

C CIVILIAN MODEL



MAINTENANCE MANUAL

User Guide
CMM 80021320-HO Revision: 7



SLIMFIT Mk-4 PN: 80021310

EMERGENCY PARACHUTE

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Gammelby Mosevej 16 – 6600 Vejen

Lufthavnsvej 8 - 6580 Vamdrup

Denmark



Tel +45 22403747

Mail info@cahoma.aero

Web www.cahoma.aero



RECORD OF CHANGES

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THE SLIMFIT EMERGENCY PARACHUTE SYSTEM

IS PROUDLY

MANUFACTURED IN DENMARK

1. DISCLAIMER – NO WARRANTY

Due to the unavoidable danger associated with the use of a parachute system, neither the manufacturer of the canopy nor the manufacturer and/or seller of the harness/container assy makes any warranty, neither expressed or implied.

Parachuting is associated with great risks and can lead to serious bodily injury or death.

We cannot advise using Slimfit parachutes, unless the user agrees to assume the risks associated with it and have the appropriate and required training and insight into the use of parachute equipment.

Parachutes can sometimes operate inadvertently, even though they are designed, manufactured, assembled, packed, maintained and used in accordance with all regulations. Malfunctions can result in disability or death.

Because of the risks associated with the use of parachutes, neither Free Flight Inc, Cahoma Aps nor Lite-Flite Aps assumes no liability and makes no warranty, either expressed or implied.

Free Flight Inc, Cahoma Aps and Lite-Flite Aps disclaims any liability in tort for damages, direct or consequential, including personal injuries, resulting from malfunction or from defects in design, manufacturing, materials or workmanship caused by the use of parachute equipment and does not provide any form of compensation.

The liability of Cahoma and Lite Flite is limited to replacement of defective parts found upon examination by manufacturer to be defective in material or workmanship within 30 days after its purchase from factory, and which has not been caused by accident, striking, improper use, alteration, tampering, excessive use, misuse, abuse or otherwise.

2. SPECIFICATIONS

FFE 201 D Preserve 1 is a round conical, 0-porosity (Permeability) steerable canopy

Canopy approved and manufactured under TSO c23b & N.A.S. 804

Maximum assembly deployment speed: 150 knots.

Maximum assembly gross weight (Pilot + clothing + equipment): 242 lbs = 113 kg

Sink rate with pilot weight of 105 kg is approximately 5,5 m/sec.

0-porosity (Permeability), 22 gores, Flying diameter 19,3 ft, 420 sq.ft.

3. LIFE LIMITS

Life time of Free Flight manufactured parachute canopies expires after 20 years from date of manufacture, provided the assembly passes the periodic inspections as described in section 5.

FFE PRESERVE I CANOPY MODEL 201 (-C)

4. CANOPY INSPECTION

Inspections to be done by a licensed parachute rigger or master rigger only.
Ensure that the canopy is assembled properly according to Cahoma/Lite Flite manual.
Check that the connector links are properly tightened. Never over tightened.
Ensure that steering toggles are installed on steering lines routed through guide rings.
Check for any damage to canopy material or suspension lines.
Canopy and harness/container material is sensible to acid and UV-rays and other violent influence.
Check for any stains or possible soiling by chemicals.
Make sure that no foreign objects are inside the canopy or entangled with lines.
If the assembly fails inspection, it must be removed from service and repaired as described in section 5 or scrapped.

5. REPAIRS

No major repairs or any alterations are authorized.
If repairs are required, the parachute must be returned to Cahoma/Lite Flite.
Cahoma/Lite Flite will determine further action.

6. ACTUAL USE

After leaving the aircraft, pull hard the chrome opening handle positioned on the shoulder strap at the left side of the chest.
The canopy is steerable.
By pulling left or right red steering toggles on risers, the canopy can be turned into the wind to optimize the safest possible landing.
Larger steering effect may be accomplished by pulling the right or left **rear** riser.

To minimize landing injuries:

- land into the wind
- keep your feet together
- protect your face
- keep your elbows together in front of your chest.

7. PACKING

Place the canopy on the packing table and connect tension devices at both container and apex ends.

Pleat the canopy. 11 gores to each side.
See procedures from Dan Poynters Parachute Manual, 9.5.1.

Diaper must be underneath the canopy.
Check each gore on each side.

Ensure that no fabric is wrapped into the next gore.
Check the skirt band and apex band to be straight.

Align the skirt band and up fold 45° parallel to the main seams.



Fold the canopy gores length wise in thirds over the main seams



Fold it once more over the main seams
(In Fifths)

Place weight bags over the canopy to keep it
in order during further packing.

Replace all damaged, loose or worn out rub-
ber bands on diaper.

Ensure correct size rubber bands. 7 x 40 mm.
P/N: 20120022



Release tension and pull container towards
the canopy putting lines on top of the
folded canopy

RIGHT →



WRONG →



Lines must **NOT** be hidden in the canopy
fabric

Close the diaper starting with the top rubber
band through the top grommet.
Form a loop of suspension lines. No more than
4 cm.



Continue with centre rubber band through the centre grommet.

Close with a 4 cm line loop



Bring the bottom rubber band through the bottom flap grommet -



and continue through the lower side flap grommet.

Close by using a line loop of no more than 4 cm.



Finish stowing of the remaining suspension lines lengthwise using line loops of no more than 4 cm.

Complete the packing according to the following instructions for **SLIMFIT** packing.



It is mandatory that the pilot chute bridle be installed through both positioning loops on 2 apex vent lines and around all the other vent lines.

The bridle must have a stitching through the loop to prevent it from tightening around the vent lines during the opening sequence.



With a fixed wrench size 9 check that connector links are tightened.
Never over tightened.



Check that toggles are in correct place on the Velcro.



Short closing loop (3-4cm) to go on the top ripcord pin.

Long closing loop (4-5cm) to go on the end ripcord pin.



Route pull up cords into each their grommet in the rear of the container.

Pull up cords now appears inside the container



Keep the loops in place in the container by knotting the pull up cords together.



Close the velcro in the upper corners of the container top cover



The diaper with the lines to be stowed in a bottom corner of the container, ensuring that it fills in the corner completely.



One extra short loop of canopy fabric to be stowed in the opposite bottom corner of the container.

Stove properly to completely fill in the corner.



Make sure there is no sloppy bottom corners.



One loop of canopy to be folded sidewise across the container followed by half a loop towards the centre.



Fold canopy up and down around the centre cover flaps.



Continue folding the canopy.



Once again fold the top part of canopy



Dress the canopy into the top corners of the container



Make sure that the corners are completely filled in.

Fold the centre inner flaps over the canopy to each side.

Also fold centre bottom and top flap to protect the canopy material from the closing loops.



Untie the pull cords and route them through the grommets in the top and bottom cover.



When closing the top cover on top of bottom cover, make sure to dress the canopy fabric and the inner flaps so it looks neat and tidy, and the closing loops are not in touch with the canopy fabric.

OBS:

Older models have a slightly longer top cover, with the grommet sitting 4 cm from the edge. These models are packed with the bottom cover **over** the top cover.

IMPORTANT:

Pull the inner flaps to the sides in order to move away the canopy fabric from the pilot chute bed.



Pull up the loops and insert temporary pins.

Compress the pilot chute using the pilot chute retainer wrap and closing pin.



The pilot chute bridle cord is S-folded in the valley between the pull up cords



Place the pilot chute so the closing pin can only be removed to the right side of the container where the spring cover flap is situated.

Pull up the closing loops through the pilot chute grommets and keep in place with temporary pins.

Once again pull the inner flaps to the sides to make room for the pilot chute.



Close the left side cover. Pull up the closing loops and secure with temporary pins.



Remove the closing pin and retainer wrap from pilot chute



Close the right-side container cover.

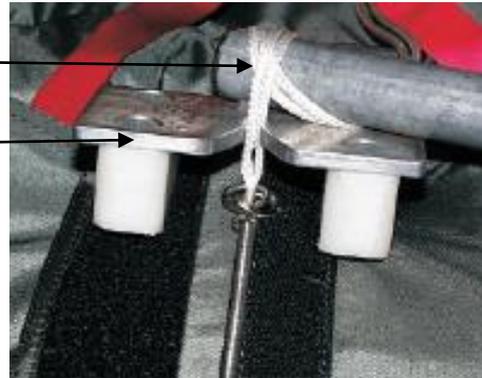
Pull up the closing loops and secure with temporary pins.



CLOSING CONTAINER WITH S-HOOK SPRING USE

Pull Up winding handle

Pull up chair



OR

New PS retaining pull up tool

This magnificent tool will retain the pull up cord in the position you decide without handhold.



First S-hook to be inserted in either closing loop



PS Pull Up Tool 20150160

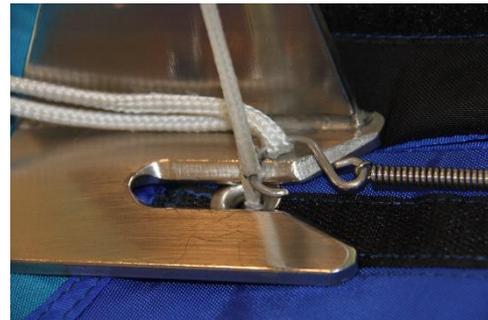


Pull up the second closing loop so the opening is well proud of the grommet.

With a cord pull the S-hook towards the loop



Carefully and gently ease the second S-hook through the loop opening



Slowly and carefully remove both pull up cords from the loops.



Close the velcro cover over the spring.



Dress the parachute with the dressing tool.



Flip over the container and check that both ripcord pins are correctly in place. Loops must be at the middle of the pin.

Seal as applicable.

Sign parachute log card and place in pocket.



Place the back pad on Velcro stripes.

Your parachute is ready



Count your packing tools.

Make sure nothing is left inside the parachute!





AFTER PACKING, REMEMBER YOUR PAPERWORK !

Personal notes:

8. PACKING TOOLS:

60030030 Dan Poynter: The Parachute Manual
20153080 Pull up cords, 3mm, 85 cm, 2 ea
20150145 Shot bag (Packing weight)
20150150 Temporary closing pins, 2 ea
20150135 Pilot Chute retainer with flagged closing pin
20150180 Dressing tool
20150154 Pull up handle
20150153 Pull up plate
20150155 Pull up chair
20150160 PS retaining pull up tool

9. ACCESSORIES

90011605 Connector links # 5 Stainless Steel
20090080 Toggles, set of 2
80023112 Closing loop, 3 - 5 cm – define desired length
20120022 Rubber bands, ¼ kg, 7 x 40 mm
20050380 Pilot chute for Slimfit with top grommets
20070203 Pilot chute bridle cord
20101490 Ripcord, 2 pin
80023108 Opening spring with 2 S-hooks
80022510 Back pad, semi sheep, to be ordered with container
80022520 Back pad, nylon duck, to be ordered with container
60030211 Packing Instructions, MK-4, GB (This manual)
60031020 Parachute record log card
80022102 Transport bag



HAPPY FLYING WITH SLIMFIT MK-4