

# CRITICAL ITEMS LIST

ASSY NOMENCLATURE: RISER ASSEMBLY

SYSTEM: CREW ESCAPE SYSTEM

REVISION:

ASSY P/N: SK102436007

SUBSYSTEM: PERSONAL PARACHUTE ASSY.

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FMEA		NAME, QTY & DRAWING REF DESIGNATION	CNTY	FAILURE MODE AND CAUSE	FAILURE EFFECT OR END ITEM	RATIONALE FOR ACCEPTANCE
REF	REV					
2.3.1		RISER ASSEMBLY, (1) SK102436007	1/1	2.3.1 Mode: Riser assembly breaks  Cause: • defective material • excessive loading	Loss of drogue chute	1. DESIGN FEATURES TO MINIMIZE FAILURE MODES <ul style="list-style-type: none"> <li>a. The material is nylon certified in accordance with MIL-W 27265, type B, class B</li> <li>b. The webbing is rated to 4,000 pounds.</li> <li>c. The maximum load is 1,200 pounds</li> <li>d. The thread is E-thread (nylon) in accordance with V-T-295, type I, class A</li> <li>e. The riser is stitched @ 12 stitches per inch over 4.5 inches.</li> </ul> 2. TEST OR ANALYSIS TO DETECT FAILURE MODE <ul style="list-style-type: none"> <li>a. <u>Acceptance Test</u> <ul style="list-style-type: none"> <li>(1) Webbing tensile test to minimum breaking strength of 4,000 pounds on each roll of webbing</li> <li>(2) Thread tensile test to a minimum of 9 pounds breaking strength</li> </ul> </li> <li>b. <u>Certification Test</u> <ul style="list-style-type: none"> <li>(1) Four dummy drops at 110 knots, 2 at 10,000 feet, 2 at 25,000 feet</li> <li>(2) Four live water drop jumps</li> <li>(3) One 300 knot wind blast test</li> <li>(4) Four dummy drops at 225 knots, 2 at 10,000 feet, 2 at 25,000 feet</li> <li>(5) Eight live jumps at 110 knots, 4 at 10,000 feet, 4 at 6,000 feet</li> </ul> </li> </ul>

PREPARED BY: R. I. ALLISON, M. HERR

SUPERSEDING DATE: 1

BY: J. O. SCHLOSSER

DATE: 8/2/89

# CRITICAL ITEMS LIST

ASSY NOMENCLATURE: **RISER ASSEMBLY**

SYSTEM: **CREW ESCAPE SYSTEM**

REVISION:

ASSY P/N: **SK1102436007**

SUBSYSTEM: **PERSONAL PARACHUTE ASSY.**

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FMEA		NAME, QTY & DRAWING REF DESIGNATION	CRITY	FAILURE MODE AND CAUSE	FAILURE EFFECT ON END ITEM	RATIONALE FOR ACCEPTANCE
REF	REV					
2.3.1		RISER ASSEMBLY, (1) SK1102436007	1/1	<b>2.3.1 Mode:</b> Riser assembly breaks  <b>Cause:</b> a defective material a excessive loading	Loss of drogue chute	(6) Four live jumps at 170 knots, 15,000 feet. (7) Four live jumps at 185 knots, 20,000 feet. (8) Four live jumps at 200 knots, 25,000 feet c. <u>Turnaround Leg</u> (in accordance with PIA 23026) The PPA will be unpacked, inspected, and repacked prior to each flight  <b>3. INSPECTION</b> a. Visual inspection of webbing for defects b. Visual inspection of thread for defects. c. Visual inspection of stitching to verify number of stitches per inch and for any defects d. Verify tensile strength of webbing. e. Verify tensile strength of thread.  <u>Turnaround Inspection</u> (in accordance with PIA 23026) a. The PPA will be unpacked, inspected, and repacked prior to each flight b. Visual inspection of webbing for defects c. Visual inspection of thread for defects d. Visual inspection of stitching to verify number of stitches per inch and for any defects

PREPARED BY: **R. L. ALLISON, M. HERR**

SUPERSEDING DATE:

ED BY: **J. D. SCHLOSSER**

DATE: **8/7/89**

# CRITICAL ITEMS LIST

ASSY NOMENCLATURE: RISER ASSEMBLY

SYSTEM: CREWESCAPE SYSTEM

REVISION:

ASSY P/N: SK1102496007

SUBSYSTEM: PERSONAL PARACHUTE ASSY.

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FMEA		NAME, QTY & DRAWING REF DESIGNATION	CRT'Y	FAILURE MODE AND CAUSE	FAILURE EFFECT OR END ITEM	RATIONALE FOR ACCEPTANCE
REF	REV					
231		RISER ASSEMBLY, (1) SK1102496007	1/1	2.3.1 Mode: Riser assembly break  Cause: • defective material • excessive loading	Loss of drogue chute	<p>4. FAILURE HISTORY</p> <p>None - The riser is in current use by the Army.</p> <p>5. OPERATIONAL USE</p> <p>a. Operational Effect of Failure - Possible loss of life.</p> <p>b. Crew Action - None.</p> <p>c. Crew Training - Not applicable</p> <p>d. Mission Constraints - None - Mission would be terminated prior to use of this hardware</p> <p>e. In-Flight Checkout - None.</p>

PREPARED BY: R. L. ALLISON, M. HERR

SUPERSEDING DATE 10/24/00

APPROVED BY: J. O. SCHLOSSER

DATE 8/7/89