

## Serviceordre – Materiell

Materiellsjef F/NLF kommuniserer pålegg omkring forhold som ansees som vesentlige for å oppnå de målsettinger som er satt for materiellarbeidet via denne Service ordre. Målgruppen for Serviceordre er Materiellkontrollører, Hovedinstruktører og andre nøkkelpersoner i miljøet.

### SERVICEORDRE – 2011-3

<b>HENVISNING:</b>	UPT Servicebulletine # 20110523, 23 mai 2011
<b>FORMÅL:</b>	Kontroll av søm som fester ryggkrysset til containeren
<b>STATUS:</b>	<b>Obligatorisk</b>
<b>IDENTIFIKASJON:</b>	Alle Vector 3 Sport og SE (elevutstyr).
<b>BAKGRUNN:</b>	En elev opplevde en meget hard åpning som igjen medførte at reservecontaineren løsnet fra innfestingen til ryggkrysset. Dette satte i gang en hendelsesrekke som til slutt resulterte i en to skjermisituasjon med påfølgende kutt i lav høyde. UPT mener at sømmen som fester containeren til ryggkrysset må ha vært skadet på forhånd, noe også kontroller har vist.
<b>SERVICE:</b>	Sømmen som fester containeren til ryggkrysset skal undersøkes av MK/MR. Ved skader på sømmen skal riggen til MR for reparasjon/omsyng. For detaljerte instruksjoner, se under.
<b>UTFØRELSE:</b>	Før neste hopp. Kontrollen utføres av MK/MR. Reparasjon utføres av MR. Ved kontroll når alt er i orden, påføres riggens kontrollkort SO 2011-3 kontroll utført ok. Ved reparasjon påføres SO 2011-3 reparasjon utført. For rigger som kun blir kontrollert, må MK ved fremtidige hovedkontroller sjekke sømmen.
<b>DISTRIBUSJON:</b>	Klubber Hovedinstruktører Materiellkontrollører SU Spot on Sky Design verksted F/NLFs Internet sider Hærens Jegerkommando Luftfartstilsynet

**Oslo, 27. Mai 2011**

**Rolf I Sotberg**  
materiellsjef F/NLF



DATE: May 23, 2011

SERVICE BULLETIN #20110523

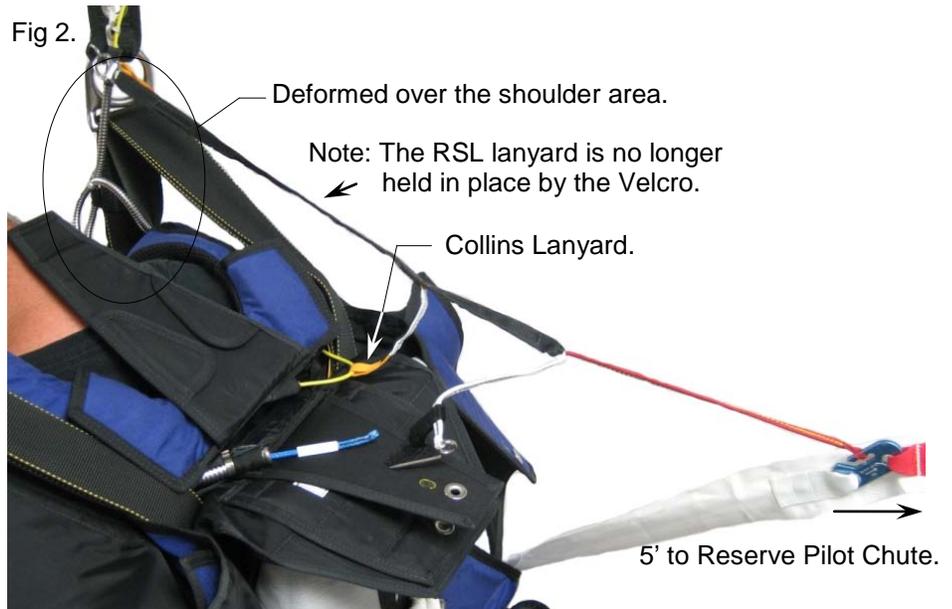
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SUBJECT: Inspection of the top diagonal attachment point on all Vector 3 Sport and SE Student Harness/Container Systems.

STATUS: Advisory

BACKGROUND: It was reported that a student jumper after pulling at a planned altitude of 5000', experienced a very hard opening and broke the upper double zigzag stitching that holds the diagonals in place and tore most of the ring cover off (See Fig1). This allowed the large ring riser attachment to be pulled far away from its normal position, deforming the over the shoulder section of padding and in turn pulled the RSL lanyard releasing the reserve pilot chute.

At an altitude of around 4500' the attachment point of the SkyHook and RSL lanyard produced a trailing reserve pilot chute (*preventing a two out scenario*) as witnessed from the ground (See Fig2). At an altitude reported to be between 225' and 250' the student jumper initiated a final approach turn, but due to the deformation of the right shoulder section of the harness, the Collins lanyard released the left riser from this turn input (See Fig2). The student then reacted by immediately pulling the cutaway handle releasing the right riser initiating a SkyHook direct bag deployment. After a very short reserve canopy ride, the student experienced a hard landing in a corn field.



NOTE: It is unlikely this stitch pattern failed completely on this one jump, but was damaged on other prior jumps and completely failed on this one very hard opening. Further inspection of other Vector SE containers at the same DZ revealed other diagonals with various stages of stitch failure in need of repair.

Affected rig information- V392-2SE, Serial # 41750, DOM 25 Apr. 2005, estimated to have 500 to 800 jumps.

Inspection of twelve (12) other Vector SE containers from another large Drop Zone revealed one (1) student container in need of this repair. If not caught at the next reserve repack, it would have most likely continued to work its way apart and may not have taken the load required of it.

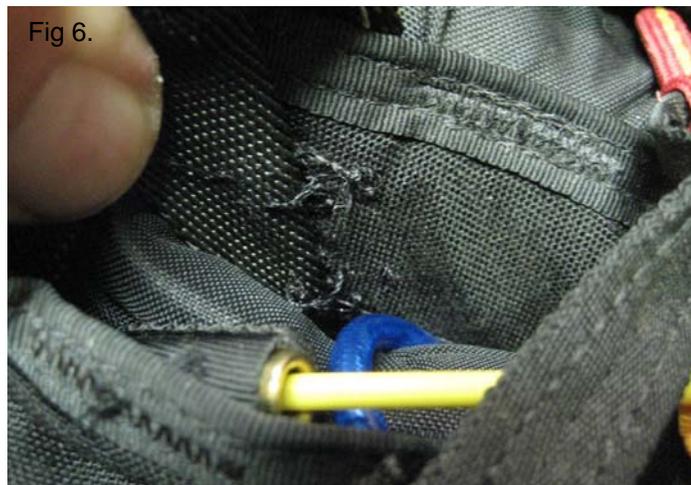
**SERVICE BULLETIN:** Before the next jump it is strongly recommended that all jumpers inspect this area for broken stitching. This can easily be done on packed rigs by simply opening the reserve pin cover and riser cover, then work your thumb up under the diagonal to expose the zigzag stitching. Only the top inside section of stitching needs to be inspected (Figure 3). Consult your local rigger if you are unsure or have any questions.

As with many areas of Harness/Containers, this stitch pattern should be checked periodically and especially after experiencing exceptionally hard openings.

It can be and should be inspected by riggers during routine reserve repacks.

Figures 3 and 4 show examples of undamaged stitch patterns. Undamaged stitch patterns such as these do not require repair.

Figures 5, 6 and 7 show example of failing stitch patterns in need of repair.



If the diagonals are in need of repair, riggers in the field are now authorized and requested to make this zigzag repair using “E” shape stitch pattern. This “E” shape zigzag stitch pattern is the same pattern that has been in use on the Sigma Tandem system for some time.

**PROCEDURE:** Slowly and carefully work your way back in between the reserve container and back pad as shown in figure 8. Ensure that nothing but what is intended to be sewn is under the presser foot. Each pass of zigzag stitching is done twice sewing over the tails of each first pass using size E, #69, T70 Nylon thread.

Inspection of the inside stitching should appear as shown in figure 9; the number of stitches per inch should appear as per samples below.

Inspection of outside/reserve pack tray stitching should appear as shown in figure 10.



Figures 11 and 12 show where the additional north/south zigzags were added.

**NOTE:** This stitch will now be used to attach the diagonals to the reserve container on all Vector Sport and SE type harness/container systems in production now.

For anyone unable to have this repair done in their area if required, UPT will do this repair free of charge. The owner is responsible for all shipping charges.



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