



# TANDEM NEWS

A PUBLICATION FOR TANDEM INFORMATION BY STRONG ENTERPRISES  
NO. 7 "THE PARACHUTE COMPANY WITH IMAGINATION" JANUARY 1991

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## DON'T MISS IT!

**TANDEM SEMINARS AND  
WORKSHOPS  
AT THE PIA SYMPOSIUM IN  
ORLANDO, FL  
20-24 JANUARY 1991**

## EVERYBODY INVITED!

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### AIR TRAFFIC CONTROL

To promote public relations in the southern California skies, Don Balch and the Skydiving Adventures Parachute Center invited air traffic controllers (who are not on strike) from the Ontario TRACON to make a tandem parachute jump. Three

accepted the offer and had a great time. One has continued with his skydiving training and recently made a Level IV AFF jump. How's that for P.R.?

### USAFA TICC

Kelly Andersen, Tandem Instructor at the U.S. Air Force Academy, arranged for a Tandem Instructor Certification Course to be conducted at the Academy 1-6 October 1990. Before the week was over, Larry Bagley assisted eight of the Academy's instructors-- Mark Boettcher, Dayton Bonadie, Bill DeSola, Fran Green, Tommy Land, John Morrison, Doug Staples, and Dave Walker--to qualify in the transition to the Dual Hawk Tandem system.

### SOUTH AMERICA VISITED

By special invitation of Cesar Aguilar, President of the Confederation of Latinamerican Parachuting, Strong Enterprises' Field Representative, Larry Bagley conducted a Tandem Instructor Certification Course, 24 November thru 2 December

1990, during the 3rd Championship of Latinamerican Sport Parachuting in Santiago, Chile. Six jumpers from Argentina, Brazil, Chile and Peru earned their instructor's rating during the meet. Three of the six--Hector Gerling, Marcelo Vilar and Jimmy Zuberbuhler (all from Argentina) completed their Phase II jumps as well. Fernando Gallegos (Peru), Roberto Sassim (Brazil) and Peter Vermehren (Chile) are working on their Phase II jumps.

After the course, Bagley joined Aguilar for an eight-day trip to Paraguay where another certification course was taught through the gracious hospitality of Mr. and Mrs. Elio Massagrande, President of the Paraguayan Association of Sport Parachuting. Four jumpers--Ricardo Arévalo, Mario Bogado, Elio Massagrande and Pastor Verdún--earned their ratings.

There are now SE Dual Hawk Tandem rigs in Argentina, Bolivia, Chile, Panama and Paraguay.

### ANOTHER HAMILTON!

Scott Hamilton, "lawyer of record" for the tandem program, continued the family skydiving tradition in October by introducing his daughter to freefall.

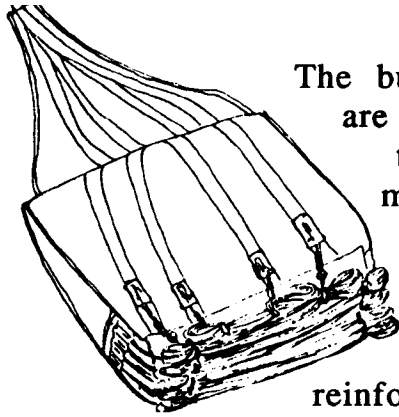
As a birthday present, Stephanie jumped tandem with Scott Cox on a Dual Hawk at the Skydive Colorado Parachute Center north of Denver. She pulled the ripcord--without dropping it--and landed within a few feet of the pea gravel pit. According to the proud father, "she was elated and is hooked."

### TANDEM NEWS SUBSCRIPTIONS

Every SE Tandem Instructor and Examiner has paid a fee to receive his rating and be placed on SE's mailing list, which includes a copy of the Tandem News. Those who are not SE-rated but want to receive their own copy of newsletter should send \$10 for a one-year subscription. Those buying a subscription before the end of January will not only get the last two issues of Tandem News but will receive a vinyl SE 3-ring binder in which to store them.

### NEW RESERVE FREEBAG

A SAFETY IMPROVEMENT! SE is taking advantage of thousands of jumps of experience on bungee stows, and is now using them on the reserve freebags. SE found that the nitrile rings previously used are subject to some deterioration while the rig is packed.



The bungee stows are identical to those on the main deployment bag, including the plastic sliders and reinforcing tapes.

The deterioration factor does not warrant a safety recall, but it is recommended that tandem rig owners upgrade their old style freebag to the new bungee stow bag.

Whenever SE gets a Dual Hawk in for repairs or updates, the above change will automatically be made. Charge for the service is \$80--\$60 for the bag and \$20 for the reserve repack. The bag itself can be ordered by Dual Hawk owners at the discounted price of \$60-- retail price is \$75.

### DROGUE DEPLOYMENT

A tandem instructor from the northeast asked the question about the possibility of the drogue being deployed between his body and the student ripcord cable housing, causing a drogue in tow.

The answer is in two parts:

a. When using the PVC handle ripcord for the student it should be attached to the

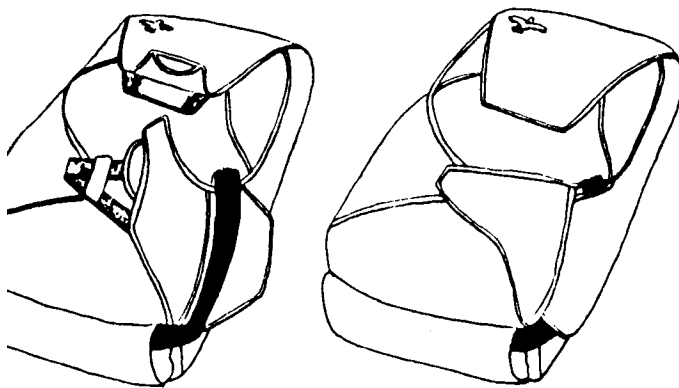
harness on the lift-a-dot snap located just above the leg strap, simulating a throw-out pilot chute handle. That leaves quite a bit of slack in the cable housing. So, when moving the housing forward to the student harness, first pass the housing between the right side and the student's right side connector (the type-7 webbing with the friction snap on it) and then snap it on to the student's harness. That will hold the housing safely inside the side strap and against the side of the instructor.

b. When using a Martin Baker ripcord handle, the ripcord cable housing, which comes out of the container through an opening in the middle of the back pad, runs along the instructor's rib area and connects to the student's main lift web at the right breast. That does not allow enough slack in order to wrap the housing around the right side connector as in "a" above, nor does it leave enough slack so that it would be likely that during drogue deployment, a tandem instructor would move his right hand from it's normal freefall position, and have it accidentally pass between his rib cage and the cable housing on it's way to grab the drogue pud, and then to withdraw the drogue from it's pouch and out along the same route, causing a drogue in tow. Photo analysis

indicates it is a very unlikely event, but SE will continue to focus on the possibility. DO NOT TRY IT IN FREEFALL, etc.

### DROGUE BRIDLE VELCRO

Another Tandem Instructor suggested it would be better to sew the velcro (that runs along the side of the right main flap), closer to the bottom edge of the container instead of angling towards the top of the drogue pilot chute pouch. It was designed that way to prevent the Tandem Instructor's hand from having to pass over the kevlar bridle when reaching for the drogue pud. The objective, of course, is to eliminate the possibility of the Tandem Instructor's hand from getting caught in the kevlar bridle during drogue deployment.

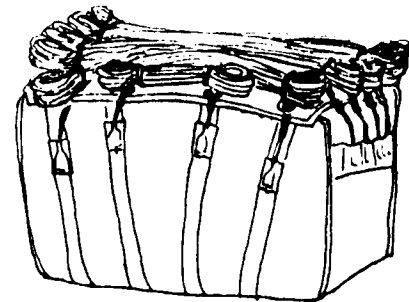


The new "drogue bridle cover flap" modification (illustration above) being installed on all new tandem rigs helps protect the bridle even more.

### PROPER LINE STOWING

SE recently examined a system that had both line and canopy damage. The bag had only 10 bungee stows on it, 5 of which were broken, indicating that either the lines were excessively overhanging the sides of the D-bag or they were left loose in the container which caused the damaged line to entangle with a rapide link. The entire opening shock was taken at one line attachment point, causing damage to the lower skin and the rib.

The main suspension lines of the 425 and T-520 should be stowed so the end of the stow is at the edge of the top of the D-bag, not overlapping the edge of the bag.



Overhanging lines can get caught on something, or be subject to excessive wear against the container during deployment. The Master 425 D-bag comes with 12 stows on it, and the T-520 D-bag comes with 14 stows on it. All of the

stows should be used when packing so that slack lines are not unnecessarily left laying in bottom of the main container.

In addition to missing bungees, and excessively long ones, some rigs have been seen to be missing some, or, as in one case, all of the plastic chokers. One packer complained the chokers were a nuisance. The lack of vigilance by the rig owner allowed the packer to render the line stows totally ineffective by not using the chokers. When the chokers on the bungees are not used, the lines are stripped off the D-bag when pulled out of the container by the released drogue. Suffice it to say that the snatch force is more than enough to strip off all of the lines and dump the canopy out of the D-bag in one motion. Out-of-sequence openings cause damaged canopies, knotted lines, and cutaways. SE welcomes design, as well as any other, suggestions, but does not recommend that packers, or anyone else, make design changes without factory approval.

Everyone must remember that the tandem system is being asked to do a very big job in decelerating tandem loads. Additionally, each instructor has the responsibility to his passengers to avoid any situation which may result in injury.

Poor packing procedures or poor gear maintenance is avoidable--there is no excuse. Professionalism is an attitude.

### STATISTICS AND YOU

"Tandem Malfunctions: Causes and Cures" was the title of the paper Bill Morrissey presented to the 4th Technical Congress of Parachuting in England last October. The congress, a function of the International Parachuting Commission, (parachuting arm of the FAI) was hosted by the British Parachute Association at Bisham Abbey outside London. Bill's report on numbers and types of tandem malfunctions certainly held everyone's attention with surprise revelations. The BPA provided survey forms which supported Strong Enterprises' findings. (Bill's illuminating report will be presented during the tandem seminars at the PLA Symposium in Orlando, FL, 21-23 January 1990.)

The report was made possible, in large part, because SE instructors sent in their malfunction and incident report forms, and their Tandem Instructor Questionnaire forms. SE is trying to gather data that will benefit the tandem community as well as eliminate both equipment and human shortcomings. Problems on

equipment cannot be addressed if they are not made known to the manufacturer; nor can progress be made on solving human error problems if those in the field are reluctant to tell what may have been done wrong by those using the tandem equipment. Don't make the next tandem instructor repeat your mistakes because you kept your mouth shut.

Bill hopes to update the material he presented in England with the 1990 incident report forms and the Tandem Instructor Questionnaire forms sent out in the last Tandem News. If you haven't sent in your questionnaire please do so. In addition, please remember that any incidents should be reported as soon as possible after they happen.



THE ENTIRE STAFF OF  
**STRONG ENTERPRISES**



WANTS TO WISH YOU ALL

**A VERY HAPPY HOLIDAY**  
**SEASON!**

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Strong Enterprises  
11236 Satellite Blvd.  
Orlando, FL 32821