

**Item #1 Tandem Vector Modification**

It has come to our attention that there may be Relative Workshop Tandem Vector Systems in the field that have not be modified according at Product Service Bulletin #052297, May 22, 1997, which affects all Vector Tandem Systems manufactured prior to 1 May 1997.

This bulletin outlines a mandatory reinforcement of the back diagonal harness webbing stitching. Failure of the stitching can cause the container and shoulder pad to separate from the harness which may result in accidental release of the riser(s).

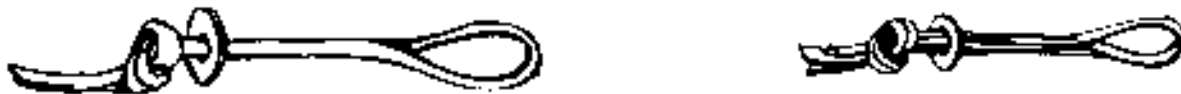
Copies of bulletin #052297 can be obtained by contacting the Relative Workshop at: (904) 736-7589 or fax (904) 734-7537.

**Item #2 Closing Loops**

There have been a number of incidents related to main closing loop design. Considerations when replacing closing loops are length and construction.

For years the standard closing loop was Type III gutted line- either sewn or finger trapped & knotted.

Manufacturers now use a wide variety of line types for their closing loops-with Spectra quickly becoming the number one choice.



Finger trapped & knotted or sewn main closing loops.

The most important thing to remember is keeping the length to a minimum - just enough to keep the grommets in line. A long loop which zigzags through the grommets makes the container easier to close but harder to open.

Stiffness also becomes a consideration if the loop bends several times in its journey through the grommets. Loops which are zigzag stitched add to this stiffness - so use a straight stitch if sewing. Loops which are finger trapped and knotted have less chance of becoming stiff but make sure both ends of the material are trapped in the knot. At least one washer will be required with smaller dimension line.

**Item #3 Loose Fitting on Vectors**

Although Service Bulletin #091098-B was issued in 1998, there may still be a number of Relative Workshop Vector Systems manufactured after 1 January 1996, which have not been checked for loose AMP fittings on the canopy release housings - riser end.

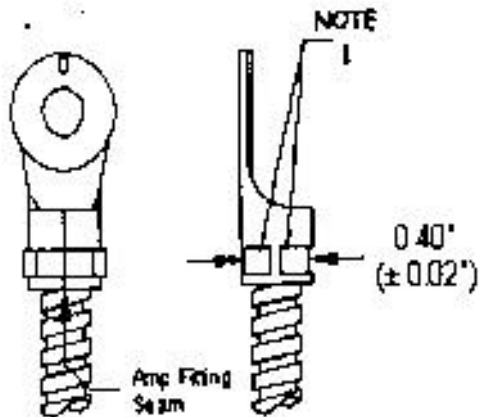
Incorrectly swaged fittings may not be secure and can be twisted off using only finger pressure applied in a certain direction. This could result in the canopy release cable being activated accidentally.

Look for the following:

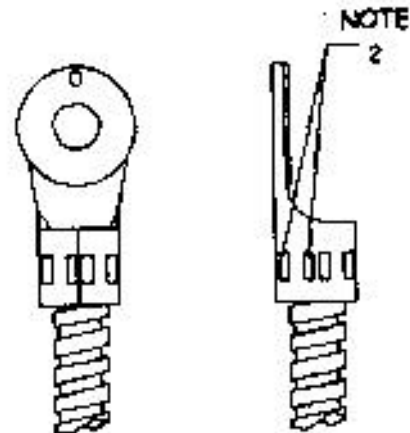
Note 1 - A correctly swaged AMP fitting has two semicircular indentations.

Note 2 - An incorrectly swaged AMP fitting has numerous small indentations around the fitting.

CORRECT



INCORRECT



Inspection may require removal of the shrink-wrap. Incorrectly swaged fittings need to be repaired immediately. Copies of SB#091098 are available from Relative Workshop.

**Item #4 The Grommet Question**

Manufacturers have come up with a number of ways to help correct the problem with small lines snagging on container grommets. Some are recommending modifications to their equipment-others have made modifications mandatory.

Fliteline Systems Inc. have mandated a grommet replacement on their Reflex harness/containers systems which must be performed prior to next use of the system. This modification entails removing a grommet and placing a "gasket" behind the fabric before installing a new grommet. Fliteline has asked the FAA to issue an Airworthiness Directive pertaining to this mod.

Copies of Service Bulletin #FSI-SB-1005 rev (1) are available at the Fliteline website [www.fliteline.com/fssb1005.htm](http://www.fliteline.com/fssb1005.htm) or by contacting Fliteline at: (909) 245-8828

Sunpath has extended modifications to their Closing Loop Retainer to include all systems manufactured prior to and including March 2000. This modification is mandatory for systems manufactured prior to September 1993 and is recommended for systems manufactured post September 1993 up to March 2000.

Service Bulletin #SPSB: 03032000-Revision B outlines the procedures to enclose the retainer grommet and to add stiffness to that component at the same time.

This work involves machine sewing so must be performed by a Rigger "B".

The Sunpath bulletin may be accessed on their website [www.sunpath.com](http://www.sunpath.com), by emailing [info@sunpath.com](mailto:info@sunpath.com) or by calling (813) 782-9242 - (813) 788-3057 fax.

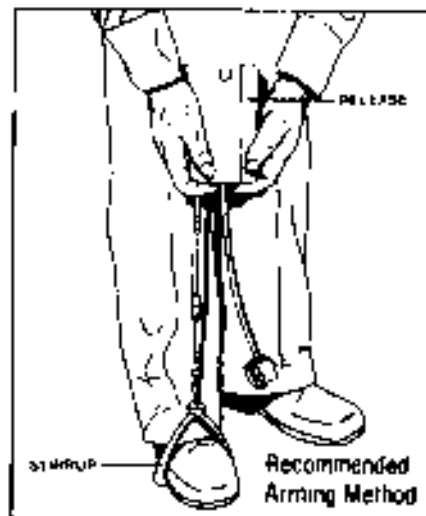
**Item #5 FXC 12000 Cable Failure**

Inspections should be carried out on FXC 12000 AAD units for possible cable damage at the pin end of the operating cable. According to the FXC this problem can be avoided by proper use of the Ripcord Pin Terminal.

"The Ripcord Pin Terminal must be screwed on tight into the Ripcord Sleeve, ensuring that the cable's ball tip is secure in the sleeve and the sleeve's hole edge is over the cable's protective shoulder. If at any time the Ripcord Pin Terminal is loose, the edge of the sleeve will be moving continuously over the cable causing a cutting action on the cable resulting in frayed cable."



The cable must be straight while the unit is rearmed which could mean removal of the unit from the harness/container system prior to beginning the rearm sequence.



#### Item #6 Changes to Rigger Currency Requirements

The Technical & Safety Committee, after considerable discussion, has decided that the concept of a 'continuous' rigger rating may no longer be compatible with the speed at which technology in sport parachuting is progressing. As a result of these discussions, and with further input from the field, CSPA rigger ratings may have to be revalidated on a yearly basis. This revalidation will likely take the form of a written, multiple choice test to check rigging knowledge and a copy of the last page of the riggers logbook to indicate active rigging experience. Both the written and practical portions will be required to maintain validation. The passing level on the written test will be 80%, the same requirement as a Rigger "A" exam. Upon reaching a pass level each rigger will be sent a dated sticker to affix to their rating card. Failure of the written test or failure to send in the logbook photocopy to prove active rigger status will result in a rigger rating being regarded as "inactive".

If the written test is failed, a retest may be requested by applying to the Technical & Safety Committee. Another test would be sent which would have the same passing criteria as the first. Failure of the second written test could result in additional requirements such as an undecided time period to study current rigging regulations, bulletins, etc. or perhaps the necessity to audit a Rigger course prior to re-application. During this period, rigger ratings would not be valid.

Ratings deemed invalid for lack of proof of rigging activity could be reinstated by having a recent reserve inspection/repack signed off by a current, valid rigger (CSPA or FAA) and a copy of such sent to the T&SC. This inspection/repack would bear the seal and signature of the supervising rigger, not the applicant.

Comment on these suggested changes are welcome and should be submitted to the Chair of the Technical & Safety Committee - prior to 30 September 2000.

A target date for implementation will be published as soon as input from the field has been achieved.