

## RIGGING ADVISORY CIRCULAR

Issue Date: 01 July 1997

RAC No. 434 Rev. A

SUBJECT:	VECTOR TANDEM DIAGONAL ZIG-ZAG INSPECTION & REINFORCEMENT
<u>STATUS:</u>	Mandatory inspection before the next jump. Mandatory reinforcing at the next reserve repack, or immediately if the zig-zag shows any sign of failure.
<b>IDENTIFICATION:</b>	All Relative Workshop (RW) Vector Tandem Systems manufactured before 1 May 1997.
BACKGROUND:	During a very hard main canopy opening, one upper right diagonal zig-zag failed, causing the container and shoulder pad to pull away from the main lift web. As a result, an accidental breakaway of the right main riser occurred. RW believes this was gradual degradation over a period of many jumps and not the sole result of one jump.
	RW has since found other Vector Tandem Systems with partially failing diagonal zig-zag stitching. Hence the importance of this bulletin.
<u>SERVICE BULLETIN:</u>	Inspect the area shown in Figure 1 on both the right (as shown) and left sides. They can be found just under the reserve risers as they enter the reserve pack tray. Figure 2 shows a possible manner in which the zig-zag pattern could be degraded; however, any stitch degradation necessitates immediate reinforcement.
	To reinforce, place a double pass, zig-zag stitch passing through the entire width of the Type-8 diagonal both above and below the old stitch pattern as shown in Figure 3. Use a Type 304, single throw machine with Nylon E (69) - Thread. The zig-zag should be set for a $3/16$ ° width pattern with 12-14 stitches per inch. The stitches should be confined within the Type-3 tape. Sew completely through the backpad.
	Perform the double pass zig-zag as follows. At the end of the first pass, lift the needle and foot of the sewing machine and position the work so that the needle is at the beginning of the first stitch pass. Sew the second stitch pass directly over the first stitch pass. Optionally, a single pass with a Type 308, double-throw zig-zag could be used with standard stitch locking procedures in place of the double pass Type 304 stitch. Trim any loose threads on the old stitch pattern and repeat for the other side.
QUALIFIED PERSONNEL:	An FAA Rigger (APF Packer A) may inspect. Reinforcing should be done by an FAA Master Rigger (APF Rigger B).



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As manufacturer's service bulletin and inspection thereafter at each APF POLICY: repack. COMPLIANCE DATE: Before next jump. AUTHORITY: Relative Workshop service bulletin 052297. **DISTRIBUTION:** APF Packers and Riggers NZPF Parachute Technicians Backside #2 Flap Type-3, 1 1/6 Tape Backside #3 Flap Reserve Pack Tray Fig. 1 Fig. 2 Fig. 3 Page 2 of 2