



## TECHNICAL & SAFETY COMMITTEE INTERNATIONAL PARACHUTING COMMISSION (FAI)

<b>Technical &amp; Safety Bulletin No.</b>	<b>5/2006</b>	<b>W.N. 10</b>
<b>Date of Issue</b>	<b>5 June 2006</b>	
<b>Subject Matter</b>	<b>Tandem Passenger Fatality &amp; Tandem Harness Fitting</b>	
<b>Origin for material/bulletin</b>	<b>Strong Enterprises Tandem Service Bulletin #24 USPA/PIA Joint Statement.</b>  (Forwarded to T & S Committee by Wim de Vos, Austria; Kim Hardwick, Australia; Jim Crouch, USPA).	
<b>Area of Concern</b>	<b>Tandem Passengers falling from Tandem harnesses</b>	

*Technical and Safety Bulletins issued by the Technical & Safety Committee of the International Parachuting Commission (FAI) are issued as a guide and help to parachuting nations. The bulletins are advisory and there is no direct or implied criticism of any manufacturer or product intended. The bulletins result from:-*

- 1 An incident or experience in the field being reported.*
  - 2 The issue of a notice by a manufacturer or by a National Parachuting Organisation.*
- In the case of equipment being the subject of the bulletin the reader is advised to check with the manufacturer regarding the current status or position of that equipment.*

*Technical & Safety Committee of IPC, IPC and FAI accept no liability for the use or misuse of any information contained in this bulletin. The reader assumes all liability.*

**Skydiver/Drop Zone/Industry Alert 05/31/06)**

**JOINT STATEMENT FROM THE U.S. PARACHUTE ASSOCIATION AND THE  
PARACHUTE INDUSTRY ASSOCIATION**

Within the last seven months there have been two U.S. tandem fatalities in which the student/passenger has fallen out of the harness upon opening shock. In one case the person went under the back strap, and in the other, over the back strap.

As circumstances of these two fatalities are being examined by multiple parties, it is imperative that tandem instructors and safety personnel examine and review tandem harness fitting and adjustment procedures available from the manufacturers.

Schools and centers with tandem operations should review tandem adjustments for varying body types while simulating opening positions/sequences on the ground to ensure a full understanding of potentially hazardous body shifting which can occur during freefall and opening.

Tandem manufacturers should examine their respective systems to ensure that unusual opening attitudes, varying body sizes/shapes, and recommended instructor procedures will provide student/passenger security within the harness, particularly during the opening sequence.

---

**STRONG ENTERPRISES**

**11236 SATELLITE BLVD**

**ORLANDO, FL 32837**

Tel. 407 859 9317

Fax 407 850 6978

[ted@strongparachutes.com](mailto:ted@strongparachutes.com)

[www.strongparachutes.com](http://www.strongparachutes.com)

STATUS: Mandatory  
COMPLIANCE DATE: 2 June, 2006  
IDENTIFICATION Dual Hawk Service Manual, Appendix M, PN 590011 Rev L  
Dual Hawk Passenger Harness, PN 240075 – 4

**BACKGROUND** Strong Enterprises started tandem parachuting in 1983, developed, TSO'd and has marketed the Dual Hawk Tandem system since 1985. Tandem jumping is the most popular method of providing a skydive to people interested in experiencing the sport. Presently there have been over 2,000 Dual Hawk Tandem Systems manufactured and sold throughout the world. There are over 4,000 registered Tandem Instructors certified to use the Dual Hawk Tandem System. It is estimated that there have been over 2 million tandem jumps made on the Dual Hawk Tandem System.

*Continued.....*

Although there have been parachute malfunctions and canopy damage, there have been no incidents or reports of harness (student/passenger or instructor harness) failure. A recent (May 27, 2006)

Tandem passenger fatality, in which the student/passenger slipped out of the harness backwards between the back diagonal straps and the horizontal back strap during main canopy deployment has led to this Service Bulletin.

**FACTORS:** This specific accident involves a 5' 4" (160 cm) female student/passenger who weighed 230 lbs (105 Kgs.). The Tandem Instructor was 5'11" (177.5 cm) and 145 lbs (66 Kgs.). Ground video footage verifies that the harness was not properly adjusted and extremely loose on the student/passenger before boarding the aircraft. Video footage of the drogue fall shows the student/passenger's horizontal back strap was located under at least one leg strap (between the leg strap and the passenger's leg), not around the lower back as intended. Also, the main lift webs, diagonal back straps and lower attachment points from the tandem instructor to the student/passenger harness are all out of the maximum length.

**SERVICE BULLETIN:** It is important for Tandem Instructors to know that they are ultimately the responsible person for all aspects of the tandem jump. They are responsible to assure a proper fit of the harness, its comfort and safety as well as the entire performance of the tandem jump for themselves and the student/passenger. The procedure of fitting the harness must be accomplished on the ground, where adjustments in proper harness fit can comfortably be made, thoroughly checked and verified, before boarding the aircraft.

Each and every current Strong Tandem Instructor should review the Dual Hawk Tandem Service Manual (DHT) Rev. L, Appendix M,, to re-familiarise themselves with instructions for fitting the Passenger Harness PN 240075-4 to the student/passenger. These instructions are attached to this Bulletin.

It is also important for Drop Zone management to establish guidelines of any physical or mental limitations for evaluating potential tandem student/passengers to ascertain that they are capable of being able to provide a safe and comfortable tandem [parachute jump within these parameters.

***End of Service Bulletin #24***

***Note from IPC Technical & Safety Committee –  
For ease of distribution the Dual Hawk Service Manual referred to in the penultimate paragraph of the this Service Bulletin #24 is not attached. This manual can be accessed on the Strong Enterprises web site, [www.strongparachutes.com](http://www.strongparachutes.com)***

***For further specific details on the incident please see Strong Enterprises web site.***