400 is only be used within the operating limits.

Remember: Successfully complete training. Read manual. Use within limits.

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Check reserve-ripcord!

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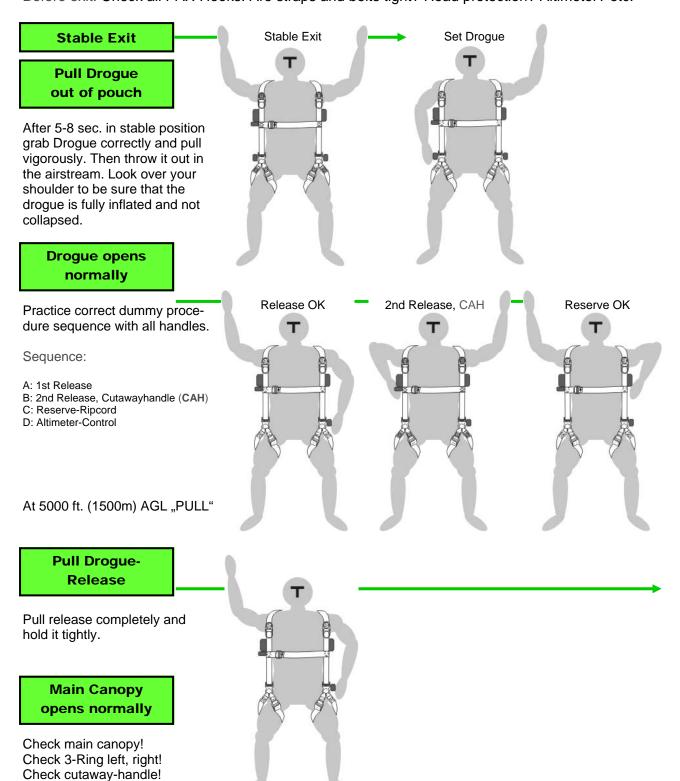
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## 24. Standard Jump Procedures

Before exit: Check all PAX-Hooks. Are straps and belts tight? Head protection? Altimeter? etc.



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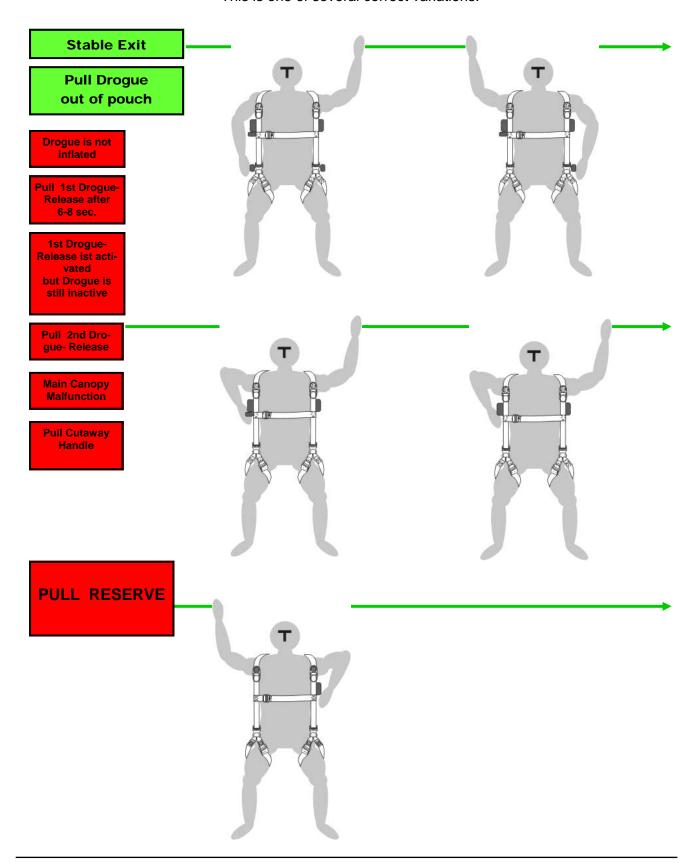
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# 25. Emergency Procedures

This is one of several correct variations.



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## 25. Tandem-Pilot Requirements

500 freefalls with square canopies. Total of 5 hours of freefall time. Current Jump-License.

#### **Maximum Limits:**

Exit Weight: (Tandem-Pilot + Passenger + Equipment)

Suggested deployment altitude main canopy: Suggested deployment altitude reserve canopy: 225 kg / 500 lbs.

1500 m GND / 5000 feet AGL 1000 m GND / 3300 feet AGL

An electronic AAD for your reserve is suggested.

(Avoid any high-speed freefall)

## **Training-Jumps Summary:**

Take care that all training jumps are done under realistic conditions.

It is required that each tandem-pilot candidate has read and understood this handbook and has passed an examination on packing the main canopy.

Be aware of the differences in all activation and opening devices between the TD400 and other systems. Before the tandem-pilot candidate uses the tandem equipment the first time, he or she must be familiar with all opening, activation, safety and emergency procedures.

Level 1: Candidate acting as Passanger:

> Complete jump sequence with ideal preparation. Sample jump sequence for the candidate

Level 2: Candidate acting as Tandem Pilot:

With an examiner as Passenger

Candidate acting as Tandem Pilot: Level 3:

With an experienced passenger (passenger with a minimum of 100 jumps)

Level 4: Candidate acting as Tandem Pilot:

With a non-experienced passenger

Candidate acting as Tandem Pilot: Level 5:

With a non-experienced passenger

Level 6: Candidate acting as Tandem Pilot:

With a non-experienced passenger

Level 7: Candidate acting as Tandem Pilot:

High-speed freefall until 2200 - 2000 m GND / 7200 - 6600 feet AGL

Level 8: Candidate acting as Tandem Pilot:

With a non-experienced passenger

Level 9: Candidate acting as Tandem Pilot:

Accompanied by a video cameraperson

Level 10: Candidate acting as Tandem Pilot:

With an uncooperative passenger

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## We are available at your convenience to answer questions and provide further information at:



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