

TANDEM NEWS

A PUBLICATION BY STRONG ENTERPRISES FOR TANDEM INFORMATION

**Christmas Greetings!
and...
A Happy New Year!**

Specific Lot of 3-D Rings Grounded

Last July, Strong Enterprises discovered two 3-D rings from a specific lot of hardware were deformed. After investigation, it was determined the metal forger had not properly hardened (tempered) them, and, as a matter of precaution, we decided to replace **all** 3-D rings from the lot.

The Dual Hawk tandem rigs affected were manufactured between July 1991 and June 1992 with serial numbers between 107067 and 206098.

Service Bulletin #16, issued 15 July 1992, required all owners to stop using the affected equipment immediately and send only the harness/container assembly to Strong Enterprises prepaid. The rigs were being replaced within two weeks of receiving the rigs and returned free of charge.

Harness container serial numbers that have not had the 3-D rings replaced as of this date are:

107074	108087	201006
108076	108088	201007
108077	108090	201008
108078	109108	201009
108079	109109	201010
108080	109110	201015
108081	110138	205071
108083	110143	205073
108084	111156	

Of almost 200 rigs, all but these listed have not been serviced and if you have, or know of any of these rigs, contact Strong Enterprises immediately—

1-800-344-6319.

Seat Belts Mandatory

Whether we like it or not, the use of seat belts in skydiving aircraft is **mandatory** for take-off and landing. Now's the time to adjust your way of thinking and routinely use them if you are not already.

Two separate but very tragic airplane accidents—Perris and Hinckley—have convinced the FAA that skydivers as a group are not wearing seat belts. That is going to change and the FAA is giving us as a community a chance to change it ourselves. Of course, if we don't, they're prepared to do something about it, and we may not like their tactics.

Seat belts are mandatory, so use them.

TICC Video

After months of negotiations, Strong Enterprises entered into an agreement with B.J. Worth to write and direct a Tandem Instructor Certification Course video to augment our tandem program. As there are almost 1,700 Strong Tandem Instructors and over 50 Examiners world-wide, standardization in how courses are being taught can be a problem. The video will be used by every Examiner when conducting courses and used by instructors to remind them of correct tandem procedures with the Dual Hawk.

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This last September, B.J. gathered his crew in beautiful Whitefish, Montana for an intense filming session which included Harry O'Connor as the Instructor Candidate; Larry Bagley as the Tandem Examiner; Bill Morrissey as the Technical Advisor; and Cindi Jones as the "experienced jumper". Chris Worth, Bobbie Worth, Jan Davis and Tim Kinamon packed, cooked and flew when necessary.

Tom Sanders did an excellent job as Director of Photography and was backed up in the air by Bill Jackson. Ken Schaefer, an Emmy Award winner from Los Angeles, did all the ground and classroom cinematography and Brian Ross, a skydiver and editor in LA will edit the film.

The film is expected to be about 30 minutes long and will be available for purchase by the first of the year.

USPA And Tandem Jumps

At USPA's board meeting in September, the Safety & Training Committee changed their position on tandem jumps which will now count towards awards, licenses and ratings.

For some unknown reason, USPA had decided some time ago that tandem jumps were exactly like static-line jumps when it came to licenses—they didn't count. The freefall time on a tandem jump could not be used for total freefall time accrued and the number of jumps required for a license could not include any tandem jumps. It was a position mysteriously assumed by USPA Headquarters that could not be substantiated by board meeting minutes.

Now it has all changed. Whether a jumper is acting as passenger or instructor, the freefall time—from when the duo leaves the airplane to when the main parachute is deployed—is recognized bonafide freefall time for all awards, license and ratings. So too, do the tandem jumps qualify for "numbers." For example, if 50 jumps are required for a B License, they can include those made on a tandem jumps.

However, it was felt by all concerned—board members, skydivers and manufacturers—that no one should be able to qualify for any license and have all his jumps tandem. Therefore, the language in the Skydiver's Information Manual specifically precludes meeting any of the individual license requirements on tandem jumps, i.e., spotting, landing accuracy, two-way RW, etc.

FAR Rule Change

Everyone involved in tandem jumping knows the industry is enduring its fourth extension to the regulation exemption issued in 1984 that allows tandem jumping. And no one has a good feel for when the permanent rule will be written.

However, with the possibility that there could be some movement on the subject, Strong Enterprises is very interested in what the tandem community has to say about a new rule. How it should be written, who should control tandem jumping, how it should be regulated (if at all), and how it should be administered are some of the questions that must be answered before 1994.

If you have some input—no matter how great or small—please contact Bill Morrissey, Strong's Tandem Director, with your thoughts. The time must be taken now to develop a plan.

Tandem Uses

PIA's Symposium in January 1991 gave Strong Enterprises some very valuable information as to how tandem is practically being used at parachute centers around the world. As part of the "One Jumpmaster Teaching Technique" forum discussion, several active businessmen relayed their feelings as to how tandem is being used for instructional as well as introductory rides as part of their skydiving regimen.

We want to sort the available information in an effort to develop a teaching technique that can be presented to USPA as "the" single jumpmaster concept. In addition, Strong Enterprises strives to maintain constant communication with the users

and owners in an effort to know how the product and procedures are being used.

Main Canopy Maintenance

After ten years of building Tandem equipment it is obvious to us, as I assume it is to the owners also, that this equipment is subjected to extraordinary wear and tear.

What may be overlooked on an individual's parachute, must not be overlooked on a Tandem system. The consequences of a worn line breaking or causing a pressure knot and thereby causing an off loading of the opening shock, could destroy a canopy. The price of this equipment is one consideration, carrying another person as your sole responsibility is another, and the unnecessary deployment of a reserve is a third.

It is safe to say that Tandem as a business would not exist if it was not profitable, therefore the costs of maintaining this equipment should be built into the cost of doing business. The cost to passengers, vary from \$370.00 in Australia, to \$80.00 in Florida. (That's a difference of \$290.00). The funds allocated for equipment maintenance may vary just as widely. Maintenance costs do not change with what you charge for your Tandem Jumps, but may dictate the amount of maintenance overlooked.

Tips

Here are some tips to follow.

1) At the 25 jump inspection check line lengths, i.e. all A's, all B's, all C's, and all D's need to be within an acceptable tolerance of 1 inch.

2) Retrim the canopy when needed. We have found that Dacron stretches with use and loading while Spectra shrinks! Some canopies in for repair have line differences of over 7 inches! These differences put an uneven loading on the bottom of the canopy.

3) Replace frayed lines before they break.

4) When replacing a single line, make sure it is the same length as the one next to it.

5) Replace all lines when they look worn or frayed. Usually between 300 to 400 jumps, in hot sandy areas maybe less.

6) When replacing outside lines at the stabilizers, leave slack in the stabilizer when reattaching it.

7) Check the packer to see they are packing correctly. We have found that Tandem Instructors have less malfunctions when they pack themselves.

8) Keep the main out of the sun as much as possible, pack inside or in the shade. UV is the biggest factor in canopy fabric deterioration.

New Developments

What is Strong Enterprises doing to develop equipment that gives greater wear and a longer life span? That is a reasonable question, and it is being asked by our Dual Hawk owners.

Our first order of business is to make stronger, more durable canopies. To this end we have new designs now being evaluated by some drop zones, and we have put into production canopies that now have additional reinforcement and one inch tapes on the ribs. We want to focus on extending the service life of these canopies as well as reducing the number of canopies that have to be cutaway due to damage.

We feel that we are focusing on the appropriate area, but no matter our successes, we must depend on the user maintaining the gear. Lines are the frequently overlooked item when it comes to maintenance, but lines are the major cause of cutaways. Severely worn lines are an obvious danger, but moderately worn lines can increase your instances of pressure knots and can fail due to the severe effects of off loading on deployment of a Tandem canopy.

It is very difficult to predict the service life of a set of lines because of the geographic and weather conditions where the equipment is being used. If you put a high priority on line maintenance and monitor your line wear, changing them when they show wear, you will save a lot in repair bills, and your Tandem Instructors will not have to endure line breakage or unnecessary cutaways.

**Tandem Pins 50 each for
only \$125.00
Postpaid!**

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