

# CRITICAL ITEMS LIST

ASSY NOMENCLATURE: MAIN PARACHUTE

SYSTEM CREW ESCAPE SYSTEM

REVISION

ASSY P/N: SK1102421187

SUBSYSTEM: PERSONAL PARACHUTE ASSY.

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FMEA		NAME, QTY & DRAWING REF DESIGNATION	CRIT'Y	FAILURE MODE AND CAUSE	PARAM EFFECT ON IND ITEM	RATIONALE FOR ACCEPTANCE
REF	REV					
471		UPPER CROSS CONNECTOR, (1) SK1102421187	2/1R	4.7.1 Mode: Cross connector break  Cause: a defective material	Loss of main canopy if upper cross connector fails	<ol style="list-style-type: none"> <li>1. DESIGN FEATURES TO MINIMIZE FAILURE MODES               <ol style="list-style-type: none"> <li>a. The material is Kevlar cord certified in accordance with MIL C 87129, type 10.</li> <li>b. The connector is finger trapped at both ends.</li> <li>c. The material is certified to 3,000 pounds minimum breaking strength.</li> </ol> </li> <li>2. TEST OR ANALYSIS TO DETECT FAILURE MODE               <ol style="list-style-type: none"> <li>a. <u>Acceptance Test.</u> <ol style="list-style-type: none"> <li>(1) Tensile test of Kevlar cord to a minimum of 3,000 pounds</li> <li>(2) Tensile test E-thread to a minimum of 9 pounds</li> </ol> </li> <li>b. <u>Certification Test</u> <ol 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> <li>(6) Four live jumps at 170 knots, 15,000 feet</li> <li>(7) Four live jumps at 185 knots, 20,000 feet</li> </ol> </li> </ol> </li> </ol>

PREPARED BY R. L. ALLISON, M. HERR

SUPERSEDING DATE 10/

DRY, J. O. SCHLOSSER

DATE 8/7/89

# CRITICAL ITEMS LIST

ASSY NOMENCLATURE: MAIN PARACHUTE

SYSTEM: CREW ESCAPE SYSTEM

REVISION:

ASSY P/N: SK1102421107

SUBSYSTEM: PERSONAL PARACHUTE ASSY.

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FMEA		NAME, QTY & DRAWING REF DESIGNATION	CRITY	FAILURE MODE AND CAUSE	FAILURE EFFECT OR END ITEM	RATIONALE FOR ACCEPTANCE
REF	REV					
471		UPPER CROSS CONNECTOR, (1) SK1102421107	2/1R	4.7.1 Mode: Cross connector breaks  Cause: • defective material	Loss of main canopy if upper cross connector fails	<p>(8) Four live jumps at 200 knots, 25,000 feet</p> <p>(9) Two drop tower tests, subject main parachute suspension points to a total load of 6,000 pounds</p> <p>c. <u>Turnaround Test</u> (In accordance with PIA 23028) The PPA will be unpacked, inspected, and repacked prior to each flight.</p> <p>3. <u>INSPECTION</u></p> <p>a. Visual inspection of Kevlar cord for defects.</p> <p>b. Visual inspection of thread for defects</p> <p>c. Verify number of stitches per inch and any defects</p> <p>d. Verify breaking strength of Kevlar cord.</p> <p>e. Verify breaking strength of thread</p> <p><u>Turnaround Inspection</u> (In accordance with PIA 23028)</p> <p>a. The PPA will be unpacked, inspected, and repacked prior to each flight</p> <p>b. Visual inspection of Kevlar cord for defects.</p> <p>c. Visual inspection of thread for defects</p> <p>d. Verify number of stitches per inch and any defects</p>

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

SUPERSEDING DATE: 10/2008

APPROVED BY: J. O. SCHLOSSER

DATE: 08/18/08

# CRITICAL ITEMS LIST

ASSY NOMENCLATURE: MAIN PARACHUTE  
ASSY P/N: SK1102421187

SYSTEM: CREW ESCAPE SYSTEM

SUBSYSTEM: PERSONAL PARACHUTE ASSY.

REVISION:

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FMEA		NAME, QTY & DRAWING REF DESIGNATION	CRIT'Y	FAILURE MODE AND CAUSE	FAILURE EFFECT ON FUNCTION	RATIONALE FOR ACCEPTANCE
REF	REV					
471		UPPER CROSS CONNECTOR, (1) SK1102421187	2/1R	4.7.1 Mode: Cross connector breaks  Cause: • defective material	Loss of main canopy if upper cross connector fails	<p>4. FAILURE HISTORY</p> <p>None. The upper cross connectors are in fleet use by the Navy</p> <p>5. OPERATIONAL USE</p> <p>a. Operational Effect of Failure - Possible loss of life if link connector fails</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 JERR

SUPERSEDING DATE 10/2

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DATE: 8/1/89