

CRITICAL ITEMS LIST

ASSY NOMENCLATURE: LIFERAFT COMPARTMENT

SYSTEM: CREW ESCAPE SYSTEM

REVISION:

ASSY P/N: SK1102460007

SUBSYSTEM: PERSONAL PARACHUTE ASSY.

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FMEA		NAME, QTY & DRAWING REF DESIGNATION	CRIT'Y	FAILURE MODE AND CAUSE	FAILURE EFFECT OR END ITEM	RATIONALE FOR ACCEPTANCE
REF	REV					
5.2.1		CLOSURE FLAP, (1) SK1102460007	1/1	<p>5.2.1 Mode: Liferaft compartment closure flap opens prematurely</p> <p>Cause: • defective material • excessive load</p>	<p>Liferaft comes out of compartment, possibly interfering with main chute deployment</p>	<p>1. DESIGN FEATURES TO MINIMIZE FAILURE MODES</p> <ul style="list-style-type: none"> a. The closure is secured by a daisy chain locking loop arrangement b. The lines are nylon certified in accordance with MIL-C-5040, type II, class A. c. The friction of the loops holds the closure flap closed until water entry d. The loops are stitched by a double row zig-zag. e. The loops are stitched to the container with nylon E-thread in accordance with U-T 295, type II, class A, 8 to 10 stitches per inch <p>2. TEST OR ANALYSIS TO DETECT FAILURE MODE</p> <ul style="list-style-type: none"> a. <u>Acceptance Test</u> <ul style="list-style-type: none"> (1) Tensile test nylon cord to a minimum of 400 pounds (2) Tensile test E-thread to a minimum of 9 pounds b. <u>Certification Test</u> <ul 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: 10/20/01

BY: J. D. SCHLOSSER

DATE: 01/10/09

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FMEA		NAME, QTY & DRAWING REF DESIGNATION	QTY	FAILURE MODE AND CAUSE	FAILURE EFFECT ON END ITEM	RATIONALE FOR ACCEPTANCE
REF	REV					
5.2.1		CLOSURE FLAP, (1) SK110246007	1/1	<p>5.2.1 Mode: Liferaft compartment closure flap opens prematurely</p> <p>Cause: * defective material * excessive load</p>	<p>Liferaft comes out of compartment, possibly interfering with main chute deployment</p>	<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 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 the nylon cord for defects</p> <p>b. Visual inspection of the thread for defects.</p> <p>c. Verify breaking strength of nylon cord is a minimum of 400 pounds.</p> <p>d. Verify breaking strength of thread is a minimum of 9 pounds</p> <p>e. Verify stitching is 8 to 10 stitches per inch and for any defects</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 the nylon cord for defects.</p> <p>c. Visual inspection of the thread for defects</p> <p>d. Verify stitching is 8 to 10 stitches per inch and for any defects</p>

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

SUPERSEDING DATE

VELU BY: J. O. SCHLOSSER

DATE: 8/18/89

CRITICAL ITEMS LIST

ASSY NOMENCLATURE: LIFERAFT COMPARTMENT

SYSTEM CREW ESCAPE SYSTEM

REVISION:

ASSY P/N: SK1102460087

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					
5.2.1		CLOSURE FLAP, (1) SK1102460087	1/1	5.2.1 Mode: Liferaft compartment closure flap opens prematurely Cause: • defective material • excessive load	Liferaft comes out of compartment, possibly interfering with main chute deployment	<p>4. FAILURE HISTORY None.</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/

DBY: J.O. SCHLOSSER

DATE 8/7/89