

CRITICAL ITEMS LIST

ASSY NOMENCLATURE: PILOT CHUTE BRIDLE ASSEMBLY
ASSY P/N: SK1102430007

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 INDIFM	RATIONALE FOR ACCEPTANCE
REF	REV					
3.4.1		BRIDLE ASSEMBLY, (1) SK1102430007	1/1	3.4.1 Mode: Bridle assembly webbing break Cause: • defective material • excessive load	Drogue chute deployment failure	<ol style="list-style-type: none"> 1. DESIGN FEATURES TO MINIMIZE FAILURE MODES <ol style="list-style-type: none"> a. The bridle is braided Kevlar line certified in accordance with MIL-C-87129, type 7. b. The breaking strength is 1,000 pounds c. The connections to the pilot chute and drogue chute are finger trapped and sewn 8-12 stitches per inch d. The thread is E thread with a breaking strength of 9 pounds e. The force to extract the drogue chute is less than 100 pounds. 2. TEST OR ANALYSIS TO DETECT FAILURE MODE <ol style="list-style-type: none"> a. <u>Acceptance Test</u>. <ol style="list-style-type: none"> (1) Tensile test the braided Kevlar line to a minimum of 1,000 pounds (2) Tensile test E thread to a minimum of 9 pounds b. <u>Certification Test</u>. <ol style="list-style-type: none"> (1) Four dummy drops at 110 knots, 2 at 10,000 feet, 2 at 25,000 feet (2) Four live water drop jumps (3) One 300 knot wind blast test (4) Four dummy drops at 225 knots, 2 at 10,000 feet, 2 at 25,000 feet (5) Eight live jumps at 110 knots, 4 at 10,000 feet, 4 at 6,000 feet

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

SUPERSEDING DATE: TC

BY: J. O. SCHLOSSER

DATE: 8/7/89

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341		BRIDLE ASSEMBLY, (1) SK110240007	1/1	3.4.1 Mode: Bridle assembly webbing break Cause: • defective material • excessive load	Drogue chute deployment failure	<p>(6) Four live jumps at 170 knots, 15,000 feet</p> <p>(7) Four live jumps at 185 knots, 20,000 feet.</p> <p>(8) Four live jumps at 200 knots, 25,000 feet</p> <p>c. <u>Turnaround Test</u> (In accordance with PIA 2302B) The PPA will be unpacked, inspected, and repacked prior to each flight.</p> <p>3. <u>INSPECTION</u></p> <p>a. Visual inspection of braided Kevlar line for defects.</p> <p>b. Visual inspection of thread for defects</p> <p>c. Verify breaking strength of braided Kevlar line.</p> <p>d. Verify breaking strength of E-thread</p> <p>e. Visual inspection of stitching to verify number of stitches per inch and for any defects</p> <p><u>Turnaround Inspection</u> (In accordance with PIA 2302B)</p> <p>a. The PPA will be unpacked, inspected, and repacked prior to each flight</p> <p>b. Visual inspection of braided Kevlar line for defects</p> <p>c. Visual inspection of thread for defects</p> <p>d. Visual inspection of stitching to verify number of stitches per inch and for any defects</p>

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

SUPERSEDING DATE: **100**

BY: **J. D. SCHLOSSER**

DATE **8/7/89**

CEE/PPA - 44

CRITICAL ITEMS LIST

ASSY NOMENCLATURE: PILOT CHUTE BRIDLE ASSEMBLY

SYSTEM: CREW ESCAPE SYSTEM

REVISION:

ASSY P/N: SK1102430087

SUBSYSTEM: PERSONAL PARACHUTE ASSY.

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REF	REV					
3.4.1		BRIDLE ASSEMBLY, (1) SK1102430087	1/1	3.4.1 Mode: Bridle assembly webbing breaks Cause: • defective material • excessive load	Drogue chute deployment failure	<p>4. FAILURE HISTORY</p> <p>None. The pilot chute is in fleet use by the Navy</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 equipment</p> <p>e. In-Flight Checkout - None</p>

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