

## FEDERATION FRANÇAISE DE PARACHUTISME

62 rue de Fécamp - 75012 PARIS Tél : 01.53.46.68.68 - Fax : 01.53.46.68.70

e-mail: ffp@ffp.asso.fr Web: www.ffp.asso.fr

## COMMISSION SECURITE CIRCULAIRE DE SECURITE N° 170

Ref.: JMS/09/1050 Date: 23/06/2009 **Issued by**: FFP

Subject: Failure of drogue bridle connection between the drogue and the deployment bag at

the time of drogue release.

Equipment concerned: Tandem Atom 740-1 of Parachutes of France-Aérazur

The CTP was alerted to several cases of failure of the bridle between the drogue and the deployment bag which occurred at the time of drogue release and the beginning of deployment. In all the cases, the opening was disorganised and the risk of interference between the main canopy and the tandem pair was very likely.

The dynamics of the incident occurs in the following way

- failure of the bridle
- interruption of the deployment sequence
- failure of the deployment bag to lift and the suspension lines partially wrapped/tangled in the legs of the tandem couple
- lift-off of the main deployment bag only by its own drag
- a disorganised canopy opening



The analysis of the various incidents reveals several causes:

- 1) The bridle failed at the larks-head knot on the outlet side of the main deployment bag by wear and abrasion of the bridle against the ground and/or between the bridle and the right side flap of the deployment bag
- 2) The total failure of the bridle can occur following a fast deployment at the time of the drogue release.
- 3) The failure can happen where the two flexible pins are attached to the drogue by embrittlement of the drogue bridle caused by the repeated folding at the same place during packing.
- 4) In at least one case, no explanation was found for the bridle failure.



Following these reports, the manufacturer, Aerazur, **developed and tested a new product** with twice the tensile strength of these earlier bridles (900 kg instead of 450 kg).

**Actions**: to check the state of wear of your drogue bridle:

- If you note any wear or the start, however small, of a tear or stitching failure
  - on the larks-head knot on the outlet side of the main deployment bag,
  - or anywhere along the length of the bridle,
  - the bridle **must** be immediately replaced before the next jump.
- If the bridle does not present any signs of wear or weakness, it must still be replaced -
  - if it has more than 200 jumps
  - at the latest by August 15, 2009

Meticulous examination must be repeated with each repack before this deadline.

**Qualified personnel**: All Tandem instructors or Packers for the inspection and maintenance of the required standard.

**Date of application**: before the next jump.

Please note: The engagement of the flexible pins into the tunnel-guide with the pins butted hard against the closing loop can cause an excessive loading and <u>IS an error of packing on the equipment Atom tandem</u>



**Distribution**: Président F.F.P.

D.T.N.

Directeurs Techniques

̃ Aerazur

Plieurs / réparateurs

Etats Majors de l'Armée de Terre, Armée de l'Air et de la Marine

Membres de la C.T.P.

B.S.A.P

C.E.V.A.P

B.S.M.A.T Montauban

D.T.M.P.L Orléans

DGAC Monsieur JOUBERT

DGA Monsieur PERRIN

Direction des Sports Monsieur MORLET

Paramag

FFP Contacts