Basik air concept
2010 RN 97
83340 Le Luc
FRANCE

SERVICE BULLETIN

MANDATORY

N° /AN
Date: 03 /11 /05
Page 1/6

Document I-2

TEL: 04 94 99 12 36 FAX:04 94 39 89 37

EQUIPMENT CONCERNED:

Reference	**Designation**	**SN# Concerned**
ADV (xxxx)	Harness-container Advance	All kind with chest strap type 8 (42 mm large)

FACTS:

Sunday October 30th at Fretoy le Château (France) a student equipped with an Advance rig was freefalling in a "chute assis" position attempt. A very hard premature opening happened. Stiches from the chest strap failed. Student flew the canopy and landed without any injury.

ANALYSIS:

Main cause of this incident is the fact that the main throw out pouch has not been changed as mandatory into our SB n° 050801 dated of 16/8/2005. (Although the incriminated n° (1045) was just below the mandatory.) The throw out handle was a FF type and could not been correctly maintained in its location because of the poor quality of the pouch.
Student was 90 kg, this mean around 110 kg fully equipped and was inside the specifications allowed. His position during opening was estimated to be on the back-head down, turned on the left side. This position provoked dissymmetrical stress toward the main canopy and the harness container.
Because of this position the main canopy opened very hard (3 cm line differences). Because of this, the seams of the chest strap (long webbing left side) have ripped off and other secondary seams as well.
Burns on different parts of the reserve container are the proof of this body position when the canopy opened. The excess dissymmetrical stress put on the chest strap shows that the total weight has been transferred to the chest strap while the student was violently returned to a belly to earth body position.

COMPLIANCE ACTIONS:

Report to the attached document for detail and photos and or compliance action as well.

Basik Air Concept Approval

Basik Air Concept
559 Chemin des Salles
83300 Draguignan France
Tel: 04 94 99 12 36
Fax: 04 94 39 89 37
E-mail: basik.fr@free.fr

Subject: Addendum of S.B. n° 051101 from 3/11/05

Following the incident pictured hereafter, we are asking urgently to have all the throw out pouches from Advance containers to be inspected and changed if signs of looseness are effective. Whole Advance container not put up-to-date does not to be used.

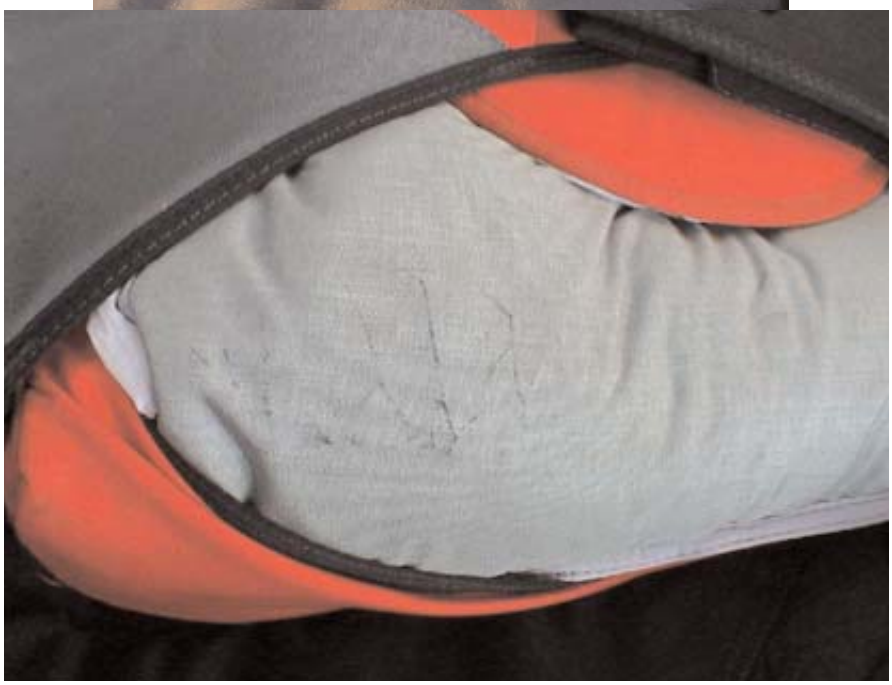
Sunday October 30th at Fretoy Le Château (France) one student equiped with an Advance harness-container with a FF handle has been victim of a prematured opening. According to the first information, this opening intervened during a body free fall transition The student land safely without any injuries.

Verification

After eyesight some photos that we've recovered (we haven't still the equipment to disposal),the main pilot chute inflated on the right side and a very hard opening happened while the student was in the head down position left slice side. This hard opening has provoking the stiches failure of the chest strap and of some secondary stiches as well.

Container juction with the lateral webbing as been slightly damaged too.

Several burns done by the main canopy lines and risers are on the reserve container divider flap and on the reserve bag as well.
Stiches from the reserve container reinforcement tape are dammaged too.



Because of the important stress the reserve bag has been push downward the bottom of the reserve container. The reserve pin stayed secured. This shown how big the forces transfer has been developped.

Left main riser grommet has been a bit dammaged (no picture) and a burn can be seen on it. The riser lengthen up to 1 cm.

A quick look at the main canopy shows that all left external lines lengthen up from 2.5 to 3 cm.
This lengthning goes from side to center cell with decreasing.

Analyse

The first cause of this incident is the poor condition of the main throw out pouch which has not been changed after our S.B. n° 050801 du 16/08/2005. Although the serial number (1045) was below the recommended SN# inspection. We are now requesting that all Advance from SN# 1000 must be inspected and the pouch must be changed if necessary. The handle was a FF style and cannot been secured in such pouch.

The student was 90 kg (around 110 kg fully equiped) this configuration match the weight certification tolerance. We cannot have any speed information, but it seems to be close to the certification limit. Student's body position was estimated head down left slice during the opening. This position has increased the forces transfer and most of them have been put on the chest strap. All burns on the container confirm this position. The important stress on the chest strap shows that the student body has been hardly moved back to a face to earth position. This over stress helped a lot on the destruction of the chest strap seams.

We have seen that the methos of conception of the chest strap can be made in a better way. This method will avoid any fall of the user from the harness in such situation.
We are suggesting to make a complete confluent wrap with the chest strap webbing around the left main webbing. (right picture) instead having just a part of the webbing around it (left picture). By this way in case of seams failure the chest strap webbing will remain to protect the user of any falling possibility. Elasticity differences between type 7 and type 8 webbing and this type of conception used are not the best method in such dissymetrical stress and hard opening. Seams cannot resists in such situation because stiches cannot be as elastic as the webbing is.
It is evident that this kind of separation of the chest strap from the main lift webbing can happened to any kind of conception which doesn't not integrated a complete confluent wrap around the MLW. **The conception we used and those who consist to insert the chest strap between the MLW (even if it is stronger) do not protect at all the user from a falling possibily from its harness in case of such violent opening and stress transfer to the chest strap.**

Old conception

New conception

Action of Compliance

We are asking to have all Advance harness-container equiped with a type 8 chest strap which not used a confluent wrap to be return for modification to our factory. This modification can also be done into a certified rigging loft. This modification is mandatory and it is totally free of charge for the customer.

We are also taking care, if necessary, of the replacemant of the throw out pouch since SN# 1000 with less than 500 jumps. For SN# less than 1000 or over 500 jumps, we are considering that they are part of the logical periodic maintenance of a parachute and the replacement will be at the full charge of the customer.
We expressly remind that the main reason of this incident is the poor condition of the throw out pouch which was unable to keep safely the main pilot chute inside it. For this reason we are asking all users to not modify the normal lenght of the main closing loop as it is set into our manual. It is also important to set correctly the FF handle for those using it. The largest part of the handle must be insert into the pouch over the pilot chute to keep it squeezed.

Le Gérant
Jérôme Bunker

Le Responsable qualité
Ludovic Chevé