

CRITICAL ITEMS LIST

ASSY NOMENCLATURE: PILOT CHUTE SUSPENSION LINES

SYSTEM: CREW ESCAPE SYSTEM

REVISION:

ASSY P/N: SK1102430007

SUBSYSTEM: PERSONAL PARACHUTE ASSY.

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FMEA		NAME, QTY & DRAWING REF DESIGNATION	CRITY	FAILURE MODE AND CAUSE	FAILURE EFFECT ON ITEM	RATIONALE FOR ACCEPTANCE
REF	REV					
321		SUSPENSION LINES, (4) SK1102430007	2/1R	3.2.1 Mode: Suspension lines break Cause: • defective material	Possible drogue deployment failure if two or more lines break	<p>1. DESIGN FEATURES TO MINIMIZE FAILURE MODES</p> <ul style="list-style-type: none"> a. The material is nylon certified in accordance with MIL-C-5040. b. The lines are radially tapered from the apex down the skirt to the confluence c. The lines are a vane design. d. The pilot chute is used on the NB-8 and NES-14 parachute systems on high performance aircraft to deploy main canopies e. The confluence thread is 6 cord, a minimum breaking strength of 54 pounds. f. The stitching is E-thread in accordance with V-T-295. g. The lines are stitched at 8-12 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 6 chord to a minimum of 54 pounds breaking strength (2) Tensile test E-thread to a minimum of 9 pounds breaking strength 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 100 knot wind blast test

PREPARED BY: R. L. ALIISON, M JERR

SUPERSEDING DATE: 10/20/89

APPROVED BY: J. O. SCHLOSSER

DATE: 01/89

CRITICAL ITEMS LIST

ASSY NOMENCLATURE: PILOT CHUTE SUSPENSION LINES

SYSTEM: CREW ESCAPE SYSTEM

REVISION:

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FMEA		NAME, QTY & DRAWING REF DESIGNATION	CRITY	FAILURE MODE AND CAUSE	PARACH EFFECT ON TMD ITEM	RATIONALE FOR ACCEPTANCE
REF	REV					
3.2.1		SUSPENSION LINES, (8) SK1102430087	2/1R	3.2.1 Mode: Suspension lines break Cause: • defective material	Possible drogue deployment failure if two or more lines break	<p>(4) Four dummy drops at 225 knots, 2 at 10,000 feet, 2 at 25,000 feet.</p> <p>15) Eight live jumps at 110 knots, 4 at 10,000 feet, 4 at 6,000 feet.</p> <p>16) 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 pilot chute vane for material defects and conformance with drawings.</p> <p>b. Visual inspection of thread for defects.</p> <p>c. Visual inspection of 6 cord for defects</p> <p>d. Visual inspection of stitching to verify number of stitches per inch and for any defects</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 pilot chute vane for material defects and conformance with drawings</p>

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

SUPERSEDING DATE: 1991

APPROVED BY: J. Q. SCHLOSSER

DATE: 06/18/92

CRP/DBA

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ASSY NOMENCLATURE: PILOT CHUTE SUSPENSION LINES

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REVISION:

ASSY P/N: SK1102430007

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FMEA		NAME, QTY & DRAWING REF DESIGNATION	CRIT'Y	FAILURE MODE AND CAUSE	FAILURE EFFECT ON END ITEM	RATIONALE FOR ACCEPTANCE
REF	REV					
3.2.1		SUSPENSION LINES, (4) SK1102430007	2/IR	3.2.1 Mode: Suspension lines break Cause: • defective material	Possible drogue deployment failure if two or more lines break	<ul style="list-style-type: none"> c. Visual inspection of thread for defects d. Visual inspection of cord for defects e. Visual inspection of stitching to verify number of stitches per inch and for any defects 4. FAILURE HISTORY None. The pilot chute is in fleet use by the Navy
						5. OPERATIONAL USE <ul style="list-style-type: none"> a. Operational Effect of Failure - Possible loss of life if two or more lines break. b. Crew Action - None. c. Crew Training - Not applicable d. Mission Constraints - None. Mission would be terminated prior to use of this equipment e. In-Flight Checkout - None

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

SUPERSEDING DATE: 10/24/88

APPROVED BY: J. Q. SCHLOSSER

DATE: 01/89