

# CRITICAL ITEMS LIST

ASSY NOMENCLATURE: PILOT CHUTE CANOPY

SYSTEM: CREW ESCAPE SYSTEM

REVISION:

ASSY P/N: SK1102430087

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					
331		PILOT CHUTE CANOPY, (1) SK1102430087	I/1	3.3.1 Mode: Canopy seam rips  Cause: a defective material excessive loads	Possible failure to deploy drogue if canopy seam rips	<p>1. DESIGN FEATURES TO MINIMIZE FAILURE MODES</p> <ul style="list-style-type: none"> <li>a. The material is nylon certified in accordance with MIL-C 7020</li> <li>b. The seams are radially taped from the apex down the skirt to the confluence.</li> <li>c. The pilot chute is a vane design.</li> <li>d. The pilot chute is used on the NB-8 and NES-14 parachute systems on high-performance aircraft to deploy main canopies.</li> <li>e. The confluence thread is 6 cord in accordance with V-T-295</li> <li>f. The stitching is E-thread in accordance with V-T-295</li> <li>g. The seams are stitched 8-12 stitches per inch.</li> </ul> <p>2. TEST OR ANALYSIS TO DETECT FAILURE MODE</p> <ul style="list-style-type: none"> <li>a. <u>Acceptance Test.</u> <ul style="list-style-type: none"> <li>(1) Tensile test 6 chord to a minimum of 54 pounds breaking strength</li> <li>(2) Tensile test E-thread 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> </ul> </li> </ul>

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

SUPERSEDING DATE: 10/24/

J. D. SCHLOSSER

DATE: 8/2/93

CEE/PPA - 40

# CRITICAL ITEMS LIST

ASSY NOMENCLATURE: PILOT CHUTE CANOPY

SYSTEM: CREW ESCAPE SYSTEM

REVISION:

ASSY P/N: SK1902430087

SUBSYSTEM: PERSONAL PARACHUTE ASSY.

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FMEA		NAME, QTY & DRAWING REF DESIGNATION	CRITY	FAILURE MODE AND CAUSE	FAILURE EFFECT OR INDICIA	RATIONALE FOR ACCEPTANCE
REF	REV					
331		PILOT CHUTE CANOPY, (1) SK1902430087	1/1	<p>3.3.1 Mode: Canopy seam rips</p> <p>Cause: • defective material • excessive loads</p>	<p>Possible failure to deploy drogue of canopy seam rips</p>	<p>(4) Four dummy drops at 225 knots, 2 at 10,000 feet, 2 at 25,000 feet.</p> <p>(5) Eight live jumps at 170 knots, 4 at 10,000 feet, 4 at 6,000 feet</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 2302B) The PPA will be unpacked, inspected, and repacked prior to each flight</p> <p>3. INSPECTION</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 B 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 2302B)</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. J. ALLISON, M. HERR

SUPERSEDING DATE: 70

APPROVED BY: J. Q. SCHLOSSER

DATE: 8/7/89

# CRITICAL ITEMS LIST

ASSY NOMENCLATURE: PILOT CHUTE CANOPY  
ASSY P/N: SK1102430007

SYSTEM: CREWESCAPE SYSTEM

REVISION:

SUBSYSTEM: PERSONAL PARACHUTE ASSY.

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FMEA		NAME, QTY & DRAWING REF DESIGNATION	CNTY	FAILURE MODE AND CAUSE	FAILURE EFFECTION END ITEM	RATIONALE FOR ACCEPTANCE
REF	REV					
3.3.1		PILOT CHUTE CANOPY, (1) SK1102430007	VI	3.3.1 Mode: Canopy seam ript  Cause: • defective material • excessive loads	Possible failure to deploy drogue if canopy seam ript	<ul style="list-style-type: none"> <li>c. Visual inspection of thread for defects</li> <li>d. Visual inspection of B card for defects</li> <li>e. Visual inspection of stitching to verify number of stitches per inch and for any defects</li> </ul> <p>4. FAILURE HISTORY None. The pilot chute is in fleet use by the Navy.</p> <p>5. OPERATIONAL USE</p> <ul style="list-style-type: none"> <li>a. Operational Effect of Failure - Possible loss of life.</li> <li>b. Crew Action - None</li> <li>c. Crew Training - Not applicable</li> <li>d. Mission Constraints - None. Mission would be terminated prior to use of this equipment.</li> <li>e. In-Flight Checkout - None</li> </ul>

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

SUPERSEDING DATE: 16

BY: J.O. SCHLOSSER

DATE: 01/09