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## **TANDEM SERVICE BULLETIN #24**

June 2, 2006

**STATUS:** Mandatory  
**COMPLIANCE DATE:** June 2, 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 4,300 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. Although there have been parachute malfunctions and canopy damage, there has 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" female student/passenger that weighed 230 lbs. The Tandem Instructor was 5'11" and 145 lbs. 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 to 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-familiarize 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.

Instructions for fitting the  
**Deluxe Tandem Passenger Harness**  
**PN 240075-4**  
For use with the Strong Tandem Systems

Congratulations on your purchase of a Strong Enterprises Deluxe Passenger Harness. Following the eight simple steps below will assure your passengers safety, and offer them a comfortable Tandem Skydiving experience.

- 1) Extend all 7 adjustments completely out to the stops.
- 2) Help the student step into the leg straps and position the harness on the student's shoulders.
- 3) Fasten the chest strap securely.



- 4) Fasten the bellyband so that the hip rings are to the front of the wearer's hips and the chest strap and bellyband are equally snug. The main lift webs should be parallel from shoulders to hip.



5) Tighten the leg straps with the rolled leg pad just under the butt.

6) Tighten the horizontal back strap. The lower harness should now be fitted and snug.



7) Begin adjusting the main lift web so the yoke is pulled all the way into the back of the passengers neck, and that the butterfly snap rests on top of the shoulder, or slightly forward.

8) Tighten the diagonals just snug enough for the passenger to feel secure in the harness.



Your student should now be comfortable and secure in the harness. Be certain to stow the extra Webbing in the keepers provided.

**Note!**

**Once the passenger is securely fitted, you should resist the urge to further tighten the MLWs in the airplane while the passenger is seated. Doing so may inhibit the passenger's ability to arch.**